

**SUBMITTAL TO THE FLOOD CONTROL AND
WATER CONSERVATION DISTRICT
BOARD OF SUPERVISORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**



ITEM: 11.3
(ID # 23820)

MEETING DATE:
Tuesday, January 09, 2024

FROM : FLOOD CONTROL DISTRICT:

SUBJECT: FLOOD CONTROL DISTRICT: Public Hearing - Adopt Resolution No. F2024-03 Complying with Section 18 of the District Act; Adopt a Mitigated Negative Declaration and a Mitigation Monitoring and Reporting Program for the Perris Valley Channel Lateral B, Stage 4 Project, Pursuant to the California Environmental Quality Act; and Approve the Perris Valley Channel Lateral B, Stage 4 Project, Project No. 4-8-00009-04, District 1. [\$0] (Clerk to File CEQA Notice of Determination)

RECOMMENDED MOTION: That the Board of Supervisors:

1. Adopt Resolution No. F2024-03 which finds the Perris Valley Channel MDP Lateral B, Stage 4 Project ("Project") complies with Section 18 of the Riverside County Flood Control and Water Conservation District Act ("District Act"), the California Environmental Quality Act ("CEQA"), and the Western Riverside County Multiple Species Habitat Conservation Plan;

Continued on Page 2

ACTION:Policy

Jason Uhley, GENERAL MGR-CHF FLD CNTRL ENG

12/27/2023

MINUTES OF THE BOARD OF SUPERVISORS

On motion of Supervisor Spiegel, seconded by Supervisor Jeffries and duly carried by unanimous vote, IT WAS ORDERED that the above matter is approved as recommended.

Ayes: Jeffries, Spiegel, Washington and Perez
Nays: None
Absent: None
Date: January 9, 2024
xc: Flood, Recorder

Kimberly A. Rector
Clerk of the Board

By:
Deputy

**SUBMITTAL TO THE FLOOD CONTROL AND WATER CONSERVATION DISTRICT BOARD
OF SUPERVISORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**

RECOMMENDED MOTION: That the Board of Supervisors:

2. Adopt a Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program for the Project based on the findings incorporated in the Initial Study and the conclusion that the Project will not have an adverse effect on the environment with the incorporation of feasible mitigation, in compliance with CEQA;
3. Approve and authorize the Riverside County Flood Control and Water Conservation District ("District") to proceed with the Project; and
4. Direct the Clerk of the Board to deliver the Notice of Determination to the office of the County Clerk and the State Office Planning and Research for filing within five (5) working days of this Board hearing.

FINANCIAL DATA	Current Fiscal Year:	Next Fiscal Year:	Total Cost:	Ongoing Cost
COST	\$0	\$0	\$0	\$0
NET COUNTY COST	\$0	\$0	\$0	\$0
SOURCE OF FUNDS: N/A			Budget Adjustment: N/A	
			For Fiscal Year: N/A	

C.E.O. RECOMMENDATION: Approve

BACKGROUND:

Summary

The District, in partnership with the March Joint Powers Authority ("MJPA") and March Air Reserve Base ("MARB"), is proposing to construct, operate, and maintain the Perris Valley Channel ("PVC") Lateral B, Stage 4 Project ("Project"). The Project consists of an approximately 6,000-lineal-foot underground reinforced concrete box storm drain partially located within the limits of the city of Perris and lands owned by MJPA and MARB in southwestern Riverside County. The objectives of the Project are to: provide flood protection to MARB and the adjacent area by constructing the regional storm drain needed to convey 100-year runoff from the PVC Lateral B, Stage 5 facility to the existing PVC Lateral B, Stage 2 facility at Heacock Street; and provide adequate outlet to proposed developments west of the Project within the city of Perris. The Project's general alignment begins at the downstream terminus of PVC Lateral B, Stage 5 facility and continues south and east adjacent to the MARB west perimeter security fence before tying into the PVC Lateral B, Stage 2 facility at Heacock Street. The Project would be located mostly within MARB right of way. The cost of implementing the Project is estimated at \$15,466,856.00 and is included in the District's Zone 4 budget.

California Environmental Quality Act (CEQA)

In accordance with CEQA, the District prepared and circulated an Initial Study and Mitigated Negative Declaration ("IS/MND") (SCH# 2022090378) for this Project, which analyzed the environmental impacts of the Project. The IS/MND found that the Project, with the incorporation of feasible mitigation, would not significantly impact the environment, therefore, an MND is proposed. As such, in accordance with CEQA, a Notice of Determination ("NOD") has been

**SUBMITTAL TO THE FLOOD CONTROL AND WATER CONSERVATION DISTRICT BOARD
OF SUPERVISORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**

prepared by the District. If the IS/MND is approved by the District's Board of Supervisors, the Clerk of the Board should be directed to file the NOD for the Project within 5 (five) days of approval pursuant to CEQA.

Impact on Residents and Businesses

N/A

Additional Fiscal Information

N/A

Contract History and Price Reasonableness

N/A

ATTACHMENTS:

1. Resolution No. F2024-03
2. Attachment "A" - Section 18 Map, including typical Project cross sections
3. Attachment "B" - Engineer's Statement
4. Attachment "C" - Declaration of Postings for the Moreno Valley Public Library – Iris Branch, the County Clerk and the District
5. Attachment "D" - Final Initial Study
6. Attachment "E" - Mitigated Negative Declaration
7. Attachment "F" - Mitigation Monitoring and Reporting Program
8. Attachment "G" - Notice of Determination, including Authorization to Bill for CDFW Filing Fees

P8/254097
KCC:rlp



Jason Farin, Principal Management Analyst 1/2/2024



Aaron Gettis, Deputy County Counsel 12/27/2023



Lead Agency: Riverside County Flood Control
ATTN: Kevin Cunningham
Address: 1995 Market Street
Riverside, CA. 92501

FILED / POSTED

County of Riverside
Peter Aldana
Assessor-County Clerk-Recorder

E-202400056
01/18/2024 12:01 PM Fee: \$ 2966.75
Page 1 of 2

Removed: _____ By: _____ Deputy


Project Title

Perris Valley Channel (PVC) Lateral B, State 4 Project

Filing Type

- Environmental Impact Report
- Mitigated/Negative Declaration
- Notice of Exemption
- Other:

Notes

NOTICE OF DETERMINATION

To: X Office of Planning and Research
 P.O. Box 3044
 Sacramento, CA 95812-3044

From: Riverside County Flood Control and
 Water Conservation District
 1995 Market Street
 Riverside, CA 92501
 Contact: Kevin Cunningham, 951.955.1526

X Riverside County Clerk
 County of Riverside
 2724 Gateway Drive
 Riverside, CA 92507

Lead Agency: Same as above.

Subject: Filing of Notice of Determination in compliance with Section 21152 of the Public Resources Code

State Clearinghouse Number: 2022090378

Project Title: Perris Valley Channel (PVC) Lateral B, Stage 4 Project

Project Location: The Project site is located on March Air Reserve Base, Riverside County. The Project is located on APNs 294-220-003, 294-200-002, 294-180-007, 294-180-006, 294-180-037, 294-180-055, and 294-180-017 in Township 3 South, Range 4 West, Sections 36 within the U.S. Geological Survey (USGS) Steele Peak and Perris 7.5 Series Topographic Quadrangle Maps. The latitude/longitude for the Project is 33°54'33"N, 117°16'17"W.

Project Description: The District, in partnership with the March Joint Powers Authority (MJPA) and March Air Reserve Base (MARB) is proposing to construct the PVC Lateral B, Stage 4 Project, an approximately 6,000-lineal-foot underground reinforced concrete box (RCB) storm drain partially located within the limits of the city of Perris and lands owned by MJPA and MARB in southwestern Riverside County.

The objectives of the Project are to: provide flood protection to MARB and the adjacent area by constructing the regional storm drain needed to convey 100-year runoff from the PVC Lateral B, Stage 5 facility to the existing PVC Lateral B, Stage 2 facility at Heacock Street; and provide adequate outlet to proposed developments west of the Project within the city of Perris. The Project's general alignment begins at the downstream terminus of PVC Lateral B, Stage 5 facility and continues south and east adjacent to the MARB west perimeter security fence before tying into the PVC Lateral B, Stage 2 facility at Heacock Street. The Project would be located mostly within MARB right of way.

CEQA Determination: This is to advise that the Riverside County Flood Control and Water Conservation District (Lead Agency) approved the above-described Project on January 9, 2024, and has made the following determinations:

1. The Project will not have a significant effect on the environment.
2. A Mitigated Negative Declaration was adopted for this Project pursuant to the provisions of CEQA.
3. Mitigation measures were made as a condition of the approval of the Project.
4. A Mitigation Monitoring Program was adopted for the Project.
5. A Statement of Overriding Considerations was not adopted for this Project.
6. Findings were made pursuant to the provisions of CEQA.

Public Access to Environmental Document: The MND is available to the General Public at the Office of the Clerk of the Board, County Administrative Center, 4080 Lemon Street, Riverside, CA 92507. The MND is also available at the District office located at 1995 Market Street, Riverside, CA 92501.

J. Williams
 Signature (Public Agency)

General Manager - Chief Engineer
 Title

12/27/2023
 Date

 Date Received for Filing at OPR

01.09.2024 11.3

BOARD OF SUPERVISORS

**RIVERSIDE COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT**

RESOLUTION NO. F2024-03

**COMPLYING WITH SECTION 18 OF THE DISTRICT ACT, ADOPTING A
MITIGATED NEGATIVE DECLARATION AND A MITIGATION MONITORING AND
REPORTING PROGRAM FOR THE PERRIS VALLEY CHANNEL LATERAL B,
STAGE 4 PROJECT, PURSUANT TO THE CALIFORNIA ENVIRONMENTAL
QUALITY ACT, AND APPROVING THE PERRIS VALLEY CHANNEL LATERAL B,
STAGE 4 PROJECT**

WHEREAS, the Perris Valley Channel ("PVC") Lateral B, Stage 4 Project is described as construction of the PVC Lateral B, Stage 4, which consists of approximately 6,000 feet of reinforced concrete box culvert starting at Heacock Street (at the upstream end of PVC Lateral B, Stage 2) to the downstream terminus of the PVC Lateral B, Stage 5 facility; and

WHEREAS, on December 12, 2023, the Riverside County Flood Control and Water Conservation District's ("District") Board of Supervisors adopted Resolution No. F2023-21, pursuant to Section 18 of the District Act ("District Act"), which requires the District to give notice of its intention to construct a project in Zone 4, within the March Air Reserve Base ("MARB") and a portion of the city of Perris, designated as the PVC Lateral B, Stage 4 Project ("Project") and giving further notice that the Project would be considered at a public hearing on January 9, 2024; and

WHEREAS, the Project is within the boundaries of MARB and is generally bounded to the north, south, east and west by industrial development; and

WHEREAS, the Project consists of the construction of an approximately 6,000 lineal feet of reinforced concrete box ("RCB") starting at Heacock Street (at the upstream end of PVC Lateral B, Stage 2) to the downstream terminus of the PVC Lateral B, Stage 5 facility; and

WHEREAS, the Project, once constructed, will provide adequate drainage flood protection for existing and future development to MARB and adjacent properties; and

FORM APPROVED COUNTY COUNSEL
BY: AARON C. GETTIS DATE 12-27-23

1 **WHEREAS**, notice of the Section 18 public hearing was properly made, as required by
2 law, and all persons desiring to be heard on the matter were given the opportunity to appear and
3 present testimony, both oral and written, on January 9, 2024; and

4 **WHEREAS**, pursuant to the California Environmental Quality Act ("CEQA"), the District
5 is the Lead Agency for the Project; and

6 **WHEREAS**, an Initial Study was prepared that thoroughly addresses the environmental
7 effects of implementing the Project, including the construction, operation and maintenance of the
8 various improvements identified therein; and

9 **WHEREAS**, the Initial Study determined that all impacts were either less-than-significant
10 or could be mitigated to less-than-significant, and a Mitigation Monitoring and Reporting Plan
11 ("MMRP") was prepared for the Project; and

12 **WHEREAS**, all CEQA documents for the Project (SCH No. 2022090378), including the
13 Notice of Intent to Adopt an Mitigated Negative Declaration ("MND") and MMRP, were made
14 available for a 30-day public review period commencing on September 22, 2023 and concluding
15 on October 24, 2023 and were posted on the District's website and made available for public review
16 at the District's office; and

17 **WHEREAS**, the District received three comment letters on the Draft Initial Study that
18 were addressed in the Final Initial Study; and

19 **WHEREAS**, the comment letters were from California Department of Fish and Wildlife,
20 City of Perris and March Joint Powers Authority; and

21 **WHEREAS**, the comments did not change the analysis nor the mitigation measures as
22 proposed in the Draft Initial Study, and the District has determined that an MND is the appropriate
23 CEQA document for the Project; and

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1 **WHEREAS**, the General Manager-Chief Engineer for the District has found the Project
2 will not have a significant adverse effect upon the environment, and an MND has been prepared;
3 and

4 **WHEREAS**, the Final Initial Study and MND have been independently reviewed and
5 reflects the independent judgement of the District's Board of Supervisors and are deemed adequate
6 for the purposes of making decisions on the merits of the Project; and

7 **WHEREAS**, all provisions of CEQA and the District Rules to Implement the CEQA have
8 been satisfied; and

9 **WHEREAS**, the District is an active participant and Permittee in the Western Riverside
10 County Multiple Species Habitat Conservation Plan ("MSHCP"); and

11 **WHEREAS**, the Project is in compliance with Sections 6.1.2, 6.1.3, 6.3.2, 6.1.4, 7.0 and
12 Appendix C of the MSHCP as supported by the conclusions of the Initial Study prepared for the
13 Project.
14

15 **NOW, THEREFORE, BE IT RESOLVED, DETERMINED AND ORDERED** by the
16 District's Board of Supervisors in regular session assembled on January 9, 2024, based upon the
17 evidence and testimony presented on the matter, both written and oral, that:
18

- 19 1. The above recitals are incorporated herein by reference.
- 20 2. The Project is in compliance with Section 18 of the District Act. The Section 18
21 Map with an illustration of the Project's cross sections is attached herein as Attachment "A"; the
22 Engineer's Statement is attached herein as Attachment "B"; and the Declaration of Postings for the
23 Moreno Valley Public Library – Iris Branch, the County Clerk and the District are attached herein
24 as Attachment "C".
25

- 26 3. There is no substantial evidence in light of the whole record that the Project, with
27 mitigation, will have a significant adverse effect upon the environment and the Initial Study
28

1 (Attachment "D") and the MND (Attachment "E") represent the independent judgement of the
2 District.

3 4. The MND (Attachment "E") is adopted based on the findings incorporated in the
4 Initial Study and the determination that the Project will not have a significant effect on the
5 environment.

6 5. The MMRP attached to this Resolution (Attachment "F") is adopted pursuant to
7 Public Resources Code §21081.6.

8 6. All obligations set forth to the District pursuant to applicable sections of the
9 MSHCP have been analyzed and shall be implemented by the District as prescribed in the MSHCP
10 Implementation Agreement.

11 7. The Project is approved, and the District is hereby authorized to proceed with the
12 Project.

13 8. Pursuant to Public Resources Code Section 21081.6, the custodians of the
14 documents and materials that constitute the record of proceedings on which this decision is based
15 are with the Clerk of the District Board of Supervisors and the District. These documents and
16 materials are located at 4080 Lemon Street, Riverside, California ("Clerk") and 1995 Market
17 Street, Riverside, California ("District"). This information is provided in compliance with Public
18 Resources Code §21081.6.

19 9. The Board of Supervisors hereby directs staff to execute and file a Notice of
20 Determination (Attachment "G") with the Riverside County Clerk's Office and the Office of
21 Planning and Research within five (5) working days of adoption of this Resolution.
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1 Board of Supervisors

RIVERSIDE COUNTY FLOOD CONTROL AND

2 WATER CONSERVATION DISTRICT

3
4 RESOLUTION NO. F2024-03

5 COMPLYING WITH SECTION 18 OF THE DISTRICT ACT, ADOPTING A MITIGATION

6 MONITORING AND REPORTING PROGRAM FOR THE PERRIS VALLEY CHANNEL

7 LATERAL B, STAGE 4 PROJECT, PURSUANT TO THE CALIFORNIA ENVIROMENTAL

8 QUALITY ACT, AND APPROVING THE PERRIS VALLEY CHANNEL LATERAL B, STAGE

9 4 PROJECT

10
11 ROLL CALL:

12
13 Ayes: Jeffries, Washington, Spiegel, Perez, and Gutierrez

14 Nays: None

15 Absent: None

16
17
18 The foregoing is certified to be a true copy of a resolution duly adopted by said Board of
19 Supervisors on the date therein set forth.

20
21 KIMBERLY A. RECTOR, Clerk of said Board

22
23 By:  _____

24 Deputy

25
01.09.2024 11.3

MITIGATED NEGATIVE DECLARATION

Project Title: Perris Valley Channel MDP Lateral B, Stage 4 **State Clearinghouse Number:** 2022090378

Contact Person: Kevin Cunningham **Telephone Number:** 951.955.1526 **Email:** kcuning@rivco.org

Lead Agency and Project Sponsor: Riverside County Flood Control and Water Conservation District

Address: 1995 Market Street **City:** Riverside **Zip:** 92501

Project Description: The Riverside County Flood Control and Water Conservation District (District), in partnership with the March Joint Powers Authority (MJPA) and March Air Reserve Base (MARB) is proposing to construct, operate and maintain the Perris Valley Channel (PVC) Lateral B, Stage 4 Project (project). PVC Lateral B-5, Stage 1 and Stage 2 and PVC Lateral B, Stage 2 and 3 have already been constructed between Heacock Street and Interstate 215 (I-215). The project would construct PVC Lateral B, Stage 4, which consists of approximately 6,000 ft. of reinforced concrete box (RCB) connecting the PVC Lateral B, Stage 5 facility to the existing PVC Lateral B, Stage 2 facility. The project's general alignment begins at the downstream terminus of PVC Lateral B, Stage 5 and continues south and east adjacent to the MARB west perimeter security fence before tying into the PVC Lateral B, Stage 2 facility at Heacock Street. The project would include three transition structures, four junction structures, twelve bolted down manholes for security, and two inlets along the southernmost end of the alignment to collect on-site flows from MARB. The project would also include two lateral stubouts and bulkheads for the future construction of Lateral B-7 and Lateral B-8 in the city of Perris. The project would be located mostly within MARB right of way but will require a 45-ft. permanent easement has been dedicated for the construction and maintenance of Stage 4 on APN 294-180-055 which is outside of the MARB.

Project Location: The project site is mostly located within the limits of MARB and the city of Perris in Western Riverside County, east of I-215. The proposed alignment would be located between the existing PVC Lateral B, Stage 2 facility at Heacock Street and the Perris Valley Channel Lateral B, Stage 5 facility. The project is located within Township 3 South, Range 4 West, Section 36 San Bernardino Baseline Meridian within APNs 294- 220-003, 294-200-002, 294-180-007, 294-180-006, 294-180-037, 294-180-055, and 294-180-017.

Lead Agency Finding: The General Manager-Chief Engineer of the Riverside County Flood Control and Water Conservation District has made a finding that the proposed Perris Valley Channel MDP Lateral B, Stage 4 Project will not have a significant adverse effect on the environment with mitigation incorporated. An Initial Study/Mitigated Negative Declaration supporting this finding is attached. This finding will become final upon adoption of this Mitigated Negative Declaration by the Board of Supervisors of the Riverside County Flood Control and Water Conservation District.

Signature: 
 JASON E. UHLEY
 General Manager-Chief Engineer

Dated: 12/20/2023

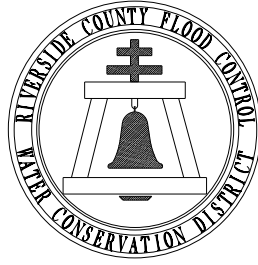
Board of Supervisors Action: The Board of Supervisors of the Riverside County Flood Control and Water Conservation District, assembled in regular session on January 9, 2024 has determined that the Perris Valley Channel MDP Lateral B, Stage 4 Project will not have a significant adverse effect on the environment and has adopted this Mitigated Negative Declaration.

Signature: 
 KIMBERLY RECTOR
 Clerk of the Board

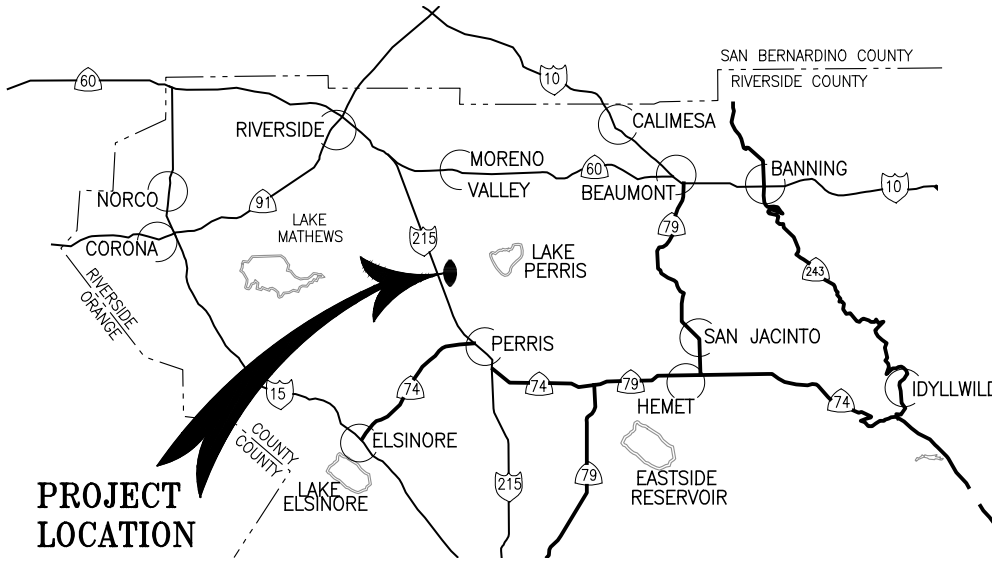
Dated: 1/9/24

Copies to: 1) County Clerk
 2) Flood Control

SECTION 18 PUBLIC HEARING MAP



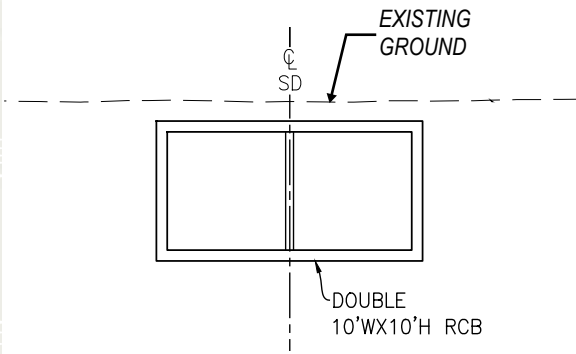
PERRIS VALLEY CHANNEL MDP LATERAL B, STAGE 4 PROJECT No. 4-0-00009 NOVEMBER 2023



VICINITY MAP
T3S, R4W, SEC.36
N.T.S.



INDEX MAP
N.T.S.



TYPICAL SECTION VIEW
N.T.S.

LEGEND

- PROPOSED PVC LATERAL B, STAGE 4 STORM DRAIN
- - - EXISTING PVC STORM DRAIN FACILITIES

Perris Valley MDP Lateral B, Stage 4
Project No. 4-0-00009-04
Engineer's Statement

Perris Valley Channel MDP Lateral B, Stage 4 is located in March Air Reserve Base, Riverside County, California and within a portion of City of Perris. This is a District-led proposed storm drain improvement project of approximately 6,000 feet of underground reinforced concrete box that will provide improved flood protection to the March Air Reserve Base and adjacent properties.

The project will collect the 100-year runoff from the recently constructed Perris Valley Channel Lateral B, Stage 5 storm drain as part of a warehouse development located between March Air Reserve Base and Interstate 215 and convey the water south to the existing Perris Valley Channel Lateral B, Stage 2 open channel at Heacock Street. The project is bounded by industrial developments to the North, South and West located in City of Perris and March Air Reserve Base to the West.

Estimated Project Cost: \$ 15,466,856.00

CERTIFICATE OF POSTING

I, Beth DeHayes, Exec Asst IV, do hereby certify that I am not
(NAME AND TITLE)
a party to the action or proceeding subject to this notice; and on 12/13/2023
(DATE OF POSTING)

I posted a copy of the following document:

**RESOLUTION NO. F2023-21 SETTING A PUBLIC HEARING DATE FOR THE
PERRIS VALLEY CHANNEL LATERAL B, STAGE 4 PROJECT IN
ACCORDANCE WITH SECTION 18 OF THE RIVERSIDE COUNTY FLOOD
CONTROL AND WATER CONSERVATION DISTRICT ACT**

The subject document was posted at the:

**RIVERSIDE COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT
1995 MARKET STREET
RIVERSIDE, CALIFORNIA 92501**

Signature: Beth DeHayes Date: 12/13/23

CERTIFICATE OF POSTING

I, Steve Johnson Library Associate 3, do hereby certify that I am not
(NAME AND TITLE)

a party to the action or proceeding subject to this notice; and on 12/12/23
(DATE OF POSTING)

I posted a copy of the following document:

**RESOLUTION NO. F2023-21 SETTING A PUBLIC HEARING DATE FOR THE
PERRIS VALLEY CHANNEL LATERAL B, STAGE 4 PROJECT IN
ACCORDANCE WITH SECTION 18 OF THE RIVERSIDE COUNTY FLOOD
CONTROL AND WATER CONSERVATION DISTRICT ACT**

The subject document was posted at the:

**MORENO VALLEY PUBLIC LIBRARY - IRIS PLAZA BRANCH
16170 PERRIS BOULEVARD
MORENO VALLEY, CALIFORNIA 92551**

Signature: Steve Johnson

Date: 12/12/23

CERTIFICATE OF POSTING

I, _____, do hereby certify that I am not
(NAME AND TITLE)
a party to the action or proceeding subject to this notice; and on _____
(DATE OF POSTING)

I posted a copy of the following document:

**RESOLUTION NO. F2023-21 SETTING A PUBLIC HEARING DATE FOR THE
PERRIS VALLEY CHANNEL LATERAL B, STAGE 4 PROJECT IN
ACCORDANCE WITH SECTION 18 OF THE RIVERSIDE COUNTY FLOOD
CONTROL AND WATER CONSERVATION DISTRICT ACT**

The subject document was posted at the:

**RIVERSIDE COUNTY CLERK AND RECORDER'S OFFICE
2724 GATEWAY DRIVE
RIVERSIDE, CALIFORNIA 92507**

Signature: _____ Date: _____

FILED / POSTED
County of Riverside
Peter Aldana
Assessor-County Clerk-Recorder
E-202301284
12/12/2023 03:58 PM Fee: \$ 0.00
Page 1 of 7
Removed: _____ By: _____ Deputy

(SPACE FOR CLERK'S USE)

FINAL
INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION

Perris Valley Channel Lateral B, Stage 4 Project

Lead Agency:



Riverside County Flood Control and Water Conservation District
1995 Market Street
Riverside, CA 92501

Prepared By:

Michael Baker
I N T E R N A T I O N A L

Michael Baker International
40810 County Center Drive, Suite 200
Temecula, CA 92591

December 2023

JN 187014

This document is designed for double-sided printing to conserve natural resources.

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APPENDIX

A. DRAFT INITIAL STUDY

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1.0 INTRODUCTION

The Riverside County Flood Control and Water Conservation District (District), in partnership with the March Joint Powers Authority (MJPA) and March Air Reserve Base (MARB), is proposing to construct the Perris Valley Channel (PVC) Lateral B, Stage 4 Project (project). The project site is located within the limits of MJPA, MARB and the City of Perris in Western Riverside County, east of the Interstate 215 freeway (I-215). PVC Lateral B-5 Stage 1 and Stage 2 and PVC Lateral B Stage 2 and 3 of the Lateral B system have already been constructed between Heacock Street and I-215. The project would construct PVC Lateral B Stage 4 which consists of approximately 6,000 ft of reinforced concrete box (RCB) culvert connecting the PVC Lateral B Stage 5 facility to the existing PVC Lateral B Stage 2 facility. The project would include three transitions structures, four junction structures, twelve bolted down manholes for security, and two inlets along the southernmost end of the alignment to collect onsite flows from MARB. The project would also include two lateral stubs and bulkheads for the future construction of Lateral B-7 and Lateral B-8 in the City of Perris. Project approval would require a U.S. Army Corps of Engineers Section 404 Permit, 401 Certification from the Regional Water Quality Control Board, General Permit Order 2009-0009-DWQ, Storm Water Pollution Prevention Plan, and Best Management Practices from the State Water Resources Control Board, and CEQA Clearance.

The Initial Study/Mitigated Negative Declaration (IS/MND) (State Clearinghouse No. 2022090378) was made available for public review and comment pursuant to CEQA Guidelines Section 15073. The public review commenced on September 22, 2022 and concluded on October 24, 2022. The IS/MND was made available for public review at the Riverside County Flood Control and Water Conservation District office located at 1995 Market Street, Riverside, CA 92501. It is also available online at www.rcflood.org and included as Appendix A.

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2.0 RESPONSE TO COMMENTS

During the public review period, comment letters were received on the IS/MND from interested public agencies, organizations, and individuals. The following is a list of commenters on the IS/MND during the public review period.

Comment Letter No.	Person, Firm, or Agency	Letter Dated
1	California Department of Fish and Wildlife Inland Deserts Region Kim Freeburn-Marquez, Environmental Program Manager	October 24, 2022
2	City of Perris Development Services Department - Planning Division Patricia Barnes, Planning Manager	October 24, 2022
3	March Joint Powers Authority Jeffrey Smith, Principal Planner	October 24, 2022

Although the California Environmental Quality Act (CEQA) Guidelines do not require a lead agency to prepare written responses to comments received (see CEQA Guidelines Section 15088), the Riverside County Flood Control and Water Conservation District (District) has elected to prepare the following written responses with the intent of conducting a comprehensive and meaningful evaluation of the proposed project. The number designations in the responses are correlated to the bracketed and identified portions of each comment letter.



State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Inland Deserts Region
3602 Inland Empire Boulevard, Suite C-220
Ontario, CA 91764
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



October 24, 2022

Mr. Jerry Aguirre, Associate Flood Control Planner
Riverside County Flood Control and Water Conservation District
1995 Market Street
Riverside, CA 92501
jeraquir@RIVCO.ORG

Subject: Mitigated Negative Declaration
Perris Valley Channel Lateral B, Stage 4 Project
State Clearinghouse No. 2022090378

Dear Mr. Aguirre:

The California Department of Fish and Wildlife (CDFW) received a Mitigated Negative Declaration (MND) from the Riverside County Flood Control and Water Conservation District (County) for the Perris Valley Channel Lateral B, Stage 4 Project (Project) for the County, in partnership with the March Joint Powers Authority (MJPA) and March Air Reserve Base, (Project Applicant/Proponent) pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹

1-1 Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW ROLE

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)) CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Fish & G. Code, § 1802.). Similarly, for purposes of CEQA, CDFW provides, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

¹ CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

CDFW is also submitting comments as a Responsible Agency under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may

need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority. (Fish & G. Code, § 1600 et seq.) Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), the project proponent may seek related take authorization as provided by the Fish and Game Code.

CDFW issued Natural Community Conservation Plan approval and take authorization in 2004 for the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP), as per Section 2800, et seq., of the California Fish and Game Code. The MSHCP established a multiple species conservation program to minimize and mitigate habitat loss and the incidental take of covered species in association with activities covered under the permit. The County of Riverside is a permittee to the MSHCP and is responsible for implementation of the MSHCP and its associated Implementation Agreement. CDFW is providing the following comments as they relate to the Project's consistency with the MSHCP and CEQA.

PROJECT DESCRIPTION SUMMARY

Project Location

The Project site comprises approximately 21.27 acres in the City of Perris within Riverside County, California, in Section 36 West, Township 3 South, Range 4 West, of the U.S. Geological Survey (USGS) 7.5" Perris, California topographic quadrangle map. The Project is located east of Interstate 215 freeway (I-215), north of Harley Knox Boulevard, and immediately west of March Air Reserve Base/Inland Port Airport. The Project is located within Assessor's Parcel Numbers (APN) 294-220-003, 294-200-002, 294-180-007, 294-180-006, 294-180-037, 294-180-055, and 294-180-017.

Project Description

The Project proposes to construct Perris Valley Channel (PVC) Lateral B Stage 4 which consists of approximately 6,000 ft of reinforced concrete box (RCB) culvert connecting the PVC Lateral B Stage 5 facility to the existing PVC Lateral B Stage 2 facility. It would also include three transitions structures, four junction structures, twelve bolted down manholes for security, and two inlets along the southernmost end of the alignment to collect on-site flows from the March Air Reserve Base. The Project would also include two lateral stubs and bulkheads for the future construction of Lateral B-7 and Lateral B-8 in the City of Perris.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations presented below to assist the County in adequately identifying and/or mitigating the Project's potentially significant direct and indirect impacts to biological resources, and in Attachment 1 "Mitigation Monitoring and Reporting Program" for consideration by the County prior to adoption of the MND for the Project. The comments and recommendations are also offered to enable the CDFW to adequately review and comment on the proposed Project's consistency with the MSHCP.

Western Riverside County Multiple Species Habitat Conservation Plan

Western Riverside MSHCP Implementation:

1-2 Compliance with approved habitat plans, such as the MSHCP, is discussed in CEQA. Specifically, Section 15125(d) of the CEQA Guidelines requires that the CEQA document discuss any inconsistencies between a proposed project and applicable general plans and regional plans, including habitat conservation plans and natural community conservation plans. An assessment of the impacts to the MSHCP as a result of this Project is necessary to address CEQA requirements. The proposed Project occurs within the MSHCP area and is subject to the provisions and policies of the MSHCP.

The proposed Project occurs within the MSHCP area and is subject to the provisions and policies of the MSHCP. To be considered a covered activity, Permittees need to demonstrate that proposed actions are consistent with the MSHCP, the Permits, and the Implementing Agreement. The County is the Lead Agency and is signatory to the Implementing Agreement of the MSHCP.

To demonstrate consistency with the MSHCP, as part of the CEQA review, the County shall ensure the Project implements the following:

1. Pays Local Development Mitigation Fees and other relevant fees as set forth in Section 8.5 of the MSHCP.
2. Demonstrates compliance with: 1) the Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools, set forth in Section 6.1.2 of the MSHCP; 2) the Protection of Narrow Endemic Plant Species set forth in Section 6.1.3; 3) the Urban/Wildlands Interface Guidelines as set forth in Section 6.1.4 of the MSHCP; 4) the policies set forth in Section 6.3.2; and 5) the Best Management Practices and the siting, construction, design, operation and maintenance guidelines as set forth in Section 7.0 and Appendix C of the MSHCP.

The MSHCP identifies that the California Department of Fish and Wildlife and the U. S. Fish and Wildlife Service (collectively known as the Wildlife Agencies) shall be notified

in advance of approval of public and private projects for the identified MSHCP activities which includes the Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools (Section 6.11 of the MSHCP). CDFW requests that to demonstrate compliance with the MSHCP, the County complete MSHCP implementation prior to adoption of the MND for the Project.

Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools

The MSHCP Protection of Species Associated with Riparian/Riverine and Vernal Pool Resources Section 6.1.2 indicates that if avoidance of onsite impacts to Section 6.1.2 resources is not feasible, then the impacts should be identified and mitigated for through a Determination of Biologically Equivalent or Superior Preservation (DBESP) process prior to or in parallel to CEQA. The assessment of Riparian/Riverine and Vernal Pool Resources should include mapping of riparian/riverine areas and vernal pools, species composition, topography/hydrology, and soil analysis which may be completed during the CEQA process (Section 6.1.2 of the MSHCP). If the mapping noted above identifies suitable Habitat for the species listed in the MSHCP and the proposed project design does not incorporate avoidance of the identified Habitat, focused surveys for those species shall be conducted, and avoidance and minimization measures implemented in accordance with the species-specific objectives for those species. The MSHCP identifies that the Wildlife Agencies **shall** be notified in advance of approval of public or private projects of draft determinations for the biologically equivalent or superior determination findings associated with the Protection of Wetland Habitats and Species policies presented in Section 6.1.2 of the MSHCP (MSHCP Section 6.11). As required by MSHCP, completion of the DBESP process prior to adoption of the environmental document ensures that the project is consistent with the MSHCP and provides public disclosure and transparency during the CEQA process by identifying the project impacts and mitigation for wetland habitat, a requirement of CEQA Guidelines, §§ 15071, subs. (a)-(e).

The MND and accompanying *General Biological Resources Assessment and MSHCP Consistency Analysis* (located in Appendix B-1) indicate that 2.4 acres of riparian/riverine or vernal pool resources are located within the proposed Project area. CDFW appreciates the analysis of impacts provided within the MND and General Biological Resource Assessment, however, because the DBESP has not been completed the impact analysis and required mitigation may change based on Wildlife Agencies review to demonstrate that the proposed mitigation proposed for the impacts to riparian/riverine resources is biologically equivalent or superior preservation to avoidance. Without a complete and accurate description of the impacts to existing riparian/riverine resources and the proposed mitigation the draft MND provides incomplete analysis of the project-related environmental impacts. To ensure the mitigation included in the final environmental document accurately represents what is required for MSHCP implementation and addresses protection of riparian/riverine resources, a DBESP should be prepared and submitted to the Wildlife Agencies for review and response prior to adopting the MND. The final CEQA document should fully

identify the potential impacts to riparian/riverine resources and provide adequate avoidance, minimization, mitigation, monitoring, and reporting commitments identified in the DBESP. CDFW requests that to demonstrate consistency with the MSHCP, the County complete the DBESP process prior to adopting the environmental document and recommends the inclusion of the following measure in the MND per the edits below (edits are in ~~strike through~~ and **bold**), and also included in Attachment 1 "Mitigation Monitoring and Reporting Program".

MM Bio XX: Riparian/Riverine Resources. The County approved a Determination of Biologically Equivalent or Superior Preservation (DBESP) to address impacts to riparian/riverine resources, MSHCP Section 6.1.2. The U.S. Fish and Wildlife Service and California Department of Fish and Wildlife reviewed and responded to the DBESP. As identified in the DBESP report, the proposed impacts are [update with numbers] of acres, and the proposed mitigation sufficient to offset impacts MSHCP riparian/riverine areas is [update with DBESP results and findings]. The County shall implement the avoidance, minimization, and mitigation measures identified in the DBESP.

Lake and Streambed Alteration Program

1-3 Based on review of material submitted with the MND and review of aerial photography the Project has the potential to impact of fish and wildlife resources subject to Fish and Game Code section 1600 et seq. Depending on how the Project is designed and constructed, it is likely that the Project applicant will need to notify CDFW per Fish and Game Code section 1602. To ensure compliance with Fish and Game Code section 1602 CDFW recommends that the County condition the MND to include a mitigation measure for consultation with CDFW to determine if Fish and Game Code section 1600 et seq. resources may occur within the proposed Project alignment. Fish and Game Code section 1602 requires an entity to notify CDFW prior to commencing any activity that may do one or more of the following: substantially divert or obstruct the natural flow of any river, stream or lake; substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or deposit debris, waste or other materials that could pass into any river, stream or lake. Please note that "any river, stream or lake" includes those that are episodic (i.e., those that are dry for periods of time) as well as those that are perennial (i.e., those that flow year-round). This includes ephemeral streams, desert washes, and watercourses with a subsurface flow.

Upon receipt of a complete notification, CDFW determines if the proposed Project activities may substantially adversely affect existing fish and wildlife resources and whether a Lake and Streambed Alteration (LSA) Agreement is required. An LSA Agreement includes measures necessary to protect existing fish and wildlife resources. CDFW may suggest ways to modify the project that would eliminate or reduce harmful impacts to fish and wildlife resources.

CDFW's issuance of an LSA Agreement is a "project" subject to CEQA (see Pub. Resources Code, § 21065). To facilitate issuance of an LSA Agreement, if necessary, the MND should fully identify the potential impacts to the lake, stream, or riparian resources, and provide adequate avoidance, mitigation, and monitoring and reporting commitments. Early consultation with CDFW is recommended, since modification of the proposed Project may be required to avoid or reduce impacts to fish and wildlife resources. To obtain a Lake or Streambed Alteration notification package, please go to <https://www.wildlife.ca.gov/Conservation/LSA/Forms>.

CDFW recommends the inclusion of the following measure in the MND per the edits below (edits are in ~~strike through~~ and **bold**), and also included in Attachment 1 "Mitigation Monitoring and Reporting Program":

MM Bio XX: Prior to the grading the Project site and prior to the start of Project activities, the Applicant shall notify the California Department of Fish and Wildlife (CDFW) for impacts to Fish and Game Code section 1602 resources. The applicant shall either receive a Streambed Alteration Agreement or written documentation from CDFW that a Streamed Alteration Agreement is not needed.

Nesting Birds

1-4 It is the Project proponent's responsibility to avoid Take of all nesting birds. Fish and Game Code section 3503 makes it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by Fish and Game Code or any regulation made pursuant thereto. Fish and Game Code section 3513 makes it unlawful to take or possess any migratory nongame bird except as provided by the rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. § 703 et seq.). Fish and Game Code section 3503.5 makes it unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by Fish and Game Code or any regulation adopted pursuant thereto. These regulations apply anytime nests or eggs exist on the Project site.

The timing of the nesting season varies greatly depending on several factors, such as the bird species, weather conditions in any given year, and long-term climate changes (e.g., drought, warming, etc.). CDFW staff have observed that changing climate conditions may result in the nesting bird season occurring earlier and later in the year than historical nesting season dates. CDFW recommends the completion of nesting bird survey regardless of time of year to ensure compliance with all applicable laws pertaining to nesting and to avoid take of nests.

The duration of a pair to build a nest and incubate eggs varies considerably, therefore, CDFW recommends surveying for nesting behavior and/or nests and construction within

three days prior to start of Project construction to ensure all nests on site are identified and to avoid take of nests.

CDFW is concerned that potential impacts to nesting birds are not identified or discussed within the MND and strongly suggests the City evaluate the direct, indirect, and cumulative impacts to nesting birds, before approval and certification of the MND. Appropriate analysis would include conducting focused nesting bird surveys throughout the project site. To address the above issues and help the Project applicant avoid unlawfully taking of nests and eggs, CDFW requests the County include the following mitigation measures in the MND per below (edits are in ~~strike through~~ and **bold**), and also included in Attachment 1 "Mitigation Monitoring and Reporting Program".

MM BIO-XX: Nesting Bird Survey. Site preparation activities (ground disturbance, construction activities, and/or removal of trees and vegetation) for all Project activities shall be avoided, to the greatest extent possible, during the nesting season of potentially occurring nesting species. Additionally, raptors (birds of prey) are known to begin nest building in January or February. If vegetation clearing is to occur between January 1 and February 15, a nesting raptor survey shall be conducted within the project site, including a 500-foot buffer, no more than three days prior to vegetation removal.

If site-preparation activities must take place during the nesting/breeding season, a qualified biologist shall be retained to perform a pre-construction survey for nesting birds. A pre-activity field survey shall be conducted by a qualified biologist prior to the issuance of grading permits for such project to determine if active nests of species protected by the MBTA or the California Fish and Game Code are present in the construction zone in addition to ongoing monitoring, and if necessary, establishment of minimization measures. The Project Applicant shall adhere to the following:

- 1. Applicant shall designate a biologist (Designated Biologist) experienced in: identifying local and migratory bird species of special concern; conducting bird surveys using appropriate survey methodology; nesting surveying techniques, recognizing breeding and nesting behaviors, locating nests and breeding territories, and identifying nesting stages and nest success; determining/establishing appropriate avoidance and minimization measures; and monitoring the efficacy of implemented avoidance and minimization measures.**
- 2. Pre-activity field surveys shall be conducted at the appropriate time of day/night, during appropriate weather conditions, no more than 3 days prior to the initiation of Project activities.**

Surveys shall encompass all suitable areas including trees, shrubs, bare ground, burrows, cavities, and structures. Survey duration shall take into consideration the size of the Project site; density, and complexity of the habitat; number of survey participants; survey techniques employed; and shall be sufficient to ensure the data collected is complete and accurate.

If active nests are not located within the implementing project site, no biological monitor is needed. If active bird nests are confirmed to be present during the pre-construction survey, an appropriate buffer zone shall be established by a qualified biologist immediately based on their best professional judgement and experience, the buffer around the nest shall be delineated and flagged, and no construction activity shall occur within the buffer area until a qualified biologist determines nesting species have fledged and the nest is no longer active or the nest has failed. A minimum buffer of 500 feet around an active listed species or raptor nest, 300 feet around active passerine (perching birds or songbirds), sensitive, or protected bird nests (non-listed), or 1000 feet of sensitive or protected songbird nests. The Designated Biologist shall monitor the nest at the onset of project activities, and at the onset of any changes in such project activities (e.g., increase in number or type of equipment, change in equipment usage, etc.) to determine the efficacy of the buffer. If the Designated Biologist determines that such project activities may be causing an adverse reaction, the Designated Biologist shall adjust the buffer accordingly or implement alternative avoidance and minimization measures, such as redirecting or rescheduling construction or erecting sound barriers. All work within these buffers will be halted until the nesting effort is finished (i.e., the juveniles are surviving independent from the nest). The onsite qualified biologist will review and verify compliance with these nesting avoidance buffers and will verify the nesting effort has finished. Work can resume within these avoidance areas when no other active nests are found. Upon completion of the survey and nesting bird monitoring, a report shall be prepared and submitted to the County for mitigation monitoring compliance record keeping.

Burrowing Owl

For burrowing owl, suitable habitat was identified through aerial imagery and focused burrowing owl surveys were completed during the 2022 field season. No owls were observed in the Project site; however, two burrowing owls were observed within the 150-meter buffer of the survey area. In California, burrowing owl are in decline primarily as a result of habitat loss, as well as disease, predation, and drought. CDFW recommends the inclusion of a process to avoid direct take of burrowing owls and to avoid project delays if the owls are detected during the pre-construction surveys.

CDFW requests the County evaluate the direct, indirect, and cumulative impacts to burrowing owl through the DBESP process, before approval and certification of the MND. Appropriate analysis would include a discussion of the results of the focused burrowing owl surveys and suitable habitat surveys for the Project site. To avoid take of active nests, appropriate avoidance and minimization measures need to be identified in the MND to protect burrowing owl during the burrowing owl nesting season. CDFW recommends creation of a Burrowing Owl Plan if owls are detected on the Project Site.

To avoid take of active burrowing owl burrows (nests), CDFW requests the addition of the following mitigation measure. References to creating a DBESP are removed because the DBESP should have been sent to the Wildlife Agencies for 60-day review and response prior to approval of the Project. Requested additions are identified in **bold** and removed measures are in ~~strikeout~~.

MM BIO-XX: Burrowing Owl Survey. A 30-day preconstruction survey shall be conducted by a qualified biologist prior to the commencement of Project activities (e.g., vegetation clearing, clearing, and grubbing, tree removal, site watering) to determine the presence of owl or sign thereof. The results of the survey would be submitted to the County prior to obtaining a grading permit, in addition to a survey conducted and reported to CDFW within three days of ground disturbance or vegetation clearance following the recommended guidelines of the MSHCP.

If burrowing owl are not detected during the pre-construction survey, no further mitigation is required. If burrowing owl are detected, CDFW shall be sent written notification within 3 days of detection of burrowing owls. If active burrowing owl burrows are detected, the County shall not commence activities until no sign is present that the burrows are being used by adult or juvenile owls or following CDFW approval of a Burrowing Owl Plan as described below. If owl presence is difficult to determine, a qualified biologist shall monitor the burrows with motion-activated trail cameras for at least 24 hours to evaluate burrow occupancy. The onsite qualified biologist will verify the nesting effort has finished according to methods identified in the Burrowing Owl Plan.

The Burrowing Owl Plan shall be prepared in accordance with guidelines in the CDFW Staff Report on Burrowing Owl (March 2012) and MSHCP. The qualified biologist and Project Applicant shall coordinate with the County, CDFW, and USFWS to develop a Burrowing Owl Plan to be approved by the County, CDFW, and USFWS prior to commencing Project activities. The Burrowing Owl Plan shall describe proposed avoidance, relocation, monitoring, minimization, and/or mitigation actions. The Burrowing Owl Plan shall include the number and location of occupied burrow sites and details on proposed buffers

if avoiding the burrowing owls or information on the adjacent or nearby suitable habitat available to owls for relocation. If no suitable habitat is available nearby for relocation, details regarding the creation and funding of artificial burrows (numbers, location, and type of burrows) and management activities for relocated owls shall also be included in the Burrowing Owl Plan. The County shall implement the Burrowing Owl Plan following CDFW and USFWS review and approval.

If burrowing owls are observed within Project Site(s) during Project implementation and construction, the County shall notify CDFW immediately in writing within 48 hours of detection. A Burrowing Owl Plan shall be submitted to CDFW for review and approval within two weeks of detection and no Project activity shall continue within 1000 feet of the burrowing owls until CDFW approves the Burrowing Owl Plan. The County shall be responsible for implementing appropriate avoidance and mitigation measures, including burrow avoidance, passive or active relocation, or other appropriate mitigation measures as identified in the Burrowing Owl Plan.

If ground-disturbing activities occur but the site is left undisturbed for more than 30 days, a preconstruction survey for burrowing owl shall be conducted and reported to CDFW as described above. If a burrowing owl is found, the same coordination described above shall be necessary.

A final letter report shall be prepared by the qualified biologist documenting the results of the passive relocation. The letter shall be submitted to CDFW prior to the start of Project activities.

MITIGATION AND MONITORING REPORTING PLAN

CDFW recommends updating the MND's proposed Biological Resources Mitigation Measures to include mitigation measures recommended in this letter. Mitigation measures must be fully enforceable through permit conditions, agreements, or other legally binding instruments [(Pub. Resources Code, § 21081.6; CEQA Guidelines, § 15126.4(a)(2)]. As such, CDFW has provided comments and recommendations to assist the City in developing mitigation measures that are (1) consistent with CEQA Guidelines section 15126.4; (2) specific; (3) detailed (i.e., responsible party, timing, specific actions, location), and (4) clear for a measure to be fully enforceable and implemented successfully via mitigation, monitoring, and/or reporting program (Pub. Resources Code, § 21081.6; CEQA Guidelines, § 15097). the County is welcome to coordinate with CDFW to further review and refine the Project's mitigation measures. Per Public Resources Code section 21081.6(a)(1), CDFW has provided the the County with a summary of our suggested mitigation measures and recommendations in the form of an attached Draft Mitigation and Monitoring Reporting Plan (MMRP; Attachment

1).

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDDB). The CNDDDB field survey form can be filled out and submitted online at the following link: <https://wildlife.ca.gov/Data/CNDDDB/Submitting-Data>. The types of information reported to CNDDDB can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>.

ENVIRONMENTAL DOCUMENT FILING FEES


The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of environmental document filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the environmental document filing fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

CONCLUSION

CDFW appreciates the opportunity to comment on the MND for the Perris Valley Channel Lateral B, Stage 4 Project, State Clearinghouse No. 2022090378 to assist in identifying and mitigating Project impacts on biological resources. CDFW personnel are available for consultation regarding biological resources and strategies to minimize impacts. CDFW requests that Riverside County Flood Control and Water Conservation County addresses CDFW's comments and concerns prior to adoption of the MND for the Project.

Questions regarding this letter or further coordination should be directed to Katrina Rehrer, Environmental Scientist, at katrina.rehrer@wildlife.ca.gov.

Sincerely,

DocuSigned by:

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Kim Freeburn-Marquez
Environmental Program Manager

Jerry Aguirre, Associate Flood Control Planner
Riverside County Flood Control and Water Conservation District
October 24, 2022
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ATTACHMENTS

Attachment 1: MMRP for CDFW-Proposed Mitigation Measures

REFERENCES

California Department of Fish and Game (CDFG). 2012. Staff report on burrowing owl mitigation. State of California, Natural Resources Agency. Available for download at:
<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843&inline=true>

ATTACHMENT 1: MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

PURPOSE OF THE MMRP

The purpose of the MMRP is to ensure compliance with mitigation measures during Project implementation. Mitigation measures must be implemented within the time periods indicated in the table below.

TABLE OF MITIGATION MEASURES

The following items are identified for each mitigation measure: Mitigation Measure, Implementation Schedule, and Responsible Party for implementing the mitigation measure. The Mitigation Measure column summarizes the mitigation requirements. The Implementation Schedule column shows the date or phase when each mitigation measure will be implemented. The Responsible Party column identifies the person or agency that is primarily responsible for implementing the mitigation measure.

Biological (BIO) Mitigation Measures (MM)	Implementation Schedule	Responsible Party
MM BIO-XX: Riparian/Riverine Resources. The County approved a Determination of Biologically Equivalent or Superior Preservation (DBESP) to address impacts to riparian/riverine resources, MSHCP Section 6.1.2. The U.S. Fish and Wildlife Service and California Department of Fish and Wildlife reviewed and responded to the DBESP. As identified in the DBESP report, the proposed impacts are [update with numbers] of acres, and the proposed mitigation sufficient to offset impacts MSHCP riparian/riverine areas is [update with DBESP results and findings]. The County shall implement the avoidance, minimization, and mitigation measures identified in the DBESP.	Prior to start of Project activities	Project Proponent
MM Bio-XX: Prior to the grading the Project site and prior to the start of Project activities, the Applicant shall notify the California Department of Fish and Wildlife (CDFW) for impacts to Fish and Game Code section 1602 resources. The applicant shall either receive a Streambed Alteration Agreement or written documentation from CDFW that a Streambed Alteration Agreement is not needed.	Prior to start of Project activities	Project Proponent
MM BIO-XX: Nesting Bird Survey. Site preparation activities (ground disturbance, construction activities, and/or removal of trees and vegetation) for all Project activities shall be avoided, to the greatest extent possible, during the nesting season of potentially occurring nesting species. Additionally, raptors (birds of prey) are known to begin nest building in January or	Prior to commencing ground- or vegetation disturbing activities	Project Proponent

<p>February. If vegetation clearing is to occur between January 1 and February 15, a nesting raptor survey shall be conducted within the project site, including a 500-foot buffer, no more than three days prior to vegetation removal.</p> <p>If site-preparation activities must take place during the nesting/breeding season, a qualified biologist shall be retained to perform a pre-construction survey for nesting birds. A pre-activity field survey shall be conducted by a qualified biologist prior to the issuance of grading permits for such project to determine if active nests of species protected by the MBTA or the California Fish and Game Code are present in the construction zone in addition to ongoing monitoring, and if necessary, establishment of minimization measures. The Project Applicant shall adhere to the following:</p> <ol style="list-style-type: none">1. Applicant shall designate a biologist (Designated Biologist) experienced in: identifying local and migratory bird species of special concern; conducting bird surveys using appropriate survey methodology; nesting surveying techniques, recognizing breeding and nesting behaviors, locating nests and breeding territories, and identifying nesting stages and nest success; determining/establishing appropriate avoidance and minimization measures; and monitoring the efficacy of implemented avoidance and minimization measures.2. Pre-activity field surveys shall be conducted at the appropriate time of day/night, during appropriate weather conditions, no more than 3 days prior to the initiation of Project activities. Surveys shall encompass all suitable areas including trees, shrubs, bare ground, burrows, cavities, and structures. Survey duration shall take into consideration the size of the Project site; density, and complexity of the habitat; number of survey participants; survey techniques employed; and shall be sufficient to ensure the data collected is complete and accurate.		
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<p>If active nests are not located within the implementing project site, no biological monitor is needed. If active bird nests are confirmed to be present during the pre-construction survey, an appropriate buffer zone shall be established by a qualified biologist immediately based on their best professional judgement and experience, the buffer around the nest shall be delineated and flagged, and no construction activity shall occur within the buffer area until a qualified biologist determines nesting species have fledged and the nest is no longer active or the nest has failed. A minimum buffer of 500 feet around an active listed species or raptor nest, 300 feet around active passerine (perching birds or songbirds), sensitive, or protected bird nests (non-listed), or 1000 feet of sensitive or protected songbird nests. The Designated Biologist shall monitor the nest at the onset of project activities, and at the onset of any changes in such project activities (e.g., increase in number or type of equipment, change in equipment usage, etc.) to determine the efficacy of the buffer. If the Designated Biologist determines that such project activities may be causing an adverse reaction, the Designated Biologist shall adjust the buffer accordingly or implement alternative avoidance and minimization measures, such as redirecting or rescheduling construction or erecting sound barriers. All work within these buffers will be halted until the nesting effort is finished (i.e., the juveniles are surviving independent from the nest). The onsite qualified biologist will review and verify compliance with these nesting avoidance buffers and will verify the nesting effort has finished. Work can resume within these avoidance areas when no other active nests are found. Upon completion of the survey and nesting bird monitoring, a report shall be prepared and submitted to the County for mitigation monitoring compliance record keeping.</p>		
<p>MM BIO-1: Burrowing Owl Preconstruction Survey. A 30-day preconstruction survey shall be conducted by a qualified biologist prior to the commencement of Project activities (e.g., vegetation clearing, clearing, and grubbing, tree removal, site watering) to determine the presence of owl or sign thereof. The results of the survey would</p>	<p>Prior to commencing ground- or vegetation disturbing activities</p>	<p>Project Proponent</p>

<p>be submitted to the County prior to obtaining a grading permit, in addition to a survey conducted and reported to CDFW within three days of ground disturbance or vegetation clearance following the recommended guidelines of the MSHCP.</p> <p>If burrowing owl are not detected during the pre-construction survey, no further mitigation is required. If burrowing owl are detected, CDFW shall be sent written notification within 3 days of detection of burrowing owls. If active burrowing owl burrows are detected, the County shall not commence activities until no sign is present that the burrows are being used by adult or juvenile owls or following CDFW approval of a Burrowing Owl Plan as described below. If owl presence is difficult to determine, a qualified biologist shall monitor the burrows with motion-activated trail cameras for at least 24 hours to evaluate burrow occupancy. The onsite qualified biologist will verify the nesting effort has finished according to methods identified in the Burrowing Owl Plan.</p> <p>The Burrowing Owl Plan shall be prepared in accordance with guidelines in the CDFW Staff Report on Burrowing Owl (March 2012) and MSHCP. The qualified biologist and Project Applicant shall coordinate with the County, CDFW, and USFWS to develop a Burrowing Owl Plan to be approved by the County, CDFW, and USFWS prior to commencing Project activities. The Burrowing Owl Plan shall describe proposed avoidance, relocation, monitoring, minimization, and/or mitigation actions. The Burrowing Owl Plan shall include the number and location of occupied burrow sites and details on proposed buffers if avoiding the burrowing owls or information on the adjacent or nearby suitable habitat available to owls for relocation. If no suitable habitat is available nearby for relocation, details regarding the creation and funding of artificial burrows (numbers, location, and type of burrows) and management activities for relocated owls shall also be included in the Burrowing Owl Plan. the County shall implement the Burrowing Owl Plan following CDFW and USFWS review and approval.</p> <p>If burrowing owls are observed within Project Site(s) during Project</p>		
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<p>implementation and construction, the County shall notify CDFW immediately in writing within 48 hours of detection. A Burrowing Owl Plan shall be submitted to CDFW for review and approval within two weeks of detection and no Project activity shall continue within 1000 feet of the burrowing owls until CDFW approves the Burrowing Owl Plan. the County shall be responsible for implementing appropriate avoidance and mitigation measures, including burrow avoidance, passive or active relocation, or other appropriate mitigation measures as identified in the Burrowing Owl Plan</p> <p>If ground-disturbing activities occur but the site is left undisturbed for more than 30 days, a preconstruction survey for burrowing owl shall be conducted and reported to CDFW as described above. If a burrowing owl is found, the same coordination described above shall be necessary.</p> <p>A final letter report shall be prepared by the qualified biologist documenting the results of the passive relocation. The letter shall be submitted to CDFW prior to the start of Project activities.</p>		
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RESPONSE NO. 1

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

INLAND DESERTS REGION

KIM FREEBURN-MARQUEZ, ENVIRONMENTAL PROGRAM MANAGER

OCTOBER 24, 2022

1-1 This comment provides introductory text that outlines the role of the California Department of Fish and Wildlife (CDFW), as it pertains to CEQA Guidelines. The commenter states that CDFW is submitting comments as a Responsible Agency under CEQA. CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. The District acknowledges the role of CDFW as a Responsible Agency on this project per Public Resources Code, §21069; CEQA Guidelines §15381. Additionally, the comment provides a summary of the project description, and an introduction to the recommendations provided by CDFW in the following comments. Specific comments are addressed in the responses below.

1-2 This comment raises concern regarding the project's compliance with the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP). The commenter states that the project occurs within the MSHCP area and is therefore subject to the MSHCP provisions and policies. Specifically, they state that relevant fees, such as Local Development Mitigation Fees, must be paid, as set forth in Section 8.5 of the MSHCP. The District will pay the Local Development Mitigation fee of up to 3 percent of the total capital cost of the project cost at the time a construction contract is awarded per Section 13.4 (B) County Flood Control Obligations of the Implementing Agreement for the MSHCP.

In addition, the commenter states that the project shall demonstrate compliance with: 1) the Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools, set forth in MSHCP Section 6.1.2; 2) the protection of Narrow Endemic Plan Species set forth in MSHCP Section 6.1.3; 3) the Urban/Wildlands Interface Guidelines as set forth in MSHCP Section 6.1.4; 4) the policies set forth in MSHCP Section 6.3.2; and 5) the Best Management Practices and the siting, construction, design, operation and maintenance guidelines as set forth in MSHCP Section 7.0 and Appendix C.

As a permittee to the MSHCP the District is obligated to comply with Section 13.4 (A) County Flood Control Obligations of the Implementing Agreement. Section 13.4(A) of the Implementing Agreement details the sections of the MSHCP that the District is required to demonstrate consistency with and includes all the sections referred to in Comment 1-2. As such, a Biological Resources Assessment and MSHCP Consistency Analysis was prepared for the project in July 2022 by Michael Baker International and is included in Appendix B-1 to the Draft IS/MND. The consistency analysis found that the project is not located within any MSHCP Subunits, Criteria Cells, Conservation Areas, Cores/Linkages, or Public/Quasi-Public (P/QP) lands. The consistency analysis also determined that the project would be consistent with MSHCP Section 6.1.2, 6.1.3, 6.1.4, 7.0, and Appendix C.

The project is located within the MSHCP burrowing owl survey area therefore additional surveys were required to demonstrate consistency with Section 6.3.2. Focused surveys following the protocol outlined in the MSHCP were conducted for burrowing owl. Although no burrowing owl were found, the site provides potentially suitable nesting habitat, therefore Mitigation Measure BIO-1 was included in the Draft IS/MND, and has been revised as follows based on comments from CDFW to ensure impacts are avoided to the maximum extent

practicable. These modifications have been made to pages *i* and 4-24 of the Draft IS/MND, and are reflected below and in Section 3.0, *Errata*, and Section 4.0, *MMRP*, of the Final IS/MND.

Section 4.4, Biological Resources, Page 4-24

BIO-1 A pre-construction survey for burrowing owl shall be completed by a qualified biologist no more than 30 days prior to commencement of construction activities in accordance with the *Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) Burrowing Owl Survey* guidelines (County of Riverside 2006) and the California Department of Fish and Wildlife (CDFW) Staff Report on Burrowing Owl (March 2012). If burrowing owls are observed within 500 feet of proposed construction and staging disturbance limits during the preconstruction survey, impacts shall be avoided through implementation of the burrowing owl avoidance measures as described in the MSHCP. CDFW shall be sent written notification within 3 days (72 hours) of detection of burrowing owls. If active burrowing owl burrows are detected, the District shall not commence ground disturbance activities within a 500-foot buffer of the occupied burrow location or less as deemed appropriate by the qualified biologist or until no sign is present that the burrows are being used by adult or juvenile owls. If work must occur within 500 feet of an occupied burrow the District shall prepare and submit a burrowing owl plan in accordance with the MSHCP and CDFW burrowing owl guidelines to CDFW for review and approval within two weeks of detection. CDFW will have two weeks to review and approve the plan prior to the commencement of construction. If no response is received from CDFW, the District will implement the avoidance and mitigation measures outlined in the burrowing owl plan prepared in accordance with MSHCP and CDFW burrowing owl guidelines.

If ground-disturbing activities occur but the site is left undisturbed for more than 30 days, a preconstruction survey for burrowing owl shall be conducted and reported to CDFW as described above. If a burrowing owl is found, the same coordination described above shall be necessary.

If burrowing owl are not detected during the pre-construction survey, no further mitigation is required.

These changes provide a minor revision or clarification and do not represent “significant new information” as defined in CEQA Guidelines Section 15088.5. The changes would not result in any new or substantially greater significant impacts as compared to those identified in the Draft IS/MND.

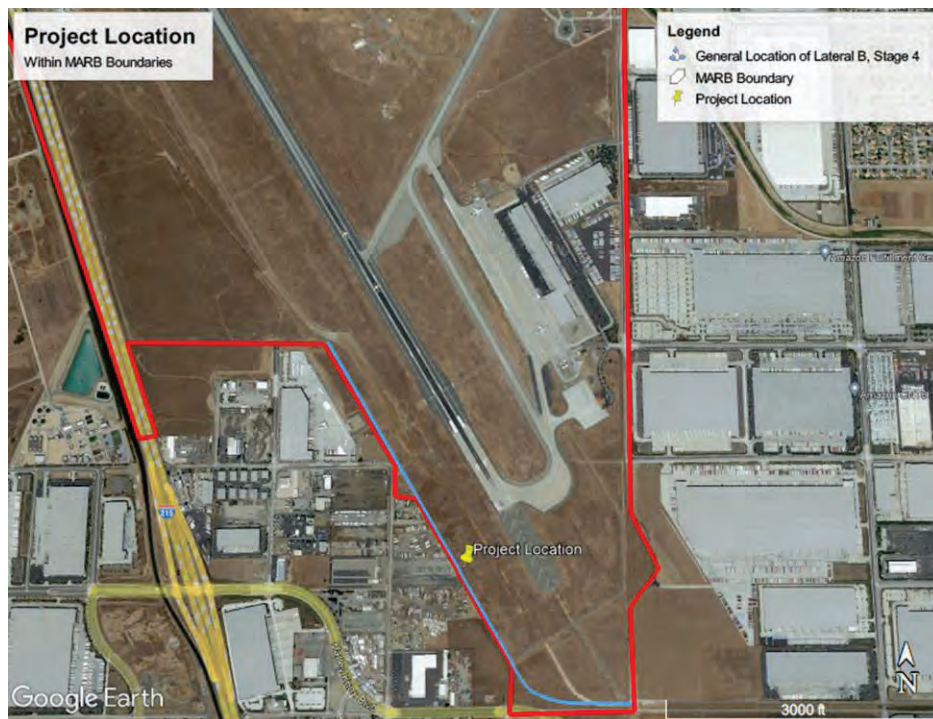
Based on the findings of protocol BUOW surveys as outlined by the MSHCP, implementation of Mitigation Measure BIO-1, and with implementation of applicable BMPs outlined in Section 7.0 and Appendix C of the MSHCP, the District has determined that the project is consistent with Section 6.3.2 of the MSHCP. Please see

Section 4.4.2 of the Draft IS/MND and Section 5 of Draft IS/MND Appendix B-1 for additional details.

- Section 7.5.3 and Appendix C. Section 7.5.3 of the MSHCP outlines construction guidelines when constructing facilities within the Criteria Area or within P/QP lands. The proposed project is not within a Criteria Area or within P/QP lands. The proposed project will incorporate the applicable Construction Guidelines per MSHCP Section 7.5.3 and the BMPs contained in Appendix C. As such, the proposed project will satisfy the BMP requirements of the MSHCP and is consistent with Section 7.5.3 of the MSHCP.

1-3 The commenter recommends that the IS/MND include a mitigation measure for consultation with CDFW, to determine if project activities would affect fish and wildlife resources and whether a Lake and Streambed Alteration Agreement is required. The project is located on Federal Land (March Air Reserve Base) as shown on Figure 1, Project Location, below and therefore would not result in impacts to CDFW jurisdictional streambed. As such, the District does not intend to submit a Lake and Streambed Alteration Agreement to CDFW for this project. A mitigation measure for consultation with CDFW is not necessary nor required in this regard.

Figure 1, Project Location



1-4 This comment discusses Fish and Game Code sections 3503 and 3513, which make it unlawful to take any migratory nongame bird or the nest or eggs of any bird. The commenter states that CDFW recommends the completion of nesting bird survey regardless of time of year to ensure compliance with all applicable laws pertaining to nesting and to avoid take of nests.

As discussed on page 4-23 of the Draft IS/MND, the District understands that take of nesting bird is prohibited by law pursuant to the federal Migratory Bird Treaty Act (MBTA) of 1918 and the California Fish and Game Code (CFG). Specifically, page 4-23 of the Draft IS/MND states that no active or remnant bird nests were observed within the project site during the biological site surveys, and no native birds exhibiting signs of nesting activity were observed. Therefore, impacts to nesting birds were evaluated in the Draft IS/MND and found to be less than significant.

The District will comply with all applicable laws pertaining to nesting birds and to avoid take of nest. To ensure CDFW's concern is fully addressed, the following mitigation measure will be included in the Final IS/MND. This addition has been made to page 4-25 of the Draft IS/MND, and is reflected below and in Section 3.0, Errata, and Section 4.0, MMRP, of the Final IS/MND.

Section 4.4, Biological Resources, Page 4-25

BIO-2 Pursuant to the Migratory Bird Treaty Act (MBTA) of 1918 and Sections 3503, 3503.5, and 3513 of the California Fish and Game Code (CFG), a pre-construction nesting bird survey shall be conducted by a qualified biologist no more than three days prior to commencement of construction activities. The nesting bird survey shall include the project site and a 500-foot buffer around the disturbance area. If nesting birds (including nesting raptors) are present, the qualified biologist shall determine an appropriate construction monitoring protocol and establish an appropriate avoidance buffer until nesting has been completed or the nest has been deemed inactive by a qualified biologist. If no nesting birds are observed during the survey, site preparation and construction activities may begin.

These changes provide a minor revision or clarification and do not represent “significant new information” as defined in CEQA Guidelines Section 15088.5. The changes would not result in any new or substantially greater significant impacts as compared to those identified in the Draft IS/MND.

- 1-5 This comment gives context regarding burrowing owl populations in California and summarizes results from the surveys conducted on the project site. The commenter recommends additional language to be incorporated into Mitigation Measure BIO-1 of the IS/MND. The District acknowledges the recommendation. As a permittee to the Western Riverside County MSHCP, the District is required to comply with Sections 6.1.2, 6.1.3, 6.1.4, 6.3.2, and 7 of the MSHCP. Section 6.3.2 addresses additional survey needs and procedures, including species-specific protections for the burrowing owl. These protections require burrowing owl surveys if suitable habitat occurs on a proposed project site. As described on Draft IS/MND page 4-21, qualified biologists determined that the project site contains suitable habitat for burrowing owl. As such, the MSHCP requires that focused burrow and burrowing owl surveys be conducted, as well as an additional pre-construction survey within 30 days prior to ground disturbance. In compliance with the MSHCP, focused burrow and burrowing owl surveys were conducted on four separate days during the 2022 breeding season, which yielded negative results for site occupation by burrowing owls. In addition, Mitigation Measure BIO-1 requires a pre-construction survey within 30 days prior to commencement of construction activities in accordance with the MSHCP burrowing owl survey guidelines; refer to page 4-24 of the Draft IS/MND. To further address concerns related to BUOW impacts, the District has modified Mitigation Measure BIO-1 of the Draft IS/MND, as shown in Response 1-2. Because the focused surveys have been conducted and Mitigation Measure BIO-1 requires the necessary pre-construction survey, the project meets the requirements of the MSHCP with respect to burrowing owl impacts.
- 1-6 This comment contains conclusive text that outlines mitigation monitoring and reporting guidelines, public review requirements, and environmental document filing information set forth by CEQA. Additionally, the comment provides contact information for any questions regarding the comment letter, and requests that the District addresses CDFW’s comments and concerns prior to the adoption of the MND for the project. The District acknowledges this comment and has prepared this response letter to address CDFW’s comments and concerns.



CITY OF PERRIS

DEVELOPMENT SERVICES DEPARTMENT
PLANNING DIVISION

135 N. "D" Street, Perris, CA 92570-2200
TEL: (951) 943-5003 FAX: (951) 943-8379

October 24, 2022

Jerry Aguirre, Associate Flood Control Planner
Riverside County Flood Control
and Water Conservation District
1995 Market Street
Riverside, CA 92501

**SUBJECT: CITY OF PERRIS COMMENTS - NOTICE OF AVAILABILITY OF INITIAL STUDY
NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION FOR
THE PERRIS VALLEY CHANNEL LATERAL B, STAGE 4 PROJECT**

Dear Mr. Aguirre:

The City of Perris appreciates the opportunity to comment on the Notice of Intent to adopt a Mitigated Negative Declaration prepared for the proposed Perris Valley Channel Lateral B, Stage 4 Project, located adjacent to the City of Perris city limits.

2-1

The City provides the below comments in light of the Project's proximity to the City of Perris:

1. It is recommended the improvements proposed for the Perris Valley Channel Lateral B are designed to preclude possible drainage impacts onto properties in the City. If the proposed improvements need to be modified, please provide to the City any future design revisions.
2. Pursuant to CEQA, please provide notices of any future public hearings scheduled to consider the project.

The City of Perris thanks you for considering these comments. Please feel free to contact me at (951) 943-5003, extension 355, if you have any questions or would like to discuss the above concern in further detail.

Sincerely,


Patricia Brenes
Planning Manager

Cc: Clara Miramontes, City Manager
Wendell Bugtai, Assistant City Manager
Robert Khuu City Attorney
Kenneth Phung, Director of Development Services
Stuart McKibbin, City Engineer

**RESPONSE NO. 2
CITY OF PERRIS
DEVELOPMENT SERVICES DEPARTMENT – PLANNING DIVISION
PATRICIA BARNES, PLANNING MANAGER
OCTOBER 24, 2022**

- 2-1 This comment requests for the District to notify the City of Perris if modifications are made to the project. It is also requested that the District sends any public hearing notices to the City of Perris. The District acknowledges this request. The City of Perris will be notified of all subsequent environmental notices and meetings related to the project. The comment does not raise a concern with the adequacy of the IS/MND document, nor does it raise a specific environmental concern. No additional response to the comment is necessary.

Aguirre, Jerry

From: Cunningham, Kevin
Sent: Tuesday, October 25, 2022 11:39 AM
To: Aguirre, Jerry
Subject: FW: Perris Valley Lateral B, Stage 4 Project: Comments - Draft Initial Study/Mitigated Negative Declaration



Kevin Cunningham | ERS II
Environmental Project Manager
RCFC + WCD
D: 951.955.1526
Office Hours: Tu-Th, 7:45A – 6:30P
Office Hours: Fridays, 7:45A – 5:30P

From: Jeffrey Smith <smith@marchjpa.com>
Sent: Monday, October 24, 2022 1:12 PM
To: jeraguiar@rivco.org
Cc: Cunningham, Kevin <kcunning@RIVCO.ORG>; Gary Gosliga <gosliga@marchjpa.com>
Subject: Perris Valley Lateral B, Stage 4 Project: Comments - Draft Initial Study/Mitigated Negative Declaration

CAUTION: This email originated externally from the Riverside County email system. **DO NOT** click links or open attachments unless you recognize the sender and know the content is safe.

Good Afternoon Jerry,

I have reviewed the Draft Initial Study/Mitigated Negative Declaration for the Perris Valley Lateral B, Stage 4 Project, and have the following comment(s) for your consideration:

- 3-1 1. Page 1-1, 1.1 Background Summary, Zoning: The correct zoning for MJPA is, "Veterans Industrial Park 215 Specific Plan (SP-8)"
- 3-2 2. Page 2-2, 2.4 Project Location: Please see the third sentence in the paragraph. Is not a small northerly portion of the project site located within the limits of March JPA?

If you have any questions regarding my comments, please give me a call.

Thank you.



Jeffrey M. Smith, AICP
Principal Planner

**March Joint Powers
Authority**

14205 Meridian Parkway, Suite 140
Riverside, CA 92518
Phone: (951) 656-7000
Cell: (951) 807-7283
Fax: (951) 653-5558
Email: smith@marchjpa.com
Web: www.marchjpa.com

RESPONSE NO. 3
MARCH JOINT POWERS AUTHORITY
JEFFREY SMITH, PRINCIPAL PLANNER
OCTOBER 24, 2022

3-1 The commenter states that the correct March Joint Powers Authority zoning for the project site is Veterans Industrial Park 215 Specific Plan (SP-8). This clarification has been made to page 1-1 of the Draft IS/MND and is reflected below and in Section 3.0, Errata, of the Final IS/MND.

Section 1.1, Summary, Page 1-1

Zoning:	MJPA: Aviation <u>Veterans Industrial Park 215 Specific Plan (SP-8)</u> City of Perris: Perris Valley Commerce Center Specific Plan (PVCC SP)
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These changes provide a minor revision or clarification and do not represent “significant new information” as defined in CEQA Guidelines Section 15088.5. The changes would not result in any new or substantially greater significant impacts as compared to those identified in the Draft IS/MND.

3-2 The commenter states that, with regard to project location, a small northern portion of the project site is located within March Joint Powers Authority limits. This clarification has been made to pages 2-2 and 4-59 of the Draft IS/MND, and is reflected below and in Section 3.0, Errata, of the Final IS/MND.

Section 2.4, Project Location, Page 2-2

The project area is characterized as developed and undeveloped-disturbed land. The surrounding areas consists of MARB to the east and scattered industrial development to the north, south and west. The project site is located within the limits of MJPA, MARB and the City of Perris in Western Riverside County, east of the Interstate 215 freeway (I-215). The proposed alignment would be located between the existing PVC Lateral B, Stage 2 facility at Heacock Street and the Perris Valley Channel Lateral B, Stage 5 facility that is under construction as part of the VIP 215 project to the northwest. The project is located within Township 3 South, Range 4 West, Section 36 San Bernardino Baseline Meridian within APNs 294-220-003, 294-200-002, 294-180-007, 294-180-006, 294-180-037, 294-180-055, and 294-180-017.

Section 4.11, Land Use and Planning, Page 4-59

The key factor with respect to this threshold is the potential to create physical barriers that change the connectivity between areas of a community to the extent that persons are separated from other areas of the community. The project site is located within the limits of MJPA, MARB and the City of Perris in Western Riverside County, east of the I-215. Within the project limits, a west perimeter security fence borders MARB. Rather than divide an established community, the project would tie into the existing PVC Lateral B, Stage 2 facility at Heacock Street and the Perris Valley Channel Lateral B, Stage 5 facility that is under construction as part of the VIP 215 project to the northwest. Based on existing MARB

security fencing and the nature of the proposed project, the project would not divide an established community and no impacts would occur in this regard.

This change provides a minor revision or clarification and does not represent “significant new information” as defined in CEQA Guidelines Section 15088.5. The change would not result in any new or substantially greater significant impacts as compared to those identified in the Draft IS/MND.

3.0 ERRATA

Changes to the Draft IS/MND are noted below. A double-underline indicates additions to the text; ~~strikethrough~~ indicates deletions to the text. Changes have been analyzed and responded to in Section 2.0, Response to Comments, of this Final IS/MND. Changes are listed by page and, where appropriate, by paragraph.

These errata address the technical comments on the Draft IS/MND, which circulated from September 22, 2022 through October 24, 2022. These changes to the Draft IS/MND do not affect the overall conclusions of the environmental document. These clarifications and modifications are not considered to result in any new or substantially greater significant impacts as compared to those identified in the Draft IS/MND.

SECTION 1.0, BACKGROUND

PAGE 1-1, SECTION 1.1, SUMMARY

Zoning:	MJPA: Aviation <u>Veterans Industrial Park 215 Specific Plan (SP-8)</u> City of Perris: Perris Valley Commerce Center Specific Plan (PVCC SP)
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SECTION 2.0, PROJECT DESCRIPTION

PAGE 2-2, SECTION 2.4, PROJECT LOCATION

The project area is characterized as developed and undeveloped-disturbed land. The surrounding areas consists of MARB to the east and scattered industrial development to the north, south and west. The project site is located within the limits of MJPA, MARB and the City of Perris in Western Riverside County, east of the Interstate 215 freeway (I-215). The proposed alignment would be located between the existing PVC Lateral B, Stage 2 facility at Heacock Street and the Perris Valley Channel Lateral B, Stage 5 facility that is under construction as part of the VIP 215 project to the northwest. The project is located within Township 3 South, Range 4 West, Section 36 San Bernardino Baseline Meridian within APNs 294-220-003, 294-200-002, 294-180-007, 294-180-006, 294-180-037, 294-180-055, and 294-180-017.

SECTION 4.0, ENVIRONMENTAL ANALYSIS

PAGE 2-2, SECTION 2.4, PROJECT LOCATION

The project area is characterized as developed and undeveloped-disturbed land. The surrounding areas consists of MARB to the east and scattered industrial development to the north, south and west. The project site is located within the limits of MJPA, MARB and the City of Perris in Western Riverside County, east of the Interstate 215 freeway (I-215). The proposed alignment would be located between the existing PVC Lateral B, Stage 2 facility at Heacock Street and the Perris Valley Channel Lateral B, Stage 5 facility that is under construction as part of the VIP 215 project to the northwest. The project is located within Township 3 South, Range 4 West, Section 36 San Bernardino Baseline Meridian within APNs 294-220-003, 294-200-002, 294-180-007, 294-180-006, 294-180-037, 294-180-055, and 294-180-017.

SECTION 4.4, BIOLOGICAL RESOURCES

PAGE 4-24, SECTION 4.4.3, MITIGATION MEASURES

- BIO-1:** A pre-construction survey for burrowing owl shall be completed by a qualified biologist no more than 30 days prior to commencement of construction activities in accordance with the *Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) Burrowing Owl Survey* guidelines (County of Riverside 2006) and the California Department of Fish and Wildlife (CDFW) Staff Report on Burrowing Owl (March 2012). If burrowing owls are observed within 500 feet of proposed construction and staging disturbance limits during the preconstruction survey, impacts shall be avoided through implementation of the burrowing owl avoidance measures as described in the MSHCP. CDFW shall be sent written notification within 3 days (72 hours) of detection of burrowing owls. If active burrowing owl burrows are detected, the District shall not commence ground disturbance activities within a 500-foot buffer of the occupied burrow location or less as deemed appropriate by the qualified biologist or until no sign is present that the burrows are being used by adult or juvenile owls. If work must occur within 500 feet of an occupied burrow the District shall prepare and submit a burrowing owl plan in accordance with the MSHCP and CDFW burrowing owl guidelines to CDFW for review and approval within two weeks of detection. CDFW will have two weeks to review and approve the plan prior to the commencement of construction. If no response is received from CDFW, the District will implement the avoidance and mitigation measures outlined in the burrowing owl plan prepared in accordance with MSHCP and CDFW burrowing owl guidelines.
- If ground-disturbing activities occur but the site is left undisturbed for more than 30 days, a preconstruction survey for burrowing owl shall be conducted and reported to CDFW as described above. If a burrowing owl is found, the same coordination described above shall be necessary.
- If burrowing owl are not detected during the pre-construction survey, no further mitigation is required.
- BIO-2:** Pursuant to the Migratory Bird Treaty Act (MBTA) of 1918 and Sections 3503, 3503.5, and 3513 of the California Fish and Game Code (CFGC), a pre-construction nesting bird survey shall be conducted by a qualified biologist no more than three days prior to commencement of construction activities. The nesting bird survey shall include the project site and a 500-foot buffer around the disturbance area. If nesting birds (including nesting raptors) are present, the qualified biologist shall determine an appropriate construction monitoring protocol and establish an appropriate avoidance buffer until nesting has been completed or the nest has been deemed inactive by a qualified biologist. If no nesting birds are observed during the survey, site preparation and construction activities may begin.

4.0 MITIGATION MONITORING AND REPORTING PROGRAM

4.1 Introduction

This section of the Final IS/MND is the Mitigation Monitoring and Reporting Program (MMRP) for the Perris Valley Channel Lateral B Stage 4 Project. This MMRP has been prepared pursuant to Section 21081.6 of the California Public Resources Code, which requires public agencies to “adopt a reporting and monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment.” An MMRP is required for the proposed project because the IS/MND has identified significant adverse impacts, and measures have been identified to mitigate those impacts.

4.2 Mitigation, Monitoring, and Reporting Program

As the Lead Agency for CEQA, the District will be responsible for monitoring compliance with all mitigation measures pertaining to compliance with CEQA. The MARB is the lead agency under the National Environmental Policy Act (NEPA) and will be responsible for monitoring compliance with all mitigation measures pertaining to compliance with NEPA and all environmental federal regulations. The MMRP identifies the department and or organization with the responsibility of ensuring the measure is completed; however, it is expected that one or more departments will coordinate efforts to ensure compliance.

The MMRP is presented in tabular form on the following pages. The components of the MMRP are described briefly below.

- Mitigation Measure:
- Timing: Identifies at which stage of the project the mitigation must be completed.
- Monitoring Responsibility: Identifies the department within the City with responsibility for mitigation monitoring.
- Verification (Date and Initials): Provides a contact who reviewed the mitigation measure and the date the measure was determined complete.

4.3 Mitigation Measure Acronyms

CDFG California Department of Fish and Game

CDFW California Department of Fish and Wildlife

CEQA California Environmental Quality Act

DBESP Determination of Biologically Equivalent or Superior Preservation

MSHCP Western Riverside County Multiple Species Habitat Conservation Plan

RWQCB Regional Water Quality Control Board

USACE U.S. Army Corps of Engineers

**Table 1
Mitigation Monitoring and Reporting Checklist**

Mitigation Number	Mitigation Measure	Implementation Responsibility	Timing	Monitoring Responsibility	Timing	Verification of Compliance		
						Initials	Date	Remarks
BIOLOGICAL RESOURCES								
BIO-1	A pre-construction survey for burrowing owl shall be completed by a qualified biologist no more than 30 days prior to commencement of construction activities in accordance with the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) <i>Burrowing Owl Survey</i> guidelines (County of Riverside 2006) and the California Department of Fish and Wildlife (CDFW) <i>Staff Report on Burrowing Owl</i> (March 2012). If burrowing owls are observed within 500 feet of proposed construction and staging disturbance limits during the preconstruction survey CDFW shall be sent written notification within 3 days (72 hours) of detection of burrowing owls. If active burrowing owl burrows are detected, the District shall not commence ground disturbance activities within a 500-foot buffer of the occupied burrow location or less as deemed appropriate by the qualified biologist or until no sign is present that the burrows are being used by adult or juvenile owls. If work must occur within 500 feet of an occupied burrow the District shall prepare and	Qualified Biologist	No more than 30 days prior to construction activities (conducting survey); Within 3 days of detection of burrowing owls (notifying CDFW)	Riverside County Flood Control and Water Conservation District	Prior to Construction Activities; During Construction if Avoidance Measures Must be Implemented			

*Final Initial Study/Mitigated Negative Declaration
Perris Valley Channel Lateral B, Stage 4 Project*

Mitigation Number	Mitigation Measure	Implementation Responsibility	Timing	Monitoring Responsibility	Timing	Verification of Compliance		
						Initials	Date	Remarks
	<p>submit a burrowing owl plan in accordance with the MSHCP and CDFW burrowing owl guidelines to CDFW for review and approval within two weeks of detection. CDFW will have two weeks to review and approve the plan prior to the commencement of construction. If no response is received from CDFW, the District will implement the avoidance and mitigation measures outlined in the burrowing owl plan prepared in accordance with MSHCP and CDFW burrowing owl guidelines.</p> <p>If ground-disturbing activities occur but the site is left undisturbed for more than 30 days, a preconstruction survey for burrowing owl shall be conducted and reported to CDFW as described above. If a burrowing owl is found, the same coordination described above shall be necessary.</p> <p>If burrowing owl are not detected during the pre-construction survey, no further mitigation is required.</p>							
BIO-2	Pursuant to the Migratory Bird Treaty Act (MBTA) of 1918 and Sections 3503, 3503.5, and 3513 of the California Fish and Game Code (CFG), a pre-construction nesting bird survey shall be conducted by a qualified biologist no	Qualified Biologist	No more than three days prior to commencement of	Riverside County Flood Control and Water Conservation District	Prior to Construction Activities; During Construction Activities			

*Final Initial Study/Mitigated Negative Declaration
Perris Valley Channel Lateral B, Stage 4 Project*

Mitigation Number	Mitigation Measure	Implementation Responsibility	Timing	Monitoring Responsibility	Timing	Verification of Compliance		
						Initials	Date	Remarks
	more than three days prior to commencement of construction activities. The nesting bird survey shall include the project site and a 500-foot buffer around the disturbance area. If nesting birds (including nesting raptors) are present, the qualified biologist shall determine an appropriate construction monitoring protocol and establish an appropriate avoidance buffer until nesting has been completed or the nest has been deemed inactive by a qualified biologist. If no nesting birds are observed during the survey, site preparation and construction activities may begin.		construction activities					
CULTURAL RESOURCES								
CUL-1	If deposits of prehistoric or historical materials are encountered during project construction, all work within 50 feet of the discovery shall be halted until an archaeologist can evaluate the findings and make recommendations. A qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeologist, shall be retained to evaluate the significance of the find. The archaeologist shall have the authority to modify the no-work radius as appropriate, using professional judgement.	Qualified Archaeologist	During Construction Activities	Riverside County Flood Control and Water Conservation District	During Construction Activities			

*Final Initial Study/Mitigated Negative Declaration
Perris Valley Channel Lateral B, Stage 4 Project*

Mitigation Number	Mitigation Measure	Implementation Responsibility	Timing	Monitoring Responsibility	Timing	Verification of Compliance		
						Initials	Date	Remarks
	<ul style="list-style-type: none"> If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately, and no agency notifications are required. If the professional archaeologist determines that the find represents a cultural resource from any time period or cultural affiliation, the handling of the cultural resource(s) shall follow the applicable recommendations as described in the Cultural Resources Management Plan (TCRMP) prepared for the project, as required by Mitigation Measure TCR-1. 							
GEOLOGY AND SOILS								
GEO-1	Due to the potential to impact sensitive paleontological resources during construction activities, the District shall prepare or cause for a Paleontological Resource Impact Mitigation Program (PRIMP) to be prepared prior to commencement of ground disturbing activities. The PRIMP shall be based on the final construction grading plans prepared by the District and detail construction	Qualified Paleontologist	Prior to Ground Disturbing Activities	Riverside County Flood Control and Water Conservation District	Prior to Ground Disturbing Activities; During Ground Disturbing Activities			

*Final Initial Study/Mitigated Negative Declaration
Perris Valley Channel Lateral B, Stage 4 Project*

Mitigation Number	Mitigation Measure	Implementation Responsibility	Timing	Monitoring Responsibility	Timing	Verification of Compliance		
						Initials	Date	Remarks
	monitoring requirements for all work consisting of excavation at depths greater than 4 feet below the original ground surface in undisturbed geologic contexts.							
TRIBAL CULTURAL RESOURCES								
TCR-1	The District shall prepare or cause for the preparation of a Tribal/Cultural Resources Management Plan (TCRMP) prior to ground disturbing activities. The TCRMP shall be based on the final construction grading plans prepared by the District and may include requirements for pre-construction cultural sensitivity training, notification, and monitoring protocol. The TCRMP will consider concerns of the consulting Tribes and the consulting Tribes will have an opportunity to review and comment on the draft TCRMP.	Riverside County Flood Control and Water Conservation District	Prior to Ground-Disturbing Activities	Riverside County Flood Control and Water Conservation District; Consulting Native American Tribe Representatives	Prior to Ground-Disturbing Activities ; During Ground-Disturbing Activities			
TCR-2	<i>In the event that the consulting Tribes are not able to reasonably accommodate the District's requests and/or needs regarding monitoring of Mitigation Measure TCR-1, the District may proceed with Mitigation Measure TCR-2 as needed:</i> The District may, at its discretion, conduct archaeological monitoring and/or reconnaissance of the project site using a qualified archaeologist that is not a Tribal monitor or representative of a Native American Tribe. This would occur only as needed during ground-disturbing construction activities.	Qualified Archaeologist	During Ground-Disturbing Activities	Riverside County Flood Control and Water Conservation District	During Ground-Disturbing Activities			

*Final Initial Study/Mitigated Negative Declaration
Perris Valley Channel Lateral B, Stage 4 Project*

DRAFT
INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION

Perris Valley Channel Lateral B, Stage 4 Project

Lead Agency:



Riverside County Flood Control and Water Conservation District
1995 Market Street
Riverside, CA 92501

Prepared By:



Michael Baker International
40810 County Center Drive, Suite 200
Temecula, CA 92591

September 2022

JN 187014

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DRAFT MITIGATED NEGATIVE DECLARATION PERRIS VALLEY CHANNEL LATERAL B, STAGE-4 PROJECT	
Lead Agency:	Riverside County Flood Control and Water Conservation District
Project Proponent:	Riverside County Flood Control and Water Conservation District
Project Location:	The project site is located within the limits of March Air Reserve Base (MARB) and the City of Perris in Western Riverside County, east of the Interstate 215 freeway (I-215). The proposed alignment would be located between the existing PVC Lateral B, Stage 2 facility at Heacock Street and the Perris Valley Channel Lateral B, Stage 5 facility that is under construction as part of the VIP 215 project to the northwest. The project is located within Township 3 South, Range 4 West, Section 36 San Bernardino Baseline Meridian within APNs 294-220-003, 294-200-002, 294-180-007, 294-180-006, 294-180-037, 294-180-055, and 294-180-017.

Project Description:

The Riverside County Flood Control and Water Conservation District (District), in partnership with the March Joint Powers Authority (MJPA) and MARB is proposing to construct the Perris Valley Channel (PVC) Lateral B, Stage 4 Project (project). PVC Lateral B-5: Stage 1 and Stage 2 and PVC Lateral B: Stage 2 and 3 of the Lateral B system have already been constructed between Heacock Street and I-215 freeway. The project would construct PVC Lateral B Stage 4 which consists of approximately 6,000 ft of reinforced concrete box (RCB) culvert connecting the PVC Lateral B Stage 5 facility to the existing PVC Lateral B Stage 2 facility. The project’s general alignment begins at the downstream terminus of PVC Lateral B Stage 5 and heads south and east adjacent to the MARB west perimeter security fence before tying into the PVC Lateral B Stage 2 facility at Heacock Street. The project would include three transitions structures, four junction structures, twelve bolted down manholes for security, and two inlets along the southernmost end of the alignment to collect on-site flows from MARB. The project would also include two lateral stubs and bulkheads for the future construction of Lateral B-7 and Lateral B-8 in the City of Perris. The project would be located mostly within MARB right of way. This alignment will go through APN 294-180-055; where a 45-ft permanent easement has been dedicated for the construction and maintenance of Stage 4.

Public Review Period: September 22, 2022 to October 24, 2022

Mitigation Measures Incorporated into the Project to Avoid Significant Effects:

Biological Resources

BIO-1 A pre-construction survey for burrowing owl shall be completed by a qualified biologist no more than 30 days prior to commencement of construction activities in accordance with the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) burrowing owl survey guidelines (County of Riverside 2006). If burrowing owls are observed during the preconstruction survey, impacts shall be avoided through implementation of the burrowing owl avoidance measures as described in the MSHCP.

Cultural Resources

- CUL-1** If deposits of prehistoric or historical materials are encountered during project construction, all work within 50 feet of the discovery shall be halted until an archaeologist can evaluate the findings and make recommendations. A qualified archaeologist, meeting the Secretary of the Interior’s Professional Qualification Standards for prehistoric and historic archaeologist, shall be retained to evaluate the significance of the find. The archaeologist shall have the authority to modify the no-work radius as appropriate, using professional judgement.
- If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately, and no agency notifications are required.
 - If the professional archaeologist determines that the find represents a cultural resource from any time period or cultural affiliation, the handling of the cultural resource(s) shall follow the applicable recommendations as described in the Cultural Resources Management Plan (CRMP) prepared for the Project, as required by TCR-1.

Geology and Soils

- GEO-1** Due to the potential to impact sensitive paleontological resources during construction activities, the District shall prepare or cause for a Paleontological Resource Impact Mitigation Program (PRIMP) to be prepared prior to commencement of ground disturbing activities. The PRIMP shall be based on the final construction grading plans prepared by the District and detail construction requirements for all work consisting of excavation at depths greater than 4 feet below the original ground surface in undisturbed geologic contexts.

Tribal Cultural Resources

- TCR-1** The District shall prepare or cause for the preparation of a Tribal/Cultural Resources Management Plan (TCRMP) prior to ground disturbing activities. The CRMP shall be based on the final construction grading plans prepared by the District and may include requirements for pre-construction cultural sensitivity training, notification, and monitoring protocol. The TCRMP will consider concerns of the consulting Tribes and the consulting Tribes will have an opportunity to review and comment on the draft TRCRMP.

In the event that the consulting Tribes are not able to reasonably accommodate the District’s requests and/or needs regarding monitoring, the District may proceed with Mitigation Measure TCR-2 as needed:

- TCR-2** The District may, at its discretion, conduct archaeological monitoring and/or reconnaissance of the project site using a qualified archaeologist that is not a Tribal monitor or representative of a Native American Tribe. This would occur only a needed during ground-disturbing construction activities.

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1.0 BACKGROUND

1.1 SUMMARY

Project Title:	Perris Valley Channel Lateral B, Stage 4 Project
Lead Agency Name and Address:	Riverside County Flood Control and Water Conservation District 1995 Market Street Riverside, CA 92501
Lead Agency Contact:	Jerry Aguirre, MURP, ERS II Kevin Cunningham Associate Flood Control Planner Environmental Project Email: jraguir@rivco.org Manager or Email: kcunning@rivco.org
Project Location:	The project site is located within the limits of MARB and the City of Perris in Western Riverside County, east of the Interstate 215 freeway (I-215). The proposed alignment would be located between the existing PVC Lateral B, Stage 2 facility at Heacock Street and the Perris Valley Channel Lateral B, Stage 5 facility that is under construction as part of the VIP 215 project to the northwest. The project is located within Township 3 South, Range 4 West, Section 36 San Bernardino Baseline Meridian within APNs 294-220-003, 294-200-002, 294-180-007, 294-180-006, 294-180-037, 294-180-055, and 294-180-017.
General Plan Designation:	MJPA: Aviation City of Perris: Perris Valley Commerce Center Specific Plan (PVCC SP); Planning Area 1 (North Industrial)
Zoning:	MJPA: Aviation City of Perris: Perris Valley Commerce Center Specific Plan (PVCC SP)

1.2 INTRODUCTION

The Riverside County Flood Control and Water Conservation District (District) is the Lead Agency for this Initial Study. The Initial Study has been prepared to identify and assess the anticipated environmental impacts of the Perris Valley Channel Lateral B, Stage 4 Project (project). This document has been prepared to satisfy the California Environmental Quality Act (CEQA) (Pub. Res. Code, Section 21000 *et seq.*) and State CEQA Guidelines (14 CCR 15000 *et seq.*). CEQA requires that all State and local government agencies consider the environmental consequences of projects over which they have discretionary authority before acting on those projects. A CEQA Initial Study is generally used to determine which CEQA document is appropriate for a project (Negative Declaration [ND], Mitigated Negative Declaration [MND], or Environmental Impact Report [EIR]). This Initial Study addresses the direct, indirect, and cumulative environmental effects of the project, as proposed.

1.2.1 Statutory Authority And Requirements

In accordance with CEQA (Public Resources Code Section 21000-21177) and pursuant to California Code of Regulations Section 15063, the District, acting in the capacity of Lead Agency under CEQA, is required to undertake the preparation of an Initial Study to determine if the proposed project would have a significant environmental impact. If, as a result of the Initial Study, the Lead Agency finds that there is evidence that any aspect of the project may cause a significant environmental effect, the Lead Agency shall further find that an Environmental Impact Report (EIR) is warranted to analyze project-related and cumulative environmental impacts. Alternatively, if the Lead Agency finds that there is no evidence that the project, either as proposed or as modified to include the mitigation measures identified in the Initial Study, may cause a significant effect on the environment, the Lead Agency shall find that the proposed project would not have a significant effect on the environment and shall prepare a Negative Declaration for that project. Such determination can be made only if “there is no substantial evidence in light of the whole record before the Lead Agency” that such impacts may occur (Public Resources Code Section 21080(c)).

The environmental documentation, which is ultimately selected by the District in accordance with CEQA, is intended as an informational document undertaken to provide an environmental basis for subsequent discretionary actions upon the project. The resulting documentation is not, however, a policy document and its approval and/or certification neither presupposes nor mandates any actions on the part of those agencies from whom permits and/or other discretionary approvals would be required.

The environmental documentation is subject to a public review period. During this review, public agency comments on the document relative to environmental issues should be addressed to the District. The District will consider the comments received as a part of the project’s environmental review and will include them as part of the Initial Study/Mitigated Negative Declaration documentation for adoption.

1.2.2 Purpose

CEQA Guidelines Section 15063 identifies specific disclosure requirements for inclusion in an Initial Study. Pursuant to those requirements, an Initial Study shall include:

- A description of the project, including the location of the project;
- Identification of the environmental setting;
- Identification of environmental effects by use of a checklist, matrix, or other method, provided that entries on a checklist or other form are briefly explained to indicate that there is some evidence to support the entries;
- Discussion of ways to mitigate significant effects identified, if any;
- Examination of whether the project is compatible with existing zoning, plans, and other applicable land use controls; and
- The name(s) of the person(s) who prepared or participated in the preparation of the Initial Study.

1.2.3 Consultation

As soon as a Lead Agency (in this case, the District) has determined that an Initial Study would be required for the project, the Lead Agency is directed to consult informally with all Responsible Agencies and Trustee Agencies that are responsible for resources affected by the project, to obtain the recommendations of those agencies as to whether an EIR or Negative Declaration should be prepared for the project. Following receipt of any written comments from those agencies, the Lead Agency considers any recommendations of those agencies in the formulation of the preliminary findings. Following completion of this Initial Study,

the Lead Agency initiates formal consultation with these and other governmental agencies as required under CEQA and its implementing guidelines.

1.3 SURROUNDING LAND USES/ENVIRONMENTAL SETTING

The project site is partially located within the limits of the City of Perris and lands owned by MJPA and MARB in southwestern Riverside County, on the east side of I-215. The project site is currently vacant land with an asphalt-paved road traversing the site from north to south. The site is bordered on the north, south, and east by MARB, and on the west by PODS Moving and Storage (located at 1330 Nandina Avenue), as well as multiple exterior equipment storage yards. The project site's vicinity is generally characterized by industrial and military uses.

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2.0 PROJECT DESCRIPTION

2.1 PROJECT PURPOSE AND NEED

The Perris Valley Master Drainage Plan (MDP) was adopted in July 1987 and last revised in 1991 with the purpose of identifying the drainage problems and providing a guide for the construction of primary drainage facilities in the Perris Valley area. The MDP Line B (now “Lateral B”) was originally proposed as an open channel on the west side of I-215 from Van Buren Boulevard to just south of Harley Knox Boulevard before extending east to Perris Valley Channel. However, since the MDP was last updated, the Perris Valley area surrounding March Air Reserve Base (MARB) has experienced new development that has prompted the need to revise the alignment and construct Lateral B to support existing and future drainage needs for the area. The purpose of the project is to provide flood protection to MARB and the adjacent area by constructing the regional storm drain facility needed to convey 100-year runoff to the existing Lateral B, Stage 2 channel east of Heacock Street. A secondary objective of the project is to provide an adequate outlet for Lateral B-7 and B-8 to be constructed as part of future development proposals in the City of Perris.

2.2 PROJECT DESCRIPTION

The Riverside County Flood Control and Water Conservation District (District), in partnership with the March Joint Powers Authority (MJPA) and MARB, is proposing to construct the Perris Valley Channel (PVC) Lateral B, Stage 4 Project (Project). PVC Lateral B-5 Stage 1 and Stage 2 and PVC Lateral B Stage 2 and 3 of the Lateral B system have already been constructed between Heacock Street and I-215. The project would construct PVC Lateral B Stage 4 which consists of approximately 6,000 ft of reinforced concrete box (RCB) culvert connecting the PVC Lateral B Stage 5 facility to the existing PVC Lateral B Stage 2 facility. The project’s general alignment begins at the downstream terminus of PVC Lateral B Stage 5 and heads south and east adjacent to the MARB west perimeter security fence before tying into the PVC Lateral B Stage 2 facility at Heacock Street; refer to [Exhibit 1, *Regional Location*](#) and [Exhibit 2, *Project Location*](#). The project would include three transition structures, four junction structures, twelve bolted down manholes for security, and two inlets along the southernmost end of the alignment to collect onsite flows from MARB. The project would also include two lateral stubs and bulkheads for the future construction of Lateral B-7 and Lateral B-8 in the City of Perris. The project would be located mostly within MARB right of way, as shown on [Exhibit 3, *Site Plan*](#). This alignment will go through APN 294-180-055; where a 45-ft permanent easement has been dedicated for the construction and maintenance of Stage 4.

2.3 PROJECT DESIGN

The original design for the PVC Lateral B included open channel facilities on the west side of the I-215 from Van Buren Boulevard to just south of Harley Knox Boulevard before extending east to Perris Valley Channel. The PVC Lateral B, Stage 4 project has been revised to be constructed as an approximately 6,000 lineal feet of RCB starting at Heacock Street (at the upstream end of PVC Lateral B, Stage 2) to the downstream terminus of the PVC Lateral B Stage 5 facility, which is currently under construction as part of the VIP-215 project. Specific details of the project design include (refer to [Exhibit 2, *Site Plan*](#)):

- One transition from double 14’x9’ RCB to double 10’x10’ RCB at STA 10+43.58-10+73.58 located at the intersection of Perris Valley Lateral B Stage 2 and Heacock Street;
- Approximately 3,000 LF of 10’x10’ RCB from STA 10+73 located at the intersection of Perris Valley Lateral B Stage 2 and Heacock Street to STA 42+00 at APN 294200005;

- One transition from double 10'x10' to 10'x14' RCB at STA 42+00 – STA 42+30;
- Approximately 3,000 LF of 10'x14' RCB from STA 42+30 at APN 294200005 to STA 67+50 at APN 294180038;
- One transition from 10'x14' RCB to single 10'x10' RCB at STA to STA 67+50 - 67+66.97 at APN 294180038;
- Two inlets collecting onsite flows from MARB;
- Two lateral stubs and bulkheads (for Lateral B-7 and Lateral B-8);
- Approximately 12 manholes bolted down for MARB security;
- MARB Perimeter fence replacement at various locations;
- Removal and replacement of MARB perimeter road, as needed; and
- Removal of the Stage 5 interim outlet structure.

2.4 PROJECT LOCATION

The project area is characterized as developed and undeveloped-disturbed land. The surrounding areas consists of MARB to the east and scattered industrial development to the north, south and west. The project site is located within the limits of MARB and the City of Perris in Western Riverside County, east of the Interstate 215 freeway (I-215). The proposed alignment would be located between the existing PVC Lateral B, Stage 2 facility at Heacock Street and the Perris Valley Channel Lateral B, Stage 5 facility that is under construction as part of the VIP 215 project to the northwest. The project is located within Township 3 South, Range 4 West, Section 36 San Bernardino Baseline Meridian within APNs 294-220-003, 294-200-002, 294-180-007, 294-180-006, 294-180-037, 294-180-055, and 294-180-017.

2.5 PROJECT TIMING

2.5.1 Construction Timing, Duration, and Equipment

The project would be constructed in one phase. Construction of the Lateral B, Stage 4 facility is expected to begin in Spring 2023 and last approximately 12 months. Construction equipment would include the following: excavator, dozer, scraper, skip loader, backhoe, water truck, crane, concrete pump, haul trucks, motor grader, sheepsfoot roller (or other compacting equipment). The construction equipment mix is shown in Table 2-1, Phase I Construction Equipment.

Table 2-1: Phase I Construction Equipment

Construction Phase	Equipment	Quantity
	Excavator*	1-2
	Dozer*	1-2
	Scraper*	1-2
	Skip Loader	1
	Backhoe	1
	Water Truck*	1-2
	Crane*	1-2
	Concrete Pump*	1-2
	Haul Trucks**	10-15
	Motor Grader	1
	Sheepsfoot Roller	1

*Contingent on the project schedule, there may be up to two of this type of equipment.
** Up to 15 trucks could be on site when a scheduled dirt haul occurs.

Construction of the project would occur 5 days a week (20 days per month) and is estimated to require approximately 20 to 60 people to be on site each day, depending on the nature of construction occurring at any one time.

2.5.2 Utility Line Relocation

Construction of this project would not require utility relocations.

2.5.3 Maintenance

The mainline RCB to be constructed by the project would be inspected and maintained by the District. Due to the “self-cleaning” nature of this facility, maintenance is expected to be minimal. Two existing inlets collecting local drainage within MARB property would be maintained by MARB. Additionally, the proposed inlet along Heacock Street would require maintenance that may include vegetation removal or thinning, sediment removal, and debris and trash removal.

2.6 REGULATORY REQUIREMENTS, PERMITS, AND APPROVALS

The following permits and approvals are anticipated for the proposed project:

Agreements, Permits, and Approvals	Granting Agency
IS/MND Approval	Riverside County Flood Control and Water Conservation District
Section 404 Permit	U.S. Army Corps of Engineers
401 Certification	Regional Water Quality Control Board
General Permit Order 2009-0009-DWQ, Storm Water Pollution Prevention Plan, and Best Management Practices	State Water Resources Control Board

2.7 CONSULTATION WITH CALIFORNIA NATIVE AMERICAN TRIBES

The following California Native American tribes traditionally and culturally affiliated with the project area have been notified of the project: Agua Caliente Band of Cahuilla Indians, Pala Band of Mission Indians, Pechanga Band of Luiseño Indians, Ramona Band of Cahuilla Indians, Rincon Band of Luiseño Indians, and Soboba Band of Luiseño Indians. The Agua Caliente Band of Cahuilla Indians, Pechanga Band of Luiseño Indians, and Soboba Band of Luiseño Indians have requested consultation pursuant to Public Resources

Code section 21080.3.1. A summary of the consultation process, including the determination of significance of impacts to tribal cultural resources, is provided in Section 4.18 of this Initial Study.



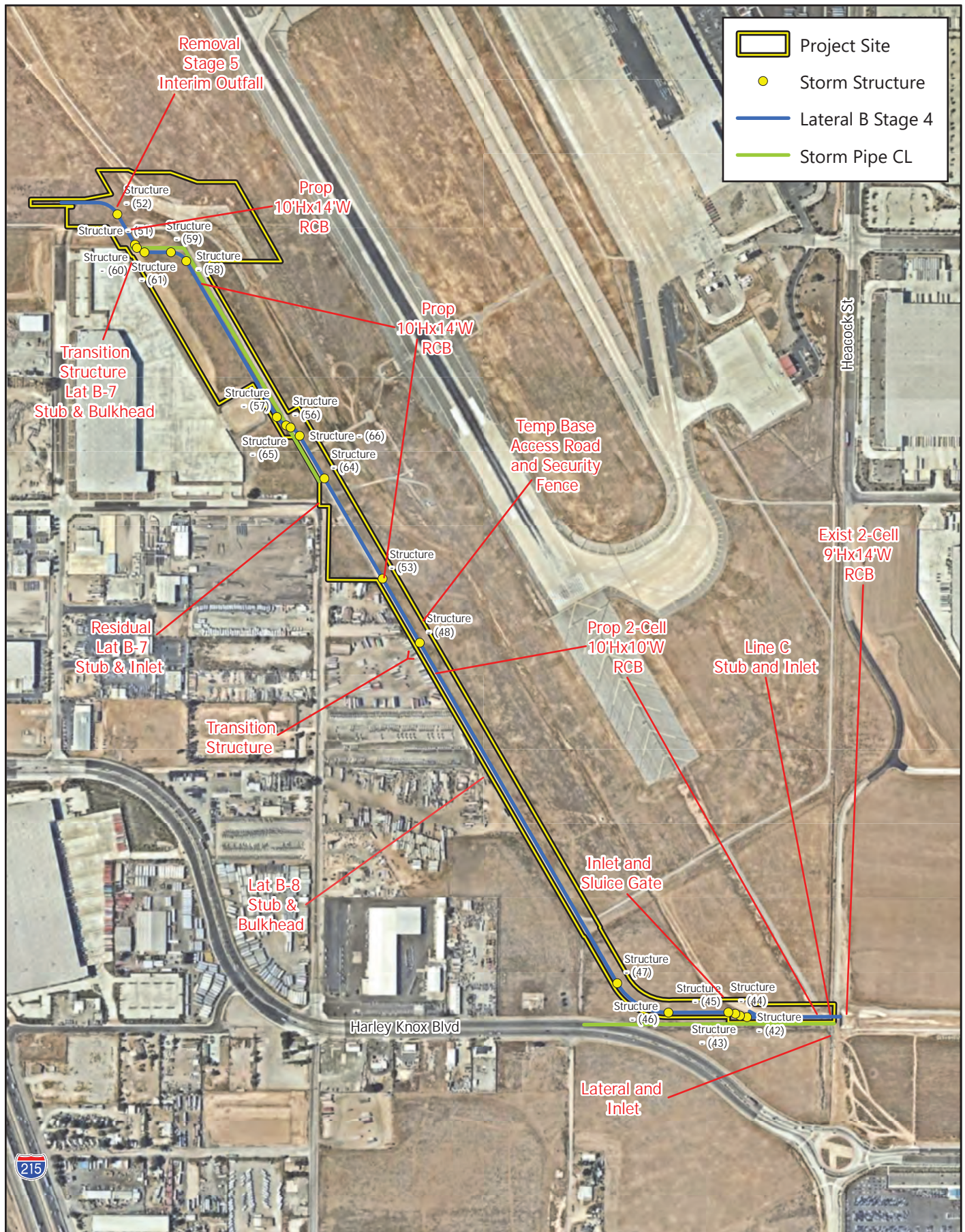
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PERRIS VALLEY CHANNEL LATERAL B, STAGE 4 PROJECT



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PERRIS VALLEY CHANNEL LATERAL B, STAGE 4 PROJECT



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3.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED AND DETERMINATION

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact,” as indicated by the checklist on the following pages.

	Aesthetics		Mineral Resources
	Agriculture and Forestry Resources		Noise
	Air Quality		Population and Housing
X	Biological Resources		Public Services
X	Cultural Resources		Recreation
	Energy		Transportation
X	Geology and Soils	X	Tribal Cultural Resources
	Greenhouse Gas Emissions		Utilities and Service Systems
	Hazards and Hazardous Materials		Wildfire
	Hydrology and Water Quality	X	Mandatory Findings of Significance
	Land Use and Planning		

Determination:


On the basis of this initial evaluation:

I find that the proposed use COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

I find that although the proposal could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described in Section 4.0 have been added. A MITIGATED NEGATIVE DECLARATION will be prepared.

I find that the proposal MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

I find that the proposal MAY have a significant effect(s) on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.



Joan Valle
Chief of Regulatory

09-20-22

Date

4.0 ENVIRONMENTAL ANALYSIS

The environmental analysis in this section is patterned after the Initial Study Checklist recommended by CEQA Guidelines Appendix G and is used by the District in its environmental review process. For the preliminary environmental assessment undertaken as part of this Initial Study's preparation, a determination that there is a potential for significant effects indicates the need to fully analyze the project's impacts and to identify mitigation.

For the evaluation of potential impacts, the questions in the Initial Study Checklist are stated with appropriate answers provided according to the analysis undertaken as part of the Initial Study. The analysis considers the project's long-term, direct, indirect, and cumulative impacts. To each question, there are four possible responses:

- **No Impact.** The project will not have any measurable environmental impact on the environment.
- **Less Than Significant Impact.** The project will have the potential for impacting the environment, although this impact will be below established thresholds that are considered to be significant.
- **Less Than Significant with Mitigation Incorporated.** The project will have the potential to generate impacts that may be considered as a significant effect on the environment, although mitigation measures or changes to the project's physical or operational characteristics can reduce these impacts to levels that are less than significant.
- **Potentially Significant Impact.** The project will have impacts that are considered significant, and additional analysis is required to identify mitigation measures that could reduce these impacts to less than significant levels. Where potential impacts are anticipated to be significant, mitigation measures will be required, so that impacts may be avoided or reduced to insignificant levels.

The following evaluation provides responses to the questions in the CEQA Environmental Checklist. A brief explanation for each question in the checklist is provided to support each impact determination. All responses consider the whole of the action involved, including construction and operational impacts, as well as direct and indirect impacts. Environmental factors potentially affected by the proposed project are presented below and organized according to the provided checklist format. Evaluation of the following resources was based on review of preliminary alignment plans and other sources listed in Section 6.0, Bibliography, of this analysis.

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4.1 AESTHETICS

4.1.1 Environmental Setting

Scenic Resources on the Project Site

The project site is undeveloped and contains non-native grassland. Surface elevations range from approximately 1,480 to 1,520 feet above mean sea level (amsl). Neither the City of Perris nor MJPA have designated any scenic resources near the project site.

Local Viewshed

Due to the relatively flat terrain on the project site, there are distant views of prominent topographic features such as hills and mountains. To the north, the Box Springs Mountain range is located east of I-215. To the west are the Temescal Mountains; on clear days, the Santa Ana Mountains can be seen in the background. To the south, the terrain is relatively flat and no prominent topographic features can be viewed. To the east, the Bernasconi Hills that surround Lake Perris are visible, and in the background are Mount San Jacinto and San Geronio Mountains.

State Scenic Highways

The California Department of Transportation (Caltrans) manages the State Scenic Highway Program and designates scenic highway corridors that contain scenic quality landscapes. The purpose of the designation is to protect and enhance the natural scenic beauty of California highways and adjacent corridors through special conservation treatment. The nearest officially designated State scenic highway is State Route (SR) 243, which is located approximately 23 miles east of the project site. The nearest eligible State scenic highway is SR-74, which is located approximately 7 miles south of the project site.¹

Light and Glare

There are no existing lighting systems on the project site. To the north, streetlights are located along Van Buren Boulevard and security lighting is located at the March Field Air Museum. To the west, there are no lighting systems located along I-215 adjacent to the project site; however, streetlights are located along the I-215 north and south of the project site. To the south, there are security lighting systems associated with the buildings south of the project site and lights along roadways. To the east, lighting systems are located along Runway 32/14 to assist aircraft landing, as well as security lighting at the buildings east of Runway 32/14.

¹ California Department of Transportation State Scenic Highways Mapping System. 2022.
<https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways> Accessed February 1, 2022.

4.1.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
AESTHETICS – Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Would the project:

- a) *Have a substantial adverse effect on a scenic vista? **Determination: No Impact.***

A scenic vista is generally defined as a view of undisturbed natural lands exhibiting a unique or unusual feature that comprises an important or dominant portion of the view shed. Scenic vistas may also be represented by a particular distant view that provides visual relief from less attractive views of nearby features. Other designated federal and State lands, as well as local open space or recreational areas, may also offer scenic vistas if they represent a valued aesthetic view within the surrounding landscape of nearby features.

As discussed, neither the City of Perris nor MIPA have designated any scenic resources near the project site. Thus, the proposed project would not have a substantial adverse effect on a scenic vista and no impacts would occur in this regard.

- b) *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway? **Determination: No Impact.***

As discussed above, there are no State scenic highways within or adjacent to the project site. The nearest officially designated State scenic highway is SR-243 located approximately 23 miles east of the project site, and the nearest eligible State scenic highway is SR-74 located approximately 7 miles south of the project site. Views of the project site are not afforded from SR-243 or SR-74 due to intervening topography, structures, and vegetation. No impact would occur.

- c) *In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with*

applicable zoning and other regulations governing scenic quality? **Determination: Less Than Significant Impact.**

As the project is surrounded by urbanized uses in all directions, the following discussion analyzes the project's potential to conflict with applicable zoning and other regulations governing scenic quality.

Construction Impacts

Short-term visual impacts associated with project construction activities would occur due to the presence of construction equipment and work vehicles, materials and temporary debris piles, and general construction activities; however, these impacts would be temporary and limited to the short-term construction duration of the project. Based on the project's limited construction duration (12 months), these activities are not anticipated to conflict with applicable zoning or regulations during construction. Impacts would be less than significant in this regard.

Operational Impacts

As an underground RCB storm drain, there are no applicable zoning or other regulations governing scenic quality which apply to the project. Long-term operational impacts to the existing visual character of the project area would not occur with project implementation since the new storm drain would be located underground and would not be visible to the surrounding community. A less than significant impact would occur in this regard.

- d) *Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?* **Determination: Less Than Significant Impact.**

Temporary glare from construction activities (including construction equipment and related materials) is possible. However, due to the nature of a storm drain construction project and short-term construction duration, it is anticipated that no new substantial sources of light or glare would result from the project. Construction would occur mainly during daylight hours. Should nighttime construction be necessary, any nighttime lighting would be directed downward and would be shielded to avoid spillover onto adjacent properties. As such, substantial impacts related to light or glare are not anticipated during project construction. Impacts are considered less than significant.

4.1.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

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4.2 AGRICULTURE AND FORESTRY RESOURCES

4.2.1 Environmental Setting

According to the California Department of Conservation Farmland Mapping and Monitoring Program (FMMP), California Important Farmland Finder interactive mapping system, the project alignment is designated as “Urban and Built Up Land” and “Other Land.”² The project alignment is not located in an area identified as Prime Farmland, Unique Farmland or Farmland of Statewide Importance, nor is it under a Williamson Act Contract. There are lands to the north of the project site that are designated as “Farmlands of Local Importance.” In addition, lands to the east of the project are identified as “Prime Farmland.”

4.2.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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AGRICULTURE RESOURCES – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forestland to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to nonagricultural use or conversion of forestland to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

² California Department of Conservation Important Farmland Finder. 2022. <https://maps.conservation.ca.gov/DLRP/CIFF/> Accessed February 1, 2022.

Would the project:

- a) *Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use? **Determination: No Impact.***

As discussed above, the project alignment is designated as “Urban and Built Up Land” and “Other Land.” The project alignment is not located in an area identified as Prime Farmland, Unique Farmland or Farmland of Statewide Importance. There is land to the north of the project site that is designated as Farmland of Local Importance and there is land to the east of the project site that is identified as Prime Farmland. However, all improvements proposed with the project would not encroach onto or interfere with any activities on these adjacent lands. Therefore, the project would not convert farmland to non-agricultural use. No impact would occur.

- b) *Conflict with existing zoning for agricultural use, or a Williamson Act contract? **Determination: No Impact.***

The lands associated with the project alignment are not zoned for agricultural use, nor are they subject to a Williamson Act contract. In addition, the project alignment is not located within an agricultural zoning designation identified by either the MJPA or City of Perris. No impact would occur.

- c) *Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? **Determination: No Impact.***

The proposed project alignment would not be located adjacent to areas designated or zoned as forest land. Therefore, implementation of the proposed project would not conflict with existing zoning of forest land, timberland, or timberland production, and no impact would occur.

- d) *Result in the loss of forestland or conversion of forest land to non-forest use? **Determination: No Impact.***

Refer to the response for Impact 4.2(c), above. There is no forest land located on or adjacent to the project site. No impact would occur.

- e) *Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of farmland to nonagricultural use? **Determination: No Impact.***

The project site and the surrounding properties are not currently used or zoned for agriculture. The project area is characterized as disturbed and developed and would not result in the conversion of forest land to non-forest use. No impact would occur.

4.2.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.3 AIR QUALITY

4.3.1 Environmental Setting

Regional Topography

The State of California is divided geographically into 15 air basins. The project site is located within the South Coast Air Basin (Basin), a 6,600-square mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and the San Jacinto Mountains to the north and east. The Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the San Geronio Pass area of Riverside County.

The extent and severity of the air pollution problem in the Basin is a function of the area's natural physical characteristics (weather and topography), as well as man-made influences (development patterns and lifestyle). Factors such as wind, sunlight, temperature, humidity, rainfall, and topography all affect the accumulation and dispersion of air pollutants throughout the Basin.

Climate

The general region lies in the semi-permanent high-pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. The climate consists of a semi-arid environment with mild winters, warm summers, moderate temperatures, and comfortable humidity. Precipitation is limited to a few winter storms. The usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds.

The average annual temperature varies little throughout the Basin, averaging 75 degrees Fahrenheit (°F). However, with a less-pronounced oceanic influence, the eastern inland portions of the Basin show greater variability in annual minimum and maximum temperatures. All portions of the Basin have had recorded temperatures over 100°F in recent years.

Although the Basin has a semi-arid climate, the air near the surface is moist due to the presence of a shallow marine layer. Except for infrequent periods when dry, continental air is brought into the Basin by offshore winds, the ocean effect is dominant. Periods with heavy fog are frequent, and low stratus clouds, occasionally referred to as "high fog," are a characteristic climate feature. The annual average relative humidity is 70 percent at the coast and 57 percent in the eastern part of the Basin. Precipitation in the Basin is typically nine to 14 inches annually and is rarely in the form of snow or hail due to typically warm weather. The frequency and amount of rainfall are greater in the coastal areas of the Basin.

The height of the inversion is important in determining pollutant concentration. When the inversion is approximately 2,500 feet above sea level, the sea breezes carry the pollutants inland to escape over the mountain slopes or through the passes. At a height of 1,200 feet, the terrain prevents the pollutants from entering the upper atmosphere, resulting in a settlement in the foothill communities. Below 1,200 feet, the inversion puts a tight lid on pollutants, concentrating them in a shallow layer over the entire coastal Basin. Usually, inversions are lower before sunrise than during the day. Mixing heights for inversions are lower in the summer and more persistent, being partly responsible for the high levels of ozone (O₃) observed during the summer months in the Basin. Smog in southern California is generally the result of these temperature inversions combining with coastal day winds and local mountains to contain the pollutants for long periods of time, allowing them to form secondary pollutants by reacting with sunlight. The Basin has a limited ability to disperse these pollutants due to typically low wind speeds.

Local Ambient Air Quality

California Air Resources Board (CARB) monitors ambient air quality at approximately 250 air monitoring stations across the State. Air quality monitoring stations usually measure pollutant concentrations ten

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feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations. The project site is located within Source Receptor Area (SRA) 24, Perris Valley. The closest air monitoring station contains three-year data to the project site is the Reseda Monitoring Station. Local air quality data from 2018 to 2020 is provided in Table 4.3-1, Summary of Air Quality Data. This table lists the monitored maximum concentrations and number of exceedances of Federal/State air quality standards for each year

Table 4.3-1: Summary of Air Quality Data

Pollutant	California Standard	Federal Primary Standard	Year	Maximum Concentration ¹	Days (Samples) State/Federal Std. Exceeded
Ozone (O ₃) (1-hour) ²	0.09 ppm for 1 hour	NA ⁶	2018 2019 2020	0.117 ppm 0.118 ppm 0.125 ppm	31 / 0 28 / 0 34 / 1
Ozone (O ₃) (8-hour) ²	0.070 ppm for 8 hours	0.070 ppm for 8 hours	2018 2019 2020	0.103 ppm 0.095 ppm 0.106 ppm	68 / 67 66 / 64 77 / 74
Carbon Monoxide (CO) (1-hour) ³	20 ppm for 1 hour	35 ppm for 1 hour	2018 2019 2020	1.128 ppm 1.605 ppm 0.914 ppm	0 / 0 0 / 0 0 / 0
Nitrogen Dioxide (NO ₂) ³	0.180 ppm for 1 hour	0.100 ppm for 1 hour	2018 2019 2020	0.041 ppm 0.038 ppm 0.044 ppm	0 / 0 0 / 0 0 / 0
Fine Particulate Matter (PM _{2.5}) ^{3,4}	No Separate Standard	35 µg/m ³ for 24 hours	2018 2019 2020	31.3 µg/m ³ 17.6 µg/m ³ 41.6 µg/m ³	NA / * NA / * NA / *
Particulate Matter (PM ₁₀) ^{2,4,5}	50 µg/m ³ for 24 hours	150 µg/m ³ for 24 hours ⁶	2018 2019 2020	64.4 µg/m ³ 97.0 µg/m ³ 92.3 µg/m ³	2 / 0 4 / 0 6 / 0
ppm = parts per million; PM ₁₀ = particulate matter 10 microns in diameter or less; µg/m ³ = micrograms per cubic meter; PM _{2.5} = particulate matter 2.5 microns in diameter or less; NA = not applicable; * = insufficient data available to determine the value					
Notes:					
1. Maximum concentration is measured over the same period as the California standards.					
2. Data collected from the Perris Monitoring Station located at 237 North D Street, Perris, California, 92570.					
3. Data collected from the Lake Elsinore – West Flint Street Monitoring Station located at 506 W Flint Street, Lake Elsinore, 92530.					
4. PM ₁₀ and PM _{2.5} exceedances are derived from the number of samples exceeded, not days.					
5. PM ₁₀ exceedances are based on State thresholds established prior to amendments adopted on June 20, 2002.					
6. The Federal standard for 1-hour ozone was revoked in June 2005.					
7. The Federal standard for average PM ₁₀ was revoked in December 2006.					
Sources:					
California Air Resources Board, <i>ADAM Air Quality Data Statistics</i> , http://www.arb.ca.gov/adam/ , accessed April 29, 2022.					
California Air Resources Board, <i>AQMIS2: Air Quality Data</i> , https://www.arb.ca.gov/aqmis2/aqdselect.php , accessed April 29, 2022.					

4.3.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
AIR QUALITY – Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

An air quality memorandum was prepared for the proposed project (Michael Baker International, May 2022). Refer to [Appendix A, Air Quality Memorandum](#).

Would the project:

- a) *Conflict with or obstruct implementation of the applicable air quality plan?* **Determination: Less Than Significant Impact.**

The project site is located within the South Coast Air Basin (Basin). The South Coast Air Quality Management District (SCAQMD) has jurisdiction in the Basin, which has a history of recorded air quality violations and is an area where both state and Federal ambient air quality standards are exceeded. Areas that meet ambient air quality standards are classified as attainment areas, while areas that do not meet these standards are classified as nonattainment areas. The SCAQMD is required, pursuant to the Federal Clean Air Act, to reduce emissions of the air pollutants for which the Basin is in nonattainment.

In order to reduce emissions, the SCAQMD adopted the *2016 Air Quality Management plan for the South Coast Air Basin (2016 AQMP)* which establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving State and Federal air quality standards. The 2016 AQMP is a regional and multi-agency effort including the SCAQMD, CARB, the Southern California Association of Governments (SCAG), and the EPA.

The 2016 AQMP pollutant control strategies are based on the latest scientific and technical information and planning assumptions, including the *2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)*, updated emission inventory methodologies for various source categories, and SCAG’s latest growth forecasts. SCAG’s latest growth forecasts were defined in consultation with local governments and with reference to local general plans. The SCAQMD considers projects that are consistent with the 2016 AQMP, which is intended to bring the Basin into attainment for all criteria pollutants, to also have less than significant cumulative impacts. While SCAG has recently adopted the *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (2020-2045 RTP/SCS)*, SCAQMD has not released an updated AQMP that utilizes information from the 2020-2045 RTP/SCS. The SCAQMD is planning

to adopt the updated AQMP in late 2022. As such, this consistency analysis is based off the 2016 AQMP and 2016-2040 RTP/SCS.

The project proposes to construct a storm drain facility to provide flood protection to MARB and the adjacent area. During project construction, the project would comply with SCAQMD Rule 403 in reducing fugitive dust emissions. Project operation would be similar to existing conditions. Maintenance activities that may be required during project operation would occur on an as needed basis. As such, the proposed storm drain facility would not conflict with applicable land use plans, including the General Plan 2030 and MJPA General Plan, during project construction and operation. It should be noted that the proposed storm drain facility would not involve any uses that have the potential to affect SCAG forecasts on population, housing, and employment in the region. As the SCAQMD has incorporated these forecasts into the 2016 AQMP, it could be implied that the proposed project would be consistent with the 2016 AQMP.

In addition, the project's short-term construction and long-term operational emissions would not exceed SCAQMD thresholds; refer to Impact 4.3(b) below. As such, the proposed project would not conflict with or obstruct implementation of the 2016 AQMP.

- b) *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?*
Determination: Less Than Significant Impact.

Short-Term Construction Emissions

The project involves construction activities associated with site preparation, grading, construction, paving, and site cleanup. Project construction would occur for approximately 12 months. Earthwork would result in approximately 71,000 cubic yards of cut and 46,000 cubic yards of fill, resulting in 25,000 cubic yards of soil to be exported. Exhaust emission factors for typical diesel-powered heavy equipment are based on the program defaults of the most recent version of the California Emissions Estimator Model (CalEEMod), version 2020.4.0. Variables factored into estimating the total construction emissions include the level of activity, length of construction period, number of pieces and types of equipment in use, site characteristics, weather conditions, number of construction personnel, and the amount of materials to be transported on- or off-site. The analysis of daily construction emissions has been prepared using CalEEMod, refer to Appendix A. Table 4.3-2, Short-Term Construction Emissions, presents the anticipated daily short-term construction emissions.

Table 4.3-2: Short-Term Construction Emissions

Emissions Source	Pollutant (pounds/day) ¹					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Year 1	10.83	97.55	125.67	0.23	11.35	7.12
Year 2	0.63	5.17	7.58	0.01	0.29	0.25
Maximum Daily Emissions ²	10.83	97.55	125.67	0.23	11.35	7.12
SCAQMD Thresholds	75	100	550	150	150	55
Is Threshold Exceeded?	No	No	No	No	No	No
Notes:						
<ol style="list-style-type: none"> 1. Emissions were calculated using CalEEMod, version 2020.4.0. Winter emissions represent the worst-case scenario. 2. Modeling assumptions include compliance with SCAQMD Rule 403 which requires: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stockpiles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour. 3. ROG = reactive organic gases; NO_x = nitrogen oxides; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = particulate matter up to 10 microns; PM_{2.5} = particulate matter up to 2.5 microns; lbs = pounds 						
Refer to Appendix A for detailed model input/output data.						

Fugitive Dust Emissions

Construction activities are a source of fugitive dust emissions that may have a substantial, temporary impact on local air quality. In addition, fugitive dust may be a nuisance to those living and working in the project area. Fugitive dust emissions are associated with land clearing, ground excavation, cut-and-fill, and truck travel on unpaved roadways. Fugitive dust emissions vary substantially from day to day, depending on the level of activity, specific operations, and weather conditions. Fugitive dust from demolition, grading, and construction is expected to be short-term and would cease upon project completion. It should be noted that most of this material is inert silicates, rather than the complex organic particulates released from combustion sources, which are more harmful to health.

Dust (larger than 10 microns) generated by such activities usually becomes more of a local nuisance than a serious health problem. Of particular health concern is the amount of PM₁₀ generated as a part of fugitive dust emissions. PM₁₀ poses a serious health hazard alone or in combination with other pollutants. PM_{2.5} is mostly produced by mechanical processes. These include automobile tire wear, industrial processes such as cutting and grinding, and re-suspension of particles from the ground or road surfaces by wind and human activities such as construction or agriculture. PM_{2.5} is mostly derived from combustion sources, such as automobiles, trucks, and other vehicle exhaust, as well as from stationary sources. These particles are either directly emitted or are formed in the atmosphere from the combustion of gases such as NO_x and SO_x combining with ammonia. PM_{2.5} components from material in the earth's crust, such as dust, are also present, with the amount varying in different locations.

Construction activities would comply with SCAQMD Rule 402, which prohibits fugitive dusts from creating a nuisance, and Rule 403, which requires that fugitive dust emissions controls such as regular watering or other dust prevention measures to be implemented. Adherence to SCAQMD Rule 402 and Rule 403 would greatly reduce PM₁₀ and PM_{2.5} concentrations and ensure project consistency with SCAQMD requirements and General Plan 2030. As depicted in Table 4.3-2, total

PM₁₀ and PM_{2.5} emissions would not exceed the SCAQMD thresholds during construction. Thus, construction-related air quality impacts from fugitive dust emissions would be less than significant.

Construction Equipment and Worker Vehicle Exhaust

Exhaust emissions (e.g., NO_x and CO) from construction activities include emissions associated with the transport of machinery and supplies to and from the project site, emissions produced on-site as the equipment is used, and emissions from trucks transporting materials to/from the site. As presented in [Table 4.3-2](#), construction equipment and worker vehicle exhaust emissions would be below the established SCAQMD thresholds. Therefore, air quality impacts from equipment and vehicle exhaust emissions would be less than significant.

Total Daily Construction Emissions

In accordance with the SCAQMD Guidelines, CalEEMod was utilized to model construction emissions for ROG, NO_x, CO, SO_x, PM₁₀, and PM_{2.5}. As indicated in [Table 4.3-2](#), criteria pollutant emissions during construction of the proposed project would not exceed the SCAQMD significance thresholds. Thus, construction-related air quality impacts from criteria pollutant emissions would be less than significant.

Asbestos

Asbestos is a term used for several types of naturally occurring fibrous minerals that are a human health hazard when airborne. The most common type of asbestos is chrysotile, but other types such as tremolite and actinolite are also found in California. Asbestos is classified as a known human carcinogen by State, Federal, and international agencies and was identified as a toxic air contaminant by the CARB in 1986.

Asbestos can be released from serpentinite and ultramafic rocks when the rock is broken or crushed. At the point of release, the asbestos fibers may become airborne, causing air quality and human health hazards. These rocks have been commonly used for unpaved gravel roads, landscaping, fill projects, and other improvement projects in some localities. Asbestos may be released to the atmosphere due to vehicular traffic on unpaved roads, during grading for development projects, and at quarry operations. All of these activities may have the effect of releasing potentially harmful asbestos into the air. Natural weathering and erosion processes can act on asbestos bearing rock and make it easier for asbestos fibers to become airborne if such rock is disturbed. According to the Department of Conservation Division of Mines and Geology, A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos Report, serpentinite and ultramafic rocks are not known to occur within the project area. Thus, there would be no impact in this regard.

LONG-TERM (OPERATIONAL) EMISSIONS

The project proposes the construction of a storm drain facility. As discussed above, project operation would be similar to existing conditions and maintenance activities that may be required would occur on an as needed basis. As such, the project would not generate additional traffic trips when compared to existing conditions or result in significant operational emissions. No impacts would occur in this regard.

Air Quality Health Impacts

Adverse health effects induced by criteria pollutant emissions are highly dependent on a multitude of interconnected variables (e.g., cumulative concentrations, local meteorology and atmospheric conditions, and the number and character of exposed individual [e.g., age, gender]). In particular, ozone precursors ROG_s and NO_x affect air quality on a regional scale. Health effects related to ozone are therefore the product of emissions generated by numerous sources throughout a region. Existing models have limited sensitivity to small changes in criteria pollutant concentrations, and, as such, translating project-generated criteria pollutants to specific health effects or additional days of nonattainment would produce meaningless results. In other words, the project's less than significant increases in regional air pollution from criteria air pollutants would have nominal or negligible impacts on human health.

The issue of correlating regional air pollution to human health effects was raised in litigation regarding the Friant Ranch project, which is a 942-acre master-planned community in Fresno County. In 2011, litigation was filed by the Sierra Club and other groups challenging the adequacy of Fresno County's EIR for failing to comply with CEQA. The Superior Court upheld all aspects of the EIR, but an appeal then followed, ultimately reversing the decision as it held that the EIR was deficient in its informational discussion of air quality impacts as they connect to adverse human health effects. In the appeal process the South Coast Air Quality Management District (SCAQMD) and San Joaquin Valley Air Pollution Control District (SJVAPCD) took the lead on behalf of air quality regulating agencies to file amicus briefs to identify the infeasibility of conducting this type of analysis using the tools that are currently available. As noted in the Brief of Amicus Curiae by the SCAQMD, the SCAQMD acknowledged that it would be extremely difficult, if not impossible to quantify health impacts of criteria pollutants for various reasons including modeling limitations as well as where in the atmosphere air pollutants interact and form. Further, as noted in the Brief of Amicus Curiae by the SJVAPCD, SJVAPCD has acknowledged that currently available modeling tools are not equipped to provide a meaningful analysis of the correlation between an individual development project's air emissions and specific human health impacts.

The SCAQMD acknowledges that health effects quantification from ozone, as an example is correlated with the increases in ambient level of ozone in the air (concentration) that an individual person breathes. SCAQMD's Brief of Amicus Curiae states that it would take a large amount of additional emissions to cause a modeled increase in ambient ozone levels over the entire region. The SCAQMD states that based on their own modeling in the SCAQMD's 2012 Air Quality Management Plan, a reduction of 432 tons (864,000 pounds) per day of NO_x and a reduction of 187 tons (374,000 pounds) per day of VOCs would reduce ozone levels at highest monitored site by only nine parts per billion. As such, the SCAQMD concludes that it is not currently possible to accurately quantify ozone-related health impacts caused by NO_x or VOC emissions from relatively small projects (defined as projects with regional scope) due to photochemistry and regional model limitations. As such, for the purpose of this analysis, since the project would not exceed SCAQMD thresholds for construction and operational air emissions, the project would have a less than significant impact for air quality health impacts as well.

- c) *Expose sensitive receptors to substantial pollutant concentrations?* **Determination: Determination: Less Than Significant Impact.**

The closest sensitive receptor for the purpose of an LST analysis is the single-family residence located approximately 145 feet to west from project site at 5137 Patterson Avenue. In order to

identify impacts to sensitive receptors, the SCAQMD recommends addressing LSTs for construction and operations impacts (area sources only).

Localized Significance Thresholds

LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the Final Localized Significance Threshold Methodology (dated June 2003 [revised 2008]) for guidance. The LST methodology assists lead agencies in analyzing localized air quality impacts. The SCAQMD provides the LST screening lookup tables for one-, two-, and five-acre projects emitting CO, NO_x, PM_{2.5}, or PM₁₀. The LST methodology and associated mass rates are not designed to evaluate localized impacts from mobile sources traveling over the roadways. The LST Mass Rate Screening Threshold was based on the anticipated daily acreage disturbance for construction (two-acre site), the distance to sensitive receptors (25 meters), and the source receptor area (SRA 24 – Perris Valley).

Construction

The LST thresholds for two-acre projects were utilized for the construction LST analysis per SCAQMD guidance. The nearest sensitive use is a single-family residence located approximately 145 feet (44.2 meters) to the west of the project site. Therefore, the LSTs for 25 meters were utilized as this is the most conservative threshold for sensitive use located at this distance. [Table 4.3-3, Localized Significance of Construction Emissions](#), shows the localized construction-related emissions. It is noted that the localized emissions presented in [Table 4.3-3](#) are less than those in Table 3 because localized emissions include only on-site emissions (i.e., from construction equipment and fugitive dust). As shown in [Table 4.3-3](#), emissions would not exceed the LST mass rate screening thresholds for SRA 24.

Operations

According to SCAQMD localized significance threshold methodology, LSTs would apply to the operational phase of a proposed project if the project includes stationary sources or attracts mobile sources that may spend extended periods queuing and idling at the site (e.g., warehouse or transfer facilities). The proposed project does not include such uses and would not cause any emissions in operations as the project is a flood control facility. Thus, due to the lack of such emissions, no long-term localized significance threshold analysis is necessary. Operational LST impacts would be less than significant in this regard.

Table 4.3-3: Localized Significance of Construction Emissions

Maximum Emissions	Maximum Daily Emissions (pounds/day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Year 1 ^{1,3}	58.41	81.11	5.52	3.10
Year 2 ^{2,3}	5.16	7.44	0.23	0.23
Maximum Daily Emissions	58.41	81.11	5.52	3.10
<i>Localized Significance Threshold Mass Rate Screening Criteria</i> ⁴	170	883	7	4
Thresholds Exceeded?	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>
Note: 1. Maximum on-site daily emissions occur during site preparation for PM ₁₀ , and PM _{2.5} , and grading phase for NO _x , and CO during Year 1. 2. Maximum on-site daily emissions occur during paving phase for NO _x , CO, PM ₁₀ , and PM _{2.5} during Year 2. 3. Modeling assumptions include compliance with SCAQMD Rule 403 which requires: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stock piles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour. 4. The Localized Significance Threshold Mass Rate Screening Criteria was determined using Appendix C of the SCAQMD <i>Final Localized Significant Threshold Methodology</i> guidance document for pollutants NO _x , CO, PM ₁₀ , and PM _{2.5} . The Localized Significance Threshold Mass Rate Screening Threshold was based on the anticipated daily acreage disturbance for construction (two-acre site), the distance to sensitive receptors (25 meters), and the source receptor area (SRA 24).				

Conclusion

The nearest sensitive receptors are single-family residence located west of the project site. As discussed under Impact 4.3(b), the project would not exceed the SCAQMD’s land use screening thresholds during construction or operational activities. Additionally, the project would be required to comply with SCAQMD Rule 402, which prohibits fugitive dusts from creating a nuisance; and Rule 403, which aims to reduce construction-related fugitive dust emissions by requiring best management practices such as properly maintain mobile and other construction equipment, replace ground cover in disturbed areas quickly, water exposed surfaces three times daily, cover stockpiles with tarps, water all haul roads twice daily, and limit speeds on unpaved roads to 15 miles per hour. Further, construction equipment would not be confined to one area and the associated emissions would fluctuate throughout the day as well as within each phase of construction depending on the quantity, duration, and type of equipment used at the time. As such, the project would not concentrate construction emissions near sensitive receptors for an extended period of time, and sensitive receptors would not be exposed to substantial pollutant concentrations during operation of the proposed project. Impacts would be less than significant in this regard.

d) Create objectionable odors affecting a substantial number of people? *Determination: Less Than Significant Impact.*

California Health and Safety Code, Division 26, Part 4, Chapter 3, Section 41700 prohibits the emission of any material which causes nuisance to a considerable number of persons or endangers the comfort, health, or safety of the public. Projects required to obtain permits from SCAQMD, typically industrial and some commercial projects, are evaluated by SCAQMD staff for potential odor nuisance and conditions may be applied (or control equipment required) where necessary to prevent occurrence of public nuisance. The proposed project would not require such a permit from SCAQMD.

According to the SCAQMD CEQA Air Quality Handbook, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical

plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed project does not include any uses identified by the SCAQMD as being associated with odors. Construction activities associated with the project may generate detectable odors from heavy-duty equipment exhaust and architectural coatings. However, construction-related odors would be short-term in nature and cease upon project completion. In addition, the project would be required to comply with the California Code of Regulations, Title 13, Sections 2449(d)(3) and 2485, which minimizes the idling time of construction equipment either by shutting it off when not in use or by reducing the time of idling to no more than five minutes. This would further reduce the detectable odors from heavy-duty equipment exhaust. No other types of emissions beyond those analyzed above would be generated by the proposed flood control facility. As such, the project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. Impacts would be less than significant in this regard.

4.3.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.4 BIOLOGICAL RESOURCES

4.4.1 Environmental Setting

The project area is characterized as developed and undeveloped-disturbed land. The surrounding areas consist of MARB to the east and scattered industrial development to the north, south, and west. An existing drainage course is located within MARB approximately 350 feet west of the existing runway and 300 feet east of the western perimeter fence boundary of MARB. Runoff in this area drains from the north to south via this natural drainage course towards a soft bottom open channel at Heacock Street (Heacock Channel) eventually draining east towards Perris Valley Channel.

The project site is mostly comprised of highly disturbed, but undeveloped lands. One (1) natural vegetation community was observed and mapped within the boundaries of the project site: red brome or Mediterranean grass grassland. In addition, the project site contains two (2) land cover types that would be classified as disturbed and developed.

Soils for the project area were obtained by Michael Baker from the *Custom Soil Resource Report for Western Riverside County, California* (USDA 2022). The project site is underlain by the following soil units: Exeter sandy loam, deep, 0 to 2 percent slopes (EpA); Greenfield sandy loam, 0 to 2 percent slopes (GyA); Hanford fine sandy loam, 0 to 2 percent slopes (HgA); Monserate sandy loam, 0 to 5 percent slopes (MmB); Pachappa fine sandy loam, 0 to 2 percent slopes (PaA); and Ramona sandy loam, 0 to 2 percent slopes, MLRA 19 (RaA). Michael Baker conducted a query of the *California Hydric Soils List* (USDA 2022) in an effort to verify whether any soil units occurring within the project site are considered to be hydric. Based on the *California Hydric Soils List*, none of the soil units occurring within the project site are listed as hydric.

4.4.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
BIOLOGICAL RESOURCES – Would the project:				

- | | | | | |
|--|--------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

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	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or State habitat conservation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

A Biological Resources Assessment (BRA) was prepared for the proposed project (Michael Baker International, July 2022). Refer to [Appendix B-1, *Biological Resources Assessment and MSHCP Consistency Analysis*](#), for the full report.

A Jurisdictional Delineation Report was prepared for the proposed project (Michael Baker International, July 2022). Refer to [Appendix B-2, *Delineation of State and Federal Jurisdictional Waters*](#), for the full report.

A Burrowing Owl Focused Survey was prepared for the proposed project (Riverside County Flood Control and Water Conservation District, July 2022). Refer to [Appendix B-3, *Burrowing Owl Focused Survey*](#), for the full report.

Would the project:

- a) *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?*
Determination: Less Than Significant With Mitigation Incorporated.

Michael Baker biologists prepared a BRA to document the results of a literature review and field survey/habitat assessment conducted on January 19, 2022. The field survey was conducted to characterize existing site conditions and assess the potential for special-status biological resources to occur within the project site that could pose a constraint to implementation of the proposed project. The following species types were evaluated pursuant to special-status consideration in the BRA:

Special-Status Plant Species

No special-status plant species were observed within the project site. Based on the results of the literature review and the field survey, Michael Baker determined that paniculate tarplant (*Deinandra paniculata*; California rare plant rank (CRPR) 4.2), which is known to occur on MARB and often occurs in non-native grasslands in Riverside County, has a moderate potential to occur within the project site. All other special-status plant species either have a low potential to occur or are not expected within the project site based on existing site conditions and a review of specific habitat requirements, occurrence records, and known distributions. Paniculate tarplant is not a covered species under the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), and because it has a CRPR of 4.2, it is generally not evaluated for potential

significant impacts under CEQA and generally does not require additional permitting for impacts. No impact to special-status plant species would occur in this regard.

Special-Status Wildlife Species

Special-status wildlife species that were observed within or adjacent to the project site during the field surveys included burrowing owl (*Athene cunicularia*; California species of special concern [SSC]), California horned lark (*Eremophila alpestris actia*; California watch list [WL] species), and San Diego black-tailed jackrabbit (*Lepus californicus bennettii*; California SSC). Based on the results of the literature review and the field survey, Michael Baker determined that Cooper's hawk (*Accipiter cooperii*; California WL species) has a high potential to occur within the project site. All other special-status wildlife species identified during the literature review either have a low potential to occur or are not expected within the project site based on existing site conditions and a review of specific habitat requirements, occurrence records, and known distributions. Impacts to Cooper's hawk, California horned lark, and San Diego black-tailed jackrabbit are all fully covered under the MSHCP and require no additional permitting as long as the project is consistent with the MSHCP and its preservation goals. Impacts to burrowing owl are not considered fully covered. Under the MSHCP, focused surveys are required to be conducted in suitable habitat on the project site and within 500 feet of the project limits.

Burrowing Owl

Because the project site contains suitable habitat for BUOW and that two pairs of burrowing owl were observed adjacent to the project site during the initial field survey on January 19, 2022, focused surveys throughout the entire project site and in suitable habitat within 500 feet were required.

District biologists conducted a focused burrow survey and focused surveys for burrowing owl on four (4) separate days during the 2022 breeding season. The focused burrow survey and focused surveys were conducted in accordance with the survey guidelines and protocols provided in the *Burrowing Owl Survey Instructions for the Western Riverside County Multiple Species Habitat Conservation Plan Area* (RCA 2006). The results of the focused surveys were negative and indicated that the site is not presently occupied by burrowing owls. Although no burrowing owls were detected during the focused surveys, direct impacts to burrowing owl through ground disturbance and habitat loss and indirect impacts from construction noise and vibrations may occur. Impacts to burrowing owl would be less than significant with the implementation of Mitigation Measure BIO-1.

- b) *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service? **Determination: Less Than Significant Impact.***

Based on the results of the Jurisdictional Delineation Report, approximately 1.02 acres (1,393 linear feet) of United States Army Corps of Engineers (USACE)/Santa Ana Regional Water Quality Control Board (RWQCB) non-wetland Waters of the United States is located within the boundaries of the project site. Additionally, an off-site unvegetated streambed occurs between the Perris Valley Channel and the MARB runway that qualifies as Waters of the United States, totaling 4.71 acres (4,530 linear feet). Refer to Table 4.4-1, State and Federal Jurisdictional Resources and Proposed Impacts.

Table 4.4-1: State and Federal Jurisdictional Resources and Proposed Impacts

Hydrologic Feature	Latitude / Longitude	Cowardin Class	Class of Aquatic Feature	Acreage (Linear Feet)		
				USACE/RWQCB Non-Wetland WoUS		
				Total Acreage	Impacts	
					Permanent	Temporary
PVC (North Segment)	33.859205° / -117.244730°	Riverine	Non-Wetland	0.68 (827)	0.00 (0)	0
PVC (South Segment)	33.870352° / -117.254872°	Riverine	Non-Wetland	0.34 (566)	0.28 (511)	0
Offsite Channel	33.870354° / -117.244862°	Riverine	Non-Wetland	3.33 (4,530)	0	0
TOTAL*				4.35 (5,923)	0.28 (511)	0

Refer to Appendix B-2, *Delineation of State and Federal Jurisdictional Waters*

*Total may not equal to sum due to rounding.

As discussed in [Appendix B-2](#), the project meets the requirements of Nationwide Permit 43 (Stormwater Management Facilities) and would require a preconstruction notification (PCN). Issuance of a Water Quality Certification from the Santa Ana RWQCB for temporary and permanent impacts to non-wetland Waters of the United States will be required as a condition of the 404 Nationwide Permit process. With issuance of the project’s Nationwide Permit 43 and Water Quality Certification, impacts to USACE non-wetland Waters of the United States would be less than significant.

- c) *Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? **Determination: No Impact.***

Wetlands are defined under the Federal Clean Water Act as land that is flooded or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that normally does support, a prevalence of vegetation adapted to life in saturated soils. Wetlands include areas such as swamps, marshes, and bogs. Based on Jurisdictional Delineation Report, the project site does not support wetland Waters of the State or wetland Waters of the United States. Further, the proposed project does not involve the placement of fill within the off-site streambed, therefore, issuance of a 404 permit for this component of the project is not required. No impact would occur in this regard.

- d) *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? **Determination: Less Than Significant Impact.***

As discussed in the BRA, no fish or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would support populations of fish were observed in the project site during the field survey. Therefore, no fish are expected to occur and the project would not interfere with the movement of migratory fish.

Due to the highly disturbed nature of the project site and surrounding areas, the project site does not currently function as a migratory corridor or linkage. Wildlife movement into or out of the project site is likely reduced by the presence of surrounding high-traffic roadways (i.e., I-215) and existing residential and commercial developments, which have fragmented the connection between the project site and surrounding naturally-occurring vegetation communities. Nesting

birds are protected pursuant to the federal Migratory Bird Treaty Act (MBTA) of 1918 and the California Fish and Game Code (CFGF). Particularly, the MBTA governs the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests. No active or remnant bird nests were observed within the project site during the field survey. A single house sparrow was observed carrying nesting material into a maintenance shed on the western edge of the property at the corner of Patterson Avenue and Nandina Avenue. However, the nests of non-native bird species, including house sparrow, are generally not protected by the MBTA or CFGF. No native birds exhibiting any signs of nesting activity were observed during the field survey. With adherence to the MBTA and CFGF, impacts to migratory birds would be reduced to less than significant.

- e) *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? **Determination: Less Than Significant Impact.***

Refer to Impact 4.4(a) and 4.4(f) for a discussion regarding the project's consistency with the MSCHP. The project site and area of construction is devoid of trees that therefore would not conflict with an existing tree preservation policy or ordinance. Therefore, no impact would occur.

- f) *Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or State habitat conservation plan? **Determination: Less Than Significant With Mitigation Incorporated.***

A Biological Resources Assessment and MSHCP Consistency Analysis was prepared for the project in July 2022 by Michael Baker International and is included in Appendix B-1 to this Initial Study. The MSHCP consistency analysis presented in the report is summarized in the response below.

Western Riverside County Multiple Species Habitat Conservation Plan

As a permittee to the Western Riverside County MSHCP, the District is required to comply with Sections 6.1.2, 6.1.3, 6.1.4, 6.3.2, and 7 of the MSHCP. The Project site is located within the MSHCP plan area but is not located within any Subunits, Criteria Cells, Conservation Areas, Cores/Linkages, or P/QP lands identified by the MSHCP.

Section 6.1.2

Based on the results of the vernal pool habitat assessment as described in the Biological Resources Assessment and MSHCP Consistency Analysis (Appendix B-1), neither vernal pools nor habitat for vernal pool fairy shrimp occur within or adjacent to the project site. However, the project site includes a total of 2.40 acres (1,393 linear feet) of non-wetland unvegetated ephemeral streambed that is considered a riverine riparian resource under Section 6.1.2 of the Western Riverside MSHCP. Implementation of the proposed project will result in permanent impacts to 0.41 acres of streambed, that does not support riparian vegetation or riparian bird habitat. An offsite segment of unvegetated non-wetland streambed totaling 4.71 acres extends from the northerly outlet of Perris Valley Channel and extends south for 4,530 feet where it joins the channel again at the southern outlet. Construction of the proposed channel improvements will divert approximately 50% of the water that typically drains to the offsite streambed. However, there is no riparian vegetation, wetlands or other water dependent resources within the channel that would be impacted by this partial diversion. The water conveyance function of the unvegetated feature will remain and will continue to be supported by onsite flows from MARB and rainfall. Therefore, the permanent impacts to the ephemeral streambed and indirect impacts to the offsite channel does not require a DBESP because no MSCHP resources on site are dependent on this channel and water delivery downstream to resources would continue post project. Therefore, the project is consistent with Section 6.1.2 of the MSHCP.

Section 6.1.3

Section 6.1.3 of the MSHCP addresses protection of Narrow Endemic Plant Species and requires surveys to be conducted in defined survey areas throughout the MSHCP area. According to the RCA's online MSHCP Information Application and Figure 6-1 of the MSHCP, the proposed project is not located within a survey area for Narrow Endemic Plant Species. Therefore, nothing further is required to demonstrate consistency with this section of MSHCP.

Section 6.3.2

Section 6.3.2 of the MSHCP addresses additional survey needs and procedures. The proposed project is not located within a mapped survey area for Amphibians, Mammals, Narrow endemic plant species, Criteria Species or Delhi Sands Flower-loving Fly, but is in a burrowing owl survey area, and was determined to provide suitable habitat for the species.

District biologists conducted a focused burrow survey and focused surveys for burrowing owls on four (4) separate days during the 2022 breeding season. The focused burrow survey and focused surveys were conducted in accordance with the survey guidelines and protocols provided in the Burrowing Owl Survey Instructions for the Western Riverside County Multiple Species Habitat Conservation Plan Area (RCA 2006). The results of the focused surveys were negative and indicated that the site is not presently occupied by burrowing owls. Although no burrowing owls were detected during the focused surveys, indirect impacts to burrowing owl may occur through ground disturbance, habitat loss, construction noise and vibration. Impacts to burrowing owl would be less than significant with the implementation of Mitigation Measure BIO-1. As such, the project is consistent with Section 6.3.2 of the MSHCP.

Section 6.1.4

Section 6.1.4 of the MSHCP addresses guidelines pertaining to urban/wildlands interface. The urban/wildlands interface guidelines presented in Section 6.1.4 of the MSHCP are intended to address indirect effects associated with new development in proximity to MSHCP Conservation Areas. The project site is not located adjacent to any Criteria Cells, Conservation Areas, Cores/Linkages, or P/QP lands identified by the MSHCP and thus would not affect these areas. As such, the 6.1.4 guidelines do not apply and the project is considered to be consistent with Section 6.1.4 of the MSHCP.

Section 7.5.3 and Appendix C

Section 7.5.3 of the MSHCP outlines construction guidelines when constructing facilities within the Criteria Area or within P/QP lands. The proposed project is not within a Criteria Area or within P/QP lands. The proposed project will incorporate the applicable Construction Guidelines per MSHCP Section 7.5.3 and the BMPs contained in Appendix C. As such, the proposed project will satisfy the BMP requirements of the MSHCP and is consistent with Section 7.5.3 of the MSHCP.

Based on the results of the Biological Resources Assessment and MSHCP Consistency Analysis, the project would not conflict with the MSHCP or any other habitat conservation plan. Therefore, impacts would be less than significant with mitigation incorporated.

4.4.3 Mitigation Measures

- BIO-1** A pre-construction survey for burrowing owl shall be completed by a qualified biologist no more than 30 days prior to commencement of construction activities in accordance with the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) burrowing owl survey guidelines (County of Riverside 2006). If burrowing owls are

observed during the preconstruction survey, impacts shall be avoided through implementation of the burrowing owl avoidance measures as described in the MSHCP.

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4.5 CULTURAL RESOURCES

4.5.1 Environmental Setting

A Cultural Resources Assessment (Michael Baker International, May 2022) was prepared for the project and is included as [Appendix C](#) of this IS/MND. The results of the report are summarized below and concluded that no significant prehistoric or historic-period cultural resources as defined by CEQA Section 15064.5(a) or Public Resources Code (PRC) 21083.2(g) were identified within the project's area of potential affect (APE). The report concluded that the potential to discover significant subsurface cultural deposits within the APE is low. The APE was delineated to encompass the maximum extent of ground disturbance required by the project design and equipment staging. The vertical APE for the project (defined as the maximum depth of project activities) measures approximately 12 to 16 feet. The APE is characterized as developed and undeveloped-disturbed land.

Identification of Cultural Resources Within the Project Area

Records Search

A cultural resource literature and records search was conducted for the APE and within one mile of the APE at the Eastern Information Center at the University of California, Riverside on January 18, 2022. Seventy-five cultural resource investigations have been conducted previously within one mile of the APE. Five of these studies involved portions of the APE, resulting in approximately 100 percent of the APE having been previously studied. As a result of these studies, 49 cultural resources have been identified within one mile of the APE: 26 prehistoric and 23 historic-period sites. Three of the 49 previously recorded cultural resources are recorded within the APE as described below, including the following: 1) a segment of the historic Lateral B – Oleander Channel); 2) a historic flood control channel); and 3) a segment of Webster Avenue. These resources are described in detail below.

- **Segment of Flood Control Channel** – This resource is a segment of a flood control channel. The recorded segment measures approximately 4,270 feet in length. It is 50 feet wide across the top, 20 feet wide across the flat bottom, and is approximately 10 feet deep. This segment features hard-earth, sloped embankments along most of its length. Boulder rip-rap and concrete lining are found at the northwest end and at two locations where natural drainages converge with the flood control channel. This flood control structure appears in a 1966 aerial photograph. The channel continues in a southeasterly direction and drains into the Perris Valley Storm Drain Lateral B at the intersection of Oleander Avenue (Harley Knox Boulevard) and Heacock Street. This resource was evaluated and recommended ineligible for listing in the National Register or California Register. It is not a historical resource or historic property as defined by CEQA or Section 106 of the National Historic Preservation Act (NHPA).
- **Lateral B – Oleander Channel** – This resource is a segment of a flood control channel known as the Lateral B – Oleander Channel. It was constructed in the 1950s as part of the Perris Valley Storm Drain to alleviate flooding across the relatively flat landscape. The Lateral B – Oleander Channel drains southeast towards the San Jacinto River. This segment is bisected by Webster Avenue, which is carried over the channel by a concrete culvert. The segment of the channel features a combination of hard-earth sloped embankments, stone rip-rap, and concrete-lined slopes. This segment of the Lateral B – Oleander Channel measures 290 feet long, between 40 and 90 feet wide at the top, between 24 and 40 feet wide across the flat bottom, and 10 feet deep. This resource has been formally evaluated and recommended ineligible for listing in the National Register and California Register. It is not a historical resource or historic property as defined by CEQA or Section 106 of the NHPA.

- **Segment of Webster Avenue** – This resource is a segment of road comprising multiple construction types including an unpaved, graded dirt road south of Harley Knox Boulevard, and a dirt and partially gravel road north of Harley Knox Boulevard. This segment of Webster Avenue measures approximately 30 feet wide. It has existed since the 1890s and appears never to have been paved. Despite its age, evaluation of the resource concluded it lacks historic significance. This resource has been formally evaluated and recommended ineligible for listing in the National Register and California Register. It is not a historical resource or historic property as defined by CEQA or Section 106 of the NHPA.

Sacred Lands File Search

On January 13, 2022, a letter was sent to the Native American Heritage Commission (NAHC) describing the project and asking the commission to review its Sacred Lands File for any Native American cultural resources that might be affected by the project. Also requested were the names of Native Americans who might have information or concerns about the APE. The NAHC responded on March 3, 2022, stating that a search of the Sacred Lands File provided positive results and to contact the Pechanga Band of Indians for more information. The NAHC also provided a list of Native American contacts. Refer to Section 4.18, Tribal Cultural Resources, of this IS/MND for a discussion regarding tribal consultation pursuant to AB-52.

Buried Site Sensitivity Summary

Archaeological site sensitivity is considered low based upon a lack of previously recorded archaeological sites within the APE, and the previous disturbance in the APE. Previously recorded prehistoric sites within one mile of the APE seem largely dependent upon the presence of bedrock exposures, which were a critical resource for food processing. The APE has no exposures of bedrock.

The project site is located within a highly developed military air base. Previous ground disturbances include the construction of the existing runways and AFB facilities. The APE was likely entirely flattened during the construction of the facility for plane approach and departure safety. This inference is supported by the gradual flattening and normalization of the topography after the construction of the base according to the historic map analysis. The earthmoving during construction would likely have removed the contextual relationships for considerations of the integrity of any finds. Therefore, the APE has low sensitivity for significant or potentially significant prehistoric or historic-period archaeological sites because of historic and modern development.

Survey Results

As a result of the records search and field survey, four built environment resources were identified within the APE. Two of the built environment resources are segments of previously recorded flood control structures associated with the PVC, one is a previously recorded road segment, and one is a new built environment resource identified during the survey as a MARB utility building (Utility Building #1300). No additional prehistoric or historical archeological resources were encountered during the survey.

Neither the existing flood control structures nor the road segment are eligible for listing in the National Register and California Register because they do not meet any of the criteria for historical significance. The fourth resource identified during the survey (Utility Building #1300) does not appear to meet any of the significance criteria required for listing in the National Register or California Register, or as a Riverside County Historical Landmark designation. It is not a historical resource as defined by CEQA Section 15064.5(a) or 36 CFR Part 800.

4.5.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

A Cultural Resources Assessment was prepared for the proposed project (Michael Baker International 2022). Refer to Appendix C, Cultural Resources Assessment, for the full report.

Would the project:

- a) *Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5? **Determination: No Impact.***

Cultural resources are evaluated using California Register of Historical Resources (CRHR) eligibility criteria in order to determine whether any of the sites are Historical Resources, as defined by CEQA. CEQA requires that impacts to Historical Resources be identified and, if the impacts would be significant, that mitigation measures to reduce the impacts be applied.

A Historical Resource is a resource that:

1. Is listed in or has been determined eligible for listing in the CRHR by the State Historical Resources Commission;
2. Is included in a local register of historical resources, as defined in Public Resources Code 5020.1(k);
3. Has been identified as significant in a historical resources survey, as defined in Public Resources Code 5024.1(g); or
4. Is determined to be historically significant by the CEQA lead agency [CCR Title 14, Section 15064.5(a)]. In making this determination, the CEQA lead agency usually applies the CRHR eligibility criteria.

The eligibility criteria for the CRHR are as follows [CCR Title 14, Section 4852(b)]:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;
2. It is associated with the lives of persons important to local, California, or national history.
3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or
4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

In addition, the resource must retain integrity. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association [CCR Title 14, § 4852(c)]. Impacts to a Historical Resource (as defined by CEQA) are significant if the resource is demolished or destroyed or if the characteristics that made the resource eligible are materially impaired [CCR Title 14, Section 15064.5(a)].

As discussed, four historic-age built environment resources were identified within the APE. Two of the built environment resources are segments of previously recorded flood control structures associated with the PVC, one is a previously recorded road segment, and one is a new built environment resource identified during the survey as a MARB utility building (Utility Building #1300). Based on the Cultural Resources Assessment, the four historic-age built environment resources were found ineligible for the National Register, CRHR, or local designation. As such, these resources are not considered a historical resource under CEQA and development of the proposed project would not result in impacts to historic resources. No impact would occur in this regard.

- b) *Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5? **Determination: Less Than Significant With Mitigation Incorporated.***

As discussed, no archaeological resources were identified during the background research and pedestrian field survey for the project. Nevertheless, given that the project would require excavation of up to 16 feet, there is potential that project-related ground-disturbing activities could uncover previously undiscovered cultural resources. In the unlikely event that archaeological resources are encountered during project construction, Mitigation Measure CUL-1 would require all project construction efforts to halt until an archaeologist examines the site, identifies the archaeological significance of the find, and recommends a course of action. With implementation of Mitigation Measure CUL-1, the project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines, and impacts would be reduced to less than significant levels.

- c) *Disturb any human remains, including those interred outside of formal cemeteries? **Determination: Less Than Significant Impact.***

Due to the level of disturbance on the project site and in the site vicinity, it is not anticipated that human remains, including those interred outside of formal cemeteries, would be encountered during earth removal or ground-disturbing activities. Nonetheless, if human remains are found, those remains would require proper treatment, in accordance with applicable laws. State of California Public Resources Health and Safety Code Section 7050.5 through 7055 describe the general provisions for human remains. Specifically, Health and Safety Code Section 7050.5 describes the requirements if any human remains are accidentally discovered during excavation of a site. As required by State law, the requirements and procedures set forth in Section 5097.98 of the California Public Resources Code would be implemented, including notification of the County Coroner, notification of the NAHC and consultation with the individual identified by the NAHC to be the most likely descendant. If human remains are found during excavation, excavation must stop near the find and any area that is reasonably suspected to overlay adjacent remains until the County Coroner has been called out, the remains have been investigated, and appropriate recommendations have been made for the treatment and disposition of the remains. Following compliance with the aforementioned regulations, impacts related to the disturbance of human remains are less than significant.

4.5.3 Mitigation Measures

CUL-1

If deposits of prehistoric or historical materials are encountered during project construction, all work within 50 feet of the discovery shall be halted until an archaeologist can evaluate the findings and make recommendations. A qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeologist, shall be retained to evaluate the significance of the find. The archaeologist shall have the authority to modify the no-work radius as appropriate, using professional judgement.

- If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately, and no agency notifications are required.
- If the professional archaeologist determines that the find represents a cultural resource from any time period or cultural affiliation, the handling of the cultural resource(s) shall follow the applicable recommendations as described in the Cultural Resources Management Plan (TCRMP) prepared for the project, as required by Mitigation Measure TCR-1.

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4.6 ENERGY

4.6.1 Environmental Setting

Electricity/Natural Gas Services

Southern California Edison provides electrical services to Riverside County through State-regulated public utility contracts. Southern California Edison, the largest subsidiary of Edison International, is the primary electricity supply company for much of Southern California. It provides 14 million people with electricity across a service territory of approximately 50,000 square miles.

The Southern California Gas Company provides natural gas services to the project area. Southern California Gas services approximately 21.6 million customers, spanning roughly 20,000 square miles of California.

Energy Consumption

Electricity use is measured in kilowatt-hours (kWh), and natural gas use is measured in therms. Vehicle fuel use is typically measured in gallons (e.g. of gasoline or diesel fuel), although energy use for electric vehicles is measured in kWh.

The electricity consumption associated with all non-residential uses in Riverside County from 2016 to 2020 is shown in [Table 4.6-1](#). As indicated, the demand has decreased since 2016.

Table 4.6-1: Non-Residential Electricity Consumption in Riverside County 2016-2020

Year	Non-Residential Electricity Consumption (kilowatt hours)
2020	8,014,699,265
2019	8,165,546,506
2018	8,248,461,330
2017	8,229,302,912
2016	8,249,798,573

Source: California Energy Commission. Energy Consumption Data Management System (ECDMS). 2022. <https://ecdms.energy.ca.gov/> Accessed 2-14-22.

The natural gas consumption associated with all non-residential uses in Riverside County from 2016 to 2020 is shown in [Table 4.6-2](#). As indicated, with the exception of year 2019, the demand has decreased since 2016.

Table 4.6-2: Non-Residential Natural Gas Consumption in Riverside County 2016-2020

Year	Non-Residential Electricity Consumption (kilowatt hours)
2020	134,892,256
2019	147,961,563
2018	139,190,917
2017	139,148,907
2016	143,265,401

Source: California Energy Commission. Energy Consumption Data Management System (ECDMS). 2022. <https://ecdms.energy.ca.gov/> Accessed 2-14-22.

Total automotive fuel consumption in Riverside County from 2015 to 2019 is shown in [Table 4.6-3](#). As shown, on-road automotive fuel consumption increased from 2015 to 2016 but has decreased since 2016. Riverside County's heavy-duty diesel fuel consumption has increased since 2015.

Table 4.6-3: Automotive Fuel Consumption in Riverside County 2015-2020

Year	Gasoline Fuel Consumption (Thousand Gallons)	Heavy-Duty Vehicle/Diesel Fuel Consumption (Thousand Gallons)
2020	733,004	257,800
2019	743,907	256,047
2018	756,450	253,005
2017	768,458	249,415
2016	799,118	247,131
2015	771,276	230,281

Source: California Air Resources Board, EMFAC2017.

4.6.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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ENERGY – Would the project:

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Would the project:

- a) *Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? **Determination: Less Than Significant Impact.***

This analysis focuses on the one source of energy that is relevant to the proposed project: transportation fuel for vehicle trips associated with project construction. The project’s gasoline fuel consumption during the construction period is estimated to be 122,785 gallons of fuel, which would increase the annual construction-related gasoline fuel use in the county by 0.01 percent during the time that project construction takes place. As such, project construction would have a nominal effect on local and regional energy supplies, especially over the long-term. Additionally, construction equipment fleet turnover and increasingly stringent State and federal regulations on engine efficiency combined with State regulations limiting engine idling times and require recycling of construction debris, would further reduce the amount of transportation fuel demand during project construction. For these reasons, it is expected that construction fuel consumption associated with the project would not be any more inefficient, wasteful, or unnecessary than other similar development projects of this nature. As such, this impact would be less than significant.

As the proposed project consists of stormwater infrastructure improvements (i.e. RCB channel for flood control purposes), project operations would not involve new buildings or uses which would introduce new permanent stationary or mobile sources of emissions within the project area. The project would not result in increased vehicular trips to and from the project site and would not

generate new operational emissions. As a result, project operations would not result in increased energy consumption from electricity, natural gas, or fuel usage.

- b) *Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?*
Determination: Less Than Significant Impact.

As stated above in Impact 4.6(a), project operation would not have operational energy, natural gas, or fuel consumption. The project would not result in increased vehicular trips to and from the project site. As the project would not have any operational energy, natural, or fuel usage, the project would not conflict with any State or local plan for renewable energy or energy efficiency. Therefore, the proposed project would result in less than significant impacts associated with renewable energy or energy efficiency plans.

4.6.3 Mitigation Measures

No significant impacts were identified and no mitigation is required.

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4.7 GEOLOGY AND SOILS

4.7.1 Environmental Setting

Geomorphic Setting

Regional/Local

The project area is located within the MIPA Planning Area and the City of Perris, in the northern portion of the Perris Plain in the Santa Ana Basin. The Santa Ana Basin covers an area of approximately 2,000 square miles and is located within the Peninsular Ranges geomorphic province. The Peninsular Ranges province consists of several northwesterly-trending ranges in southwestern California. The province is truncated to the north by east-west trending Transverse Ranges. Prior to the mid-Mesozoic, the region was covered by seas and thick marine sedimentary and volcanic sequences were deposited. The bedrock geology that dominates the elevated areas of the Peninsular Ranges consists of high-grade metamorphic rocks intruded by Mesozoic plutons. During the Cretaceous, extensive mountain building occurred during the emplacement of the southern California batholith. The Peninsular Ranges have been significantly disrupted by Tertiary and Quaternary strike-slip faulting along the Elsinore and San Jacinto faults. The tectonic activity has resulted in the present terrain.

Project Site

The MARB is located on the Perris Erosional Surface and the Paloma Surface. The depositional surface is underlain by sediments of various thicknesses that have filled the Perris Groundwater Basin. There are bedrock outcroppings in the western and central portions of the MARB. The buried bedrock surface was defined by a gravimetric survey and described as complex bedrock scour surface morphology. The ground surface at the Main Base is relatively flat. Depth to bedrock ranges from the surface (at the bedrock outcroppings) to 900 feet below ground surface (bgs). Subsurface investigations at the Main Base show that most of the underlying sediments consist of laterally discontinuous, interbedded fine to medium sands, silts, and lean clays with minor amounts of gravel. The uppermost units are not affected by elevation changes in the bedrock surface; deeper units are interrupted by bedrock highs.

Soils

Based on review of the Custom Soil Resource Report for Western Riverside County, California (USDA 2022), the project site is underlain by the following six (6) classified soil units: Exeter sandy loam, deep, 0 to 2 percent slopes (EpA); Greenfield sandy loam, 0 to 2 percent slopes (GyA); Hanford fine sandy loam, 0 to 2 percent slopes (HgA); Monserate sandy loam, 0 to 5 percent slopes (MmB); Pachappa fine sandy loam, 0 to 2 percent slopes (PaA); and Ramona sandy loam, 0 to 2 percent slopes, MLRA 19 (RaA). Michael Baker conducted a query of the California Hydric Soils List (USDA 2022) in an effort to verify whether any soil units occurring within the project site are considered to be hydric. Based on the California Hydric Soils List, none of the soil units occurring within the project site are listed as hydric.

Groundwater

There is an existing aquifer underlying the MARB, which has been divided into three hydrostratigraphic units (HSUs)³ including the upper alluvium, lower alluvium and bedrock units based on variations in contaminant concentrations. The upper alluvial unit is approximately 70 feet thick (northwestern portion of the MARB) to 170 feet thick (east of the Base) and extends from the ground surface to elevations ranging from 1,478 feet amsl at the northwestern portion of the MARB to 1,290 feet amsl southeast of the MARB. This unit predominantly comprises silts and clays. The lower alluvial unit has a thickness that

³ A hydrostratigraphic unit is defined as a part of a body of rock that forms a distinct hydrologic unit with respect to the flow of ground water.

varies across the MARB and region based on buried bedrock elevation. This unit includes sands, silts, and clays. The bedrock unit, which is composed of weathered and fractured bedrock, ranges in thickness from 10 feet to 200 feet across the MARB and region.

Groundwater on the MARB has been characterized as semi-confined. Groundwater at in the western portion of MARB is essentially unconfined. Groundwater on western MARB exists in a relatively thin layer of weathered crystalline bedrock and alluvial soils. On the MARB, groundwater flow direction in the upper alluvial unit is generally to the southeast. Regional groundwater elevations have been rising since the 1970s; this rise in groundwater levels, along with changes in well production on and around the MARB, has caused changes in the groundwater flow direction over the years.

Geologic Hazards

A fault is a fracture in the crust of the earth along which rocks on one side have moved relative to those on the other side. Based on criteria established by the California Geological Survey (CGS), faults are classified as active, potentially active, or inactive. According to those criteria, active faults are those that have shown evidence of movement within the past 11,700 years (i.e., Holocene epoch). Potentially active faults are those that have shown evidence of movement between 11,700 and 1.6 million years ago (Quaternary age). Faults showing no evidence of surface displacement within the last 1.6 million years are considered inactive for most design purposes, with the exception of the design of some critical buildings or structures (e.g., hospitals, communication centers and emergency response centers).

There currently is not a published Alquist-Priolo Earthquake Zone Map for the project area (Riverside East Quadrangle). As such, the CGS has not mapped any active or potentially active faults with potential surface fault rupture in the Riverside East Quadrangle. In addition, the Riverside County Information Technology (RCIT) interactive GIS website does not depict any fault zones near the project area.

While there are no known faults that cross the project area, several faults in the region have the potential to produce seismic impacts. Three significant faults pass within 20 miles of the project area. The Elsinore Fault passes within 13 miles of the project area, extending approximately 4 miles west of Lake Mathews and the City of Corona and south into the City of Lake Elsinore. This northwest/southwest trending fault has the capability of producing up to a 6.0 magnitude (M) earthquake. The San Andreas Fault is located approximately 16 miles northeast of the project area, generally following the San Bernardino Mountains. The San Andreas Fault extends 600 miles from Eureka in Humboldt County south to the International Border with Mexico. The San Andreas Fault is estimated to have the capability of producing up to an 8.4 M earthquake. The nearest fault to the project area, the San Jacinto Fault, is located approximately 8 miles from the project area. The San Jacinto Fault is considered to be one of the most seismically-active faults in the region. The San Jacinto Fault Zone is a right-lateral strike-slip fault with minor right-reverse with a slip rate ranging between 7 and 17 millimeters (mm)/year. This fault is more than 125 miles long from northwest of the City of El Centro in Imperial County to northwest of San Bernardino, passing through the intersection of I-10 and I-215, the City of Loma Linda and the Box Springs Mountains. The interval between surface ruptures ranges between 100 and 300 years. The San Jacinto Fault Zone has the capability of producing up to a 7.0 M earthquake. An earthquake with a 7.58 M is the estimated seismic event that could impact the project area.

Liquefaction

The ground surface on the project site is relatively flat and surface elevations range from approximately 1,480 to 1,520 feet amsl. The RCIT interactive GIS website indicates that the on-site project area is located within a zone of moderate high liquefaction susceptibility.

Landslides

As discussed above, the project site is relatively flat with on-site surface elevations ranging from 1,480 to 1,520 feet amsl.

4.7.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<i>GEOLOGY AND SOILS</i> – Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

A Paleontological Resources Survey was prepared for the proposed project (Michael Baker International, March 2022). Refer to Appendix D, Paleontological Resources Identification Memo, for the full report.

Would the project:

- a) *Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:*
 - i) *Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other*

substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

*ii) Strong seismic ground shaking? **Determination: No Impact.***

The project site has one potentially active fault within its vicinity, the San Jacinto fault, which lies approximately 8 miles to the southeast of the project site. There are no faults located within an Alquist-Priolo Earthquake Fault Zone within the project site. Because none of these faults cross or trend toward the project site, fault-line surface rupture is not considered a hazard. Consequently, the project would have no impact regarding exposing people or structures to rupture of a known earthquake fault. No impact would occur.

*iii) Seismic-related ground failure, including liquefaction? **Determination: Less Than Significant Impact.***

The Alquist-Priolo Earthquake Fault Zoning Act prohibits the construction of buildings for human occupancy across the trace of a known fault, and requires structures intended for human occupancy to be set back generally 50 feet from the fault trace. As discussed above, the RCIT interactive GIS website indicates that the on-site project area is located within a zone of moderate high liquefaction susceptibility. However, there is no published Alquist-Priolo Earthquake Zone Map for the Riverside East Quadrangle. As such, the CGS has not mapped any active or potentially active faults with potential surface fault rupture in the Riverside East Quadrangle. The RCIT interactive GIS website does not depict any fault zones near the project area. The nearest fault, the San Jacinto Fault, is located approximately 8 miles from the project area. Based on the fault data collected and known for the San Jacinto Fault, the proposed project would be located at a distance greater than 50 feet from the nearest San Jacinto Fault trace, which would be consistent with the requirements of the Alquist-Priolo 50-foot setback requirement. As such, the possibility of a seismic-related ground failure on the project site is considered to be low.

In addition, design and construction of the proposed project would follow the recommendations of the site-specific geotechnical investigation that is required for the project, to be prepared by a registered civil, structural engineer, and/or engineering geologist. At a minimum, the project would be required to adhere to seismic requirements in the most current version of the California Building Code (CBC) and the requirements and standards contained in the applicable chapters of the MIPA and City of Perris Municipal Codes. Thus, development of the project would not expose people or structures to potential substantial risk of loss, injury, or death involving rupture of a known earthquake fault, and impacts regarding seismic-related ground failure would be less than significant.

*iv) Landslides? **Determination: Less Than Significant Impact.***

Landslides can generally occur in areas that have steep slopes and can be caused by seismic activity and/or extended periods of rain resulting in high water saturation of soils. As discussed above, the project site is relatively flat and there are no slopes located within or adjacent to the project site. As such, the potential for landslides and seismically induced slope instability at the project site is considered to be low. Further, the proposed project would not create new significant slopes on-site which would create or be subject to landslide hazards. Therefore, impacts to the proposed project associated with landslides or other forms of natural slope instability would be less than significant.

- b) *Result in substantial soil erosion or the loss of topsoil? **Determination: Less Than Significant Impact.***

Project construction would result in ground surface disruption during excavation, grading, and trenching that would create the potential for erosion to occur. According to the MJPA Development Code, Section 9.08.080, *Grading*, an erosion control plan for the project would be prepared by a registered civil engineer and submitted to and approved by the MJPA Commission prior to grading plan approval. The erosion control plan would address methods of control (i.e., desilting basins, check dams, sandbagging) and interim storm drain construction if necessary. Construction activities would be carried out in accordance with applicable standard erosion control practices required pursuant to the MJPA Development Code, CBC, and the requirements of the National Pollutant Discharge Elimination System (NPDES) General Construction Permit issued by the RWQCB, as applicable. In accordance with these requirements, a Stormwater Pollution Prevention Plan (SWPPP) would be prepared that incorporates Best Management Practices (BMPs) to control water erosion during the proposed project's construction period. Soil erosion impacts would be reduced to a less than significant level in this regard.

- c) *Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in an on-site or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? **Determination: Less Than Significant Impact.***

The project site is relatively flat, lacking steep slopes; therefore, landslides are not anticipated. In addition, the project would construct below ground or at grade drainage improvements. Structures associated with the project would be required to comply with MJPA, District, State, and/or federal design criteria and/or other accepted non-building structure standards to reduce the risks associated with seismically induced ground failures. Therefore, the project would have a less than significant impact related to landslide, lateral spreading, subsidence, liquefaction, or collapse.

- d) *Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? **Determination: Less Than Significant Impact.***

As stated above, six soil groups are represented within the project site. The project site is primarily comprised of Ramona sandy loam soils with 0 to 2 percent slopes followed by Hanford fine sandy loam soils with 0 to 2 percent slopes according to the California Hydric Soils List (USDA 2022). Additionally, no habitable structures are proposed as part of the project. Due to the soil characteristics mentioned above, the project is not anticipated to create a substantial risk to life or property. A less than significant impact would occur.

- e) *Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? **Determination: No Impact.***

The project does not propose the use or construction of septic tanks; therefore, no impact as a result of the presence of soils incapable of supporting the use of septic tanks or alternative wastewater disposal systems would occur.

- f) *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? **Determination: Less Than Significant With Mitigation Incorporated.***

Paleontological resources are the preserved fossilized remains of plants and animals. Fossils and traces of fossils are preserved in sedimentary rock units, particularly fine- to medium-grained marine, lake, and stream deposits, such as limestone, siltstone, sandstone, or shale, and in ancient soils (paleosols). Such resources are also found in coarse-grained sediments, such as

conglomerates or coarse alluvium sediments. Additionally, fossils are rarely preserved in igneous or metamorphic rock units. Fossils may occur throughout a sedimentary unit and are more likely to be preserved subsurface, where they have not been damaged or destroyed by previous ground disturbance, amateur collecting, or natural causes such as erosion. In contrast, archaeological and historic resources are often recognized by surface evidence of their presence.

A Paleontological Resources Survey was prepared for the project and included a request for a fossil locality records search through the Western Science Center (WSC) located in Hemet, CA; refer to [Appendix D](#). One paleontological locality was recorded within a general, 5-mile radius search. Significant fossil localities (e.g., Diamond Valley Lake) have been found outside this radius in similar geologic formations to those observed in the project area. The sensitivity of the Pleistocene-age alluvium formations, such as those in the project area, is typically high in intact geologic contexts. Therefore, the project area is considered highly sensitive for paleontological resources.

Due to the depth and nature of ground-disturbing activities, the project has high potential to disturb paleontological resources. Following the protocol from the County of Riverside General Plan (Riverside County 2015: Table 4.7.2), full-time paleontological monitoring is recommended during ground disturbance, at depths greater than 4 feet, in undisturbed geologic contexts which have the potential to contain significant paleontological resources. Activities occurring along the current surface and at depths less than 4 feet do not require full-time monitoring. Implementation of Mitigation Measure GEO-1 will ensure that paleontological resources are protected in the event of any discovery during earthwork activities and will reduce impacts to less than significant.

4.7.3 Mitigation Measures

- GEO-1** Due to the potential to impact sensitive paleontological resources during construction activities, the District shall prepare or cause for a Paleontological Resource Impact Mitigation Program (PRIMP) to be prepared prior to commencement of ground disturbing activities. The PRIMP shall be based on the final construction grading plans prepared by the District and detail construction monitoring requirements for all work consisting of excavation at depths greater than 4 feet below the original ground surface in undisturbed geologic contexts.

4.8 GREENHOUSE GAS EMISSIONS

4.8.1 Environmental Setting

The natural process through which heat is retained in the troposphere is called the “greenhouse effect.” The greenhouse effect traps heat in the troposphere through a threefold process as follows: short wave radiation emitted by the sun is absorbed by the Earth; the Earth emits a portion of this energy in the form of long wave radiation; and GHGs in the upper atmosphere absorb this long wave radiation and emit this long wave radiation into space and toward the Earth. This “trapping” of the long wave (thermal) radiation emitted back toward the Earth is the underlying process of the greenhouse effect.

California is a substantial contributor of global GHGs, emitting approximately 418 million metric tons of carbon dioxide equivalent (MMTCO₂e) per year. A carbon dioxide equivalent is defined as the number of metric tons of CO₂ emissions with the same global warming potential as one metric ton of another GHG. Methane (CH₄) is also an important GHG that potentially contributes to global climate change. GHGs are global in their effect, which is to increase the earth’s ability to absorb heat in the atmosphere. As primary GHGs have a long lifetime in the atmosphere, accumulate over time, and are generally well-mixed, their impact on the atmosphere is mostly independent of the point of emission. Every nation emits GHGs and as a result makes an incremental cumulative contribution to global climate change; therefore, global cooperation will be required to reduce the rate of GHG emissions enough to slow or stop the human-caused increase in average global temperatures and associated changes in climatic conditions.

The impact of human activities on global climate change is apparent in the observational record. Air trapped by ice has been extracted from core samples taken from polar ice sheets to determine the global atmospheric variation of CO₂, CH₄, and nitrous oxide (N₂O) from before the start of industrialization (approximately 1750), to over 650,000 years ago. For that period, it was found that CO₂ concentrations ranged from 180 to 300 parts per million (ppm). For the period from approximately 1750 to the present, global CO₂ concentrations increased from a pre-industrialization period concentration of 280 to 379 ppm in 2005, with the 2005 value far exceeding the upper end of the pre-industrial period range. As of May 2022, the highest monthly average concentration of CO₂ in the atmosphere was recorded at 420 ppm.

The Intergovernmental Panel on Climate Change (IPCC) constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. It concluded that a stabilization of GHGs at 400 to 450 ppm carbon dioxide equivalent (CO₂e) concentration is required to keep global mean warming below 2 degrees Celsius (°C), which in turn is assumed to be necessary to avoid dangerous climate change.

4.8.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
GREENHOUSE GAS EMISSIONS – Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

A greenhouse gas emissions memorandum was prepared for the project (Michael Baker International, June 2022). Refer to [Appendix E, Greenhouse Gas Emissions Memorandum](#).

Would the project:

- a) *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?* **Determination: Less Than Significant Impact.**

The City has not adopted a numerical significance threshold for assessing impacts related to GHG emissions. Similarly, the SCAQMD, CARB, or any other state or regional agency has not yet adopted a numerical significance threshold for assessing GHG emissions that applies to the project. Since there is no applicable adopted or accepted numerical threshold of significance for GHG emissions, the methodology for evaluating the project’s impacts related to GHG emissions focuses on its consistency with statewide, regional, and local plans adopted for the purpose of reducing and/or mitigating GHG emissions. This evaluation of consistency with such plans is the sole basis for determining the significance of the project’s GHG-related impacts on the environment.

Notwithstanding, for informational purposes, the analysis also calculates the amount of GHG emissions that would be attributable to the project using recommended air quality models, as described below. The primary purpose of quantifying the project’s GHG emissions is to satisfy State CEQA Guidelines Section 15064.4(a), which calls for a good-faith effort to describe and calculate emissions. The estimated emissions inventory is also used to determine if there would be a reduction in the project’s incremental contribution of GHG emissions as a result of compliance with regulations and requirements adopted to implement plans for the reduction or mitigation of GHG emissions. However, the significance of the project’s GHG emissions impacts is not based on the amount of GHG emissions resulting from the project.

Project-Related Sources of Greenhouse Gases

The proposed project would result in direct and indirect emissions of CO₂, N₂O, and CH₄, and would not result in other GHGs that would facilitate a meaningful analysis. Therefore, this analysis focuses on these three forms of GHG emissions. Project-related GHG emissions include emissions from construction activities. The most recent version of the California Emissions Estimator Model (CalEEMod), version 2020.4.0, was used to calculate direct and indirect project-related GHG emissions. [Table 4.8-1, Estimated Greenhouse Gas Emissions](#), presents the estimated CO₂, N₂O, and CH₄ emissions associated with the proposed project. CalEEMod outputs are contained within [Appendix E](#).

Table 4.8-1: Estimated Greenhouse Gas Emissions

Source	CO ₂	CH ₄		N ₂ O		Total MTCO ₂ e ^{2,3}
	Metric tons/year ¹	Metric tons/year ¹	Metric tons of CO ₂ e ^{1,3}	Metric tons/year ¹	Metric tons of CO ₂ e ^{1,3}	
Direct Emissions						
Construction (amortized over 30 years) ⁴	47.04	0.01	0.36	<0.01	0.05	47.45
<i>Total Project-Related Emissions³</i>	<i>48.36 MTCO₂e/year</i>					
Notes:						
Carbon dioxide equivalent = CO ₂ e; metric tons of carbon dioxide equivalent per year = MTCO ₂ e per year						
1. Project emissions were calculated using CalEEMod version 2020.4.0, as recommended by the SCAQMD.						
2. Totals may be slightly off due to rounding.						
3. Carbon dioxide equivalent values calculated using the U.S. Environmental Protection Agency Website, Greenhouse Gas Equivalencies Calculator, http://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator , accessed May 13, 2022.						
4. Total project construction GHG emissions equate to 1,423.39 MTCO ₂ e. Value shown is amortized over the lifetime of the project (assumed to be 30 years).						
Refer to Appendix E for detailed model input/output data.						

Construction of the project would emit GHG emissions, as indicated in [Table 4.8-1](#). In total, the project would result in approximately 47.45 MTCO₂e per year when amortized over 30 years (or a total of 1,423.39 MTCO₂e emissions). Maintenance activities that may be required during project operation would occur on an as needed basis. Typical maintenance activities for the mainline RCB would be conducted by the District. Due to the “self-cleaning” nature of this facility, maintenance is expected to be minimal. Two existing inlets collecting local drainage within MARB property would be maintained by MARB. Additionally, the proposed inlet along Heacock Street would require maintenance that may include vegetation removal or thinning, sediment removal, and debris and trash removal, none of which would have the potential to result in significant air pollution. The project would generate minimal trips in operations. As a result, the project would not result in significant increase in operational GHG emissions.

- b) *Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases? **Determination: Less Than Significant Impact.***

Consistency with Applicable GHG Plans, Policies, or Regulations

The GHG plan consistency analysis for the project is based on the project’s consistency with the 2017 Scoping Plan, and 2020-2045 RTP/SCS. The 2017 Scoping Plan describes the approach California will take to reduce GHG emissions by 40 percent below 1990 levels by the year 2030. The 2020-2045 RTP/SCS is a regional growth management strategy that targets per-capita GHG reduction from passenger vehicles and light-duty trucks in the Southern California region and incorporates local land use projections and circulation networks in city and county general plans. The following discussion analyzes the project’s consistency with the CARB 2017 Scoping Plan, and SCAG 2020-2045 RTP/SCS.

Consistency with the SCAG 2020-2045 RTP/SCS

The SCAG’s 2020-2045 RTP/SCS includes performance goals that were adopted to help focus future investments on the best-performing projects, as well as different strategies to preserve, maintain, and optimize the performance of the existing transportation system. The 2020-2045 RTP/SCS is forecasted to help California reach its GHG reduction goals by reducing GHG emissions from passenger cars by 8 percent below 2005 levels by 2020 and 19 percent by 2035 in accordance with the most recent CARB targets, adopted in March 2018. Five key SCS strategies are included in the 2020-2045 RTP/SCS to help the region meet its regional VMT and GHG reduction goals, as required by the State. [Table 4.8-2, Consistency with the 2020-2045 RTP/SCS](#), shows the project’s

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consistency with these five strategies found within the 2020-2045 RTP/SCS. As shown, the proposed project would be consistent with the GHG emission reduction strategies contained in the 2020-2045 RTP/SCS.

Table 4.8-2: 2020-2045 RTP/SCS Project Consistency Analysis

Reduction Strategy	Applicable Land Use Tools	Project Consistency Analysis
Focus Growth Near Destinations and Mobility Options		
<ul style="list-style-type: none"> • Emphasize land use patterns that facilitate multimodal access to work, educational and other destinations • Focus on a regional jobs/housing balance to reduce commute times and distances and expand job opportunities near transit and along center-focused main streets • Plan for growth near transit investments and support implementation of first/last mile strategies • Promote the redevelopment of underperforming retail developments and other outmoded nonresidential uses 	Center Focused Placemaking, Priority Growth Areas (PGA), Job Centers, High Quality Transit Areas (HQTAs), Transit Priority Areas (TPA), Neighborhood Mobility Areas (NMAs), Livable Corridors, Spheres of Influence (SOIs), Green Region, Urban Greening.	Not Applicable. The proposed project consists of a storm drain facility. As such, no new land uses, or development are proposed that would focus growth near destinations and mobility options. Therefore, this strategy is not applicable to the proposed project.
Promote Diverse Housing Choices		
<ul style="list-style-type: none"> • Preserve and rehabilitate affordable housing and prevent displacement • Identify funding opportunities for new workforce and affordable housing development • Create incentives and reduce regulatory barriers for building context sensitive accessory dwelling units to increase housing supply • Provide support to local jurisdictions to streamline and lessen barriers to housing development that supports reduction of greenhouse gas emissions 	PGA, Job Centers, HQTAs, NMA, TPAs, Livable Corridors, Green Region, Urban Greening.	Not Applicable. Refer to response above regarding project consistency with the “Focus Growth Near Destinations and Mobility Options” strategy. The proposed project does not include residential development; thus, this strategy is not applicable.
Leverage Technology Innovations		
<ul style="list-style-type: none"> • Promote low emission technologies such as neighborhood electric vehicles, shared rides hailing, car sharing, bike sharing and scooters by providing supportive and safe infrastructure such as dedicated lanes, charging and parking/drop-off space • Improve access to services through technology—such as telework and telemedicine as well as other incentives such as a “mobility wallet,” an app-based system for storing transit and other multi-modal payments • Identify ways to incorporate “micro-power grids” in communities, for example solar energy, hydrogen fuel cell power storage and power generation 	HQTA, TPAs, NMA, Livable Corridors.	Not Applicable. Refer to response above regarding project consistency with the “Focus Growth Near Destinations and Mobility Options” strategy. The proposed project consists of a storm drain facility with minimal maintenance activities anticipated; thus, this strategy is not applicable.
Support Implementation of Sustainability Policies		
<ul style="list-style-type: none"> • Pursue funding opportunities to support local sustainable development implementation projects that reduce greenhouse gas emissions • Support Statewide legislation that reduces barriers to new construction and that incentivizes development near transit corridors and stations • Support local jurisdictions in the establishment of Enhanced Infrastructure Financing Districts (EIFDs), Community Revitalization and Investment Authorities (CRIAs), or other tax increment or value capture tools to finance sustainable infrastructure and development projects, including parks and open space 	Center Focused Placemaking, Priority Growth Areas (PGA), Job Centers, High Quality Transit Areas (HQTAs), Transit Priority Areas (TPA), Neighborhood Mobility Areas (NMAs), Livable Corridors, Spheres of Influence (SOIs), Green Region, Urban Greening.	Not Applicable. Refer to response above regarding project consistency with the “Focus Growth Near Destinations and Mobility Options” strategy. The proposed project consists of a storm drain facility with minimal maintenance activities anticipated; thus, this strategy is not applicable.

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Reduction Strategy	Applicable Land Use Tools	Project Consistency Analysis
<ul style="list-style-type: none"> • Work with local jurisdictions/communities to identify opportunities and assess barriers to implement sustainability strategies • Enhance partnerships with other planning organizations to promote resources and best practices in the SCAG region • Continue to support long range planning efforts by local jurisdictions • Provide educational opportunities to local decisions makers and staff on new tools, best practices and policies related to implementing the Sustainable Communities Strategy 		
Promote a Green Region		
<ul style="list-style-type: none"> • Support development of local climate adaptation and hazard mitigation plans, as well as project implementation that improves community resiliency to climate change and natural hazards • Support local policies for renewable energy production, reduction of urban heat islands and carbon sequestration • Integrate local food production into the regional landscape • Promote more resource efficient development focused on conservation, recycling and reclamation • Preserve, enhance and restore regional wildlife connectivity • Reduce consumption of resource areas, including agricultural land • Identify ways to improve access to public park space 	<p>Green Region, Urban Greening, Greenbelts and Community Separators.</p>	<p>Not Applicable. Refer to response above regarding project consistency with the “Focus Growth Near Destinations and Mobility Options” strategy. The proposed project consists of a storm drain facility with minimal maintenance activities anticipated; thus, this strategy is not applicable.</p>

Source: Southern California Association of Governments, Connect SoCal: 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy, September 3, 2020.

Consistency with the 2017 Scoping Plan

The 2017 Scoping Plan identifies GHG reduction measures necessary to achieve the 2030 target. These measures build upon those identified in the first update to the Scoping Plan (2013). Although a number of these measures are currently established as policies and measures, some measures have not yet been formally proposed or adopted. It is expected that these measures or similar actions to reduce GHG emissions will be adopted as required to achieve statewide GHG emissions targets. *Table 4.8-3, Consistency with the 2017 Scoping Plan*, provides an evaluation of applicable reduction actions/strategies by emissions source category, and demonstrates that the project would be consistent with the reduction actions/strategies outlined in the 2017 Scoping Plan.

Table 4.8-3: Consistency with the 2017 Scoping Plan

Actions and Strategies	Project Consistency Analysis
SB 350	
Achieve a 50 percent Renewables Portfolio Standard (RPS) by 2030, with a doubling of energy efficiency savings by 2030.	Consistent. The proposed project would not be an electrical provider and would not delay the goals of SB 350. Furthermore, the project would not consume electricity during operation. As such, the project would comply with SB 350.
Low Carbon Fuel Standard (LCFS)	
Increase stringency of carbon fuel standards; reduce the carbon intensity of fuels by 18 percent by 2030, which is up from 10 percent in 2020.	Consistent. Motor vehicles (including trucks) driven within the project area and hauling trucks driven during project construction would be use LCFS compliant fuels. As such, the project would comply with LCFS.
Mobile Source Strategy (Cleaner Technology and Fuels Scenario)	
Maintain existing GHG standards of light and heavy-duty vehicles while adding an addition 4.2 million zero-emission vehicles (ZEVs) on the road. Increase the number of ZEV buses, delivery trucks, or other trucks.	Not Applicable. The project proposes a storm drain facility and would only generate minimal trips during operation as the maintenance activities would occur as needed basis. The minimal trip increase would not impeded with implementation of such reduction strategy. As such, the project would not be applicable to this strategy.
Sustainable Freight Action Plan	
Improve the freight system efficiency and maximize the use of near zero emission vehicles and equipment powered by renewable energy. Deploy over 100,000 zero-emission trucks and equipment by 2030.	Not Applicable. As discussed above, the project proposes a storm drain facility and would not generate any trips during operation. As such, the project would not be applicable to this strategy.
Short-Lived Climate Pollutant (SLCP) Reduction Strategy	
Reduce the GHG emissions of methane and hydrofluorocarbons by 40 percent below the 2013 levels by 2030. Furthermore, reduce the emissions of black carbon by 50 percent below the 2013 levels by the year 2030.	Consistent. The project would not emit a large amount of CH ₄ (methane) emissions; refer to Table 4.8-1 . Additionally, no hydrofluorocarbons would be emitted during project implementation. As such, the proposed project would not conflict with the SLCP reduction strategy.
SB 375 Sustainable Communities Strategies	
Increase the stringency of the 2035 GHG emission per capita reduction target for metropolitan planning organizations (MPO).	Consistent. As shown in Table 4.8-2 , the key strategies associated with the 2020-2045 RTP/SCS are not applicable to the proposed storm drain facility. Thus, the project would not conflict with the goals of SB 375.
Post-2020 Cap and Trade Programs	
The Cap-and-Trade Program will reduce greenhouse gas (GHG) emissions from major sources (covered entities) by setting a firm cap on statewide GHG emissions while employing market mechanisms to cost-effectively achieve the emission-reduction goals.	Not Applicable. As shown in Table 4.8-1 , the project would generate approximately 47.45 MTCO ₂ e per year, which is below the 25,000 MTCO ₂ e/yr Cap-and-Trade screening level. Therefore, the project would not be applicable to the program.
Source: California Air Resources Board, 2017 Scoping Plan, November 2017.	

Conclusion

In summary, the plan consistency analysis provided above demonstrates that the proposed project complies with or exceeds the plans, policies, regulations and GHG reduction actions/strategies outlined in the 2020-2045 RTP/SCS and CARB 2017 Scoping Plan. Therefore, the project would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing emissions of GHGs. Impacts in this regard would be less than significant.

4.8.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.9 HAZARDS AND HAZARDOUS MATERIALS

4.9.1 Environmental Setting

A Phase I Environmental Site Assessment (Phase I ESA) was prepared for the proposed project (Group Delta Consultants, Inc. 2022). Refer to [Appendix F, *Phase I Environmental Site Assessment*](#), for the full report.

Current Site Uses

The project site is currently vacant land with an asphalt-paved road traversing the site from north to south. The site is bordered on the north, south, and east by MARB, and on the west by PODS Moving and Storage (1330 Nandina Avenue), and multiple exterior equipment storage yards. The site's vicinity is generally characterized by industrial and military uses.

Historic Site Uses

Aerial photographs and historical topographic maps of the project site and adjoining properties from 1938 to 2018 were reviewed to identify historical land development. Based on this review, it was determined that agricultural lands (row crops) were present from 1938 to 1953. Following those years, the site appears to be vacant land, with an asphalt-paved road traversing the Site from north to south. The MARB runway appears in its current configuration to the east of the site. The adjoining properties to the west of the site start to be developed industrially by 1978 and reach their current configuration by 1990.

Project Site Reconnaissance Results

During the site reconnaissance conducted as part of the Phase I ESA prepared for the project, a groundwater monitoring well (89F4E-MW-001) was observed in the northern portion of the site. In addition, signage for a high-pressure gas pipeline was observed at the adjoining property to the east (5137 Patterson Avenue) at the site perimeter. No evidence of natural gas pipelines was found on the National Pipeline Mapping System (NPMS) database maintained by the Office of California State Fire Marshal. However, the signage may refer to an inactive, old, unreported, or abandoned pipeline. The potential east-adjoining high-pressure gas pipeline does not represent a Recognized Environmental Condition (REC); however, it does represent an Area of Concern (AOC) to the site.

Hazardous Materials Sites

The regulatory database review conducted as part of the Phase I ESA determined that the project site is located on the MAFB National Priority List (NPL) site, based on the Department of Toxic Substances Control (DTSC) (Envirostor) and State Water Resources Control Board (SWRCB) databases. The 7,123-acre MARB and the former MAFB has been used for aircraft maintenance and repair, refueling operations, and training activities since 1918. Facility operations contaminated soil and groundwater with hazardous chemicals. Three zones of groundwater contamination beneath the base were identified. Groundwater contamination has migrated to drinking water wells located off-base that are no longer in use. However, a groundwater containment system has been installed to prevent off-site groundwater migration and the off-site plume is being monitored. The MAFB NPL long-term cleanup is ongoing. Two groundwater plumes (identified as OU-1 and OU-2) are located at the eastern portion of the former MAFB.

According to a review of closed and open release cases at MARB and the former MAFB, no documented releases have occurred within the site boundaries, including all individual sites associated with groundwater plumes OU-1 and OU-2.

The *Final Fourth Five-Year Review Report at MARB and former MAFB, California* was prepared and dated July 16, 2019. According to sampling results from 2017, none of the upper and lower alluvial or bedrock groundwater contamination plumes for tetrachloroethene (PCE), trichloroethylene (TCE), or carbon

tetrachloride are located beneath the site. Based on the current monitoring well network, the groundwater plumes are generally decreasing in size. Although some contaminants were detected in off-base water supply wells, the contaminant concentrations were below California Maximum Contaminant Levels (MCLs) for drinking water and were generally not increasing. The Expanded Groundwater Extraction and Treatment System (EGETS) is in place and functioning as designed, however, it may be providing incomplete hydraulic control at the eastern base boundary. The protectiveness evaluation for the groundwater extraction and treatment remedy shall be reviewed once the per- and polyfluorinated alkyl substances (PFAS) investigation at former MAFB is complete, and a cleanup level is established in the future. The EGETS is located approximately 1.41 miles northeast of the site.

Based on the information provided, the MARB and former MAFB NPL site represents a REC to the project site. If encountered, expected ordnance would likely be limited to potential lead-containing bullets and spent cartridge casings.

Based on the eleven identified potential PFAS release sites due to the use of AFFF, the potential PFAS-impacted groundwater underlying the site represents an AOC.

Schools

The closest school to the project site is Rainbow Ridge Elementary School located at 15950 Indian Street in the City of Moreno Valley, approximately two miles northeast.

Airports

The proposed project is located within the boundaries of the March Inland Port Airport and within the MARB Airport Influence Area (AIA). The project is located in Compatibility Zone B2 per the *2014 March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan* land use policy. The General Plan land use is currently designated as Aviation.

Wildland Fire Hazards

According to the Fire Hazard Severity Zones in State Responsibility Areas (SRA) Map for Riverside County (west), the project site is not located on, or near to land designated as moderate, high or very high fire hazard severity zone in SRA.⁴ In addition, no wildlands are present on or adjacent to the project site.

⁴ CalFire Fire Hazard Severity Zone Viewer (FHSZ). 2022. <https://egis.fire.ca.gov/FHSZ/>
Accessed March 11, 2022.

4.9.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
HAZARDS AND HAZARDOUS MATERIALS – Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

A Phase I Environmental Site Assessment was prepared for the proposed project (Group Delta Consultants, Inc. 2022). Refer to Appendix E, Phase I Environmental Site Assessment, for the full report.

Would the project:

- a) *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?* **Determination: Less Than Significant Impact.**

The construction phase of the project may include the transport, storage, and short-term use of petroleum-based fuels, lubricants, pesticides, and other similar materials. Best Management Practices (BMPs) stipulating proper storage of hazardous materials and vehicle refueling would be implemented during construction as part of the Stormwater Pollution Prevention Plan (SWPPP). All transport, handling, use, and disposal of substances such as petroleum products, paints, and solvents related to the operation and maintenance of the project would comply with all federal, State, and local laws regulating the management and use of hazardous materials. The project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous material. Impacts would be less than significant.

- b) *Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? **Determination: Less Than Significant Impact.***

As discussed above, the regulatory database review conducted as part of the Phase I ESA determined that the project site is located on the MAFB National Priority List (NPL) site, based on the Envirostor and State Water Resources Control Board (SWRCB) databases.

The MARB and former MAFB NPL site represents a REC to the project site. If encountered, expected ordnance would likely be limited to potential lead-containing bullets and spent cartridge casings. No direct evidence of contaminated soil on the site was found; however, contaminated groundwater underlies the site. In addition, based on the eleven identified potential PFAS release sites due to the use of AFFF, the potential PFAS-impacted groundwater underlying the site represents an AOC to the site. The project would be required to comply with current OSHA/CFR requirements in regards to potential worker contact with hazardous materials. If encountered, expected ordnance would likely be limited to potential lead-containing bullets and spent cartridge casings. MARB may require site-specific training, including spent ordnance training, prior to construction. Impacts would be less than significant in this regard.

In addition, the potential east-adjoining high-pressure gas pipeline also represents an AOC to the site. Prior to project commencement, the construction contractor will identify whether the potential pipeline encroaches onto the project site and whether it will be encountered during construction activities. If the construction contractor determines the high-pressure gas pipeline encroaches onto the project site and could be encountered during project construction, the construction contractor shall follow the appropriate engineering controls, monitoring, and security measures in compliance with current OSHA/CFR requirements. Impacts would be less than significant in this regard.

- c) *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? **Determination: No Impact.***

There are no existing or proposed schools within 0.25-mile of the project site. The closest school to the project site is Rainbow Ridge Elementary School located at 15950 Indian Street in the City of Moreno Valley, approximately 2 miles northeast. Since there are no existing or proposed schools within 0.25-mile of the project site, no impact would occur in this regard.

- d) *Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? **Determination: Less Than Significant Impact.***

Refer to Impact 4.9(b). The project would be required to comply with current OSHA/CFR requirements in regard to potential worker contact with hazardous materials. If encountered, expected ordnance would likely be limited to potential lead-containing bullets and spent cartridge casings. MARB may require site-specific training, including spent ordnance training, prior to construction. Impacts would be less than significant in this regard.

- e) *For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area? **Determination: Less Than Significant Impact.***

The project's location in the MIPA's AIA may expose people working on the project site to safety hazards. The MARB AIA surrounds the entire project site. The project site is located in airport compatibility zone B2, is between the 65 and 75 Community Noise Equivalent Level (CNEL) noise contour, and would be exposed to airport noise at or below 75 dBA CNEL. However, the project

would be required to implement protective measures for construction workers for occupational noise exposure, based on federal and State employee health and safety regulations (i.e., regulations of the Occupational Safety and Health Administration of the U.S. Department of Labor [OSHA] and the California Division of Occupational Safety and Health [Cal/OSHA]).

As the proposed project consists of stormwater infrastructure improvements (i.e. RCB channel for flood control purposes), project operations would not involve new buildings or uses which would result in a safety hazard for people working or residing in the project area. Therefore, impacts relative to airport hazards would be less than significant.

- f) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? **Determination: Less Than Significant Impact.***

Operation of the project would not interfere with an adopted emergency response plan. However, the construction of the project has the potential to interfere with emergency response access to areas near the project site. Prior to any lane closures, a Traffic Control Plan would be implemented to ensure proper access to residences and businesses by emergency vehicles during construction and to maintain traffic flow; refer to Section 4.17, *Transportation*. Impacts to emergency access would be less than significant in this regard.

- g) *Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? **Determination: Less Than Significant Impact.***

As discussed above, the project site is not located on, or near to land designated as moderate, high, or very high fire hazard severity zone in SRA, nor are there any wildlands located on or adjacent to the project site. Therefore, a less than significant impact would occur in this regard.

4.9.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

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4.10 HYDROLOGY AND WATER QUALITY

4.10.1 Environmental Setting

The project is located within the Lower Santa Jacinto River Watershed in Riverside County.⁵ The main drainage within the Lower San Jacinto River Watershed is the San Jacinto River which drains into Canyon Lake reservoir, and followed by drainage downstream into Lake Elsinore.

The project area is characterized as developed and undeveloped-disturbed land. The surrounding areas consist of MARB to the east and scattered industrial development to the north, south, and west. An existing drainage course is located within MARB approximately 350 feet west of the existing runway and 300 feet east of the western perimeter fence boundary of MARB. Runoff in this area drains from the north to south via this natural drainage course towards a soft bottom open channel at Heacock Street and Oleander Avenue (Heacock Channel). Runoff from this point is conveyed along the PVC in an easterly followed by southeasterly direction for approximately 7.75 miles to the confluence of the San Jacinto River. Elevation ranges of the project area of construction range from approximately 1,503 to 1,472 feet amsl.

4.10.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
HYDROLOGY AND WATER QUALITY – Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river or through the addition of impervious surfaces, in a manner which would:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) Result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

⁵ California Department of Water Resources, SGMA Basin Prioritization Dashboard, <https://gis.water.ca.gov/app/bp-dashboard/final/>, accessed April 20, 2022.

*Draft Initial Study/Mitigated Negative Declaration
Perris Valley Channel Lateral B, Stage 4 Project*

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Would the project:

- a) *Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality? **Determination: Less Than Significant Impact.***

Construction Related Water Quality Impacts

During construction, the District would implement a Storm Water Pollution Prevention Plan (SWPPP), listing Best Management Practices (BMPs) to prevent construction pollutants and products from violating any water quality standard or any waste discharge requirements. These on-site BMPs would treat stormwater before it discharges into drainages. Additionally, the State has published a set of BMPs for both pre- and post-construction periods, which would be applied to the project. The District would identify the appropriate BMPs for the project. Compliance with the provisions of the best management practices would reduce impacts associated with water quality standards and discharge requirements to a less than significant level.

Operational Related Water Quality Impacts

The project involves the construction of the regional storm drain facility needed to convey 100-year runoff to the existing Lateral B, Stage 2 channel east of Heacock Street. During operation, the project would collect, convey, and discharge stormwater runoff originating from developed areas that may already produce pollutants. The District is required to comply with the National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) permit issued by the Regional Water Quality Control Board. The amount of contaminants discharged in stormwater drainage varies based on a variety of factors, including pollutants on surfaces and the amount of rainfall. The NPDES permit requires a SWPPP to be developed and implemented and the SWPPP to identify best management practices for construction and operation in project design. Compliance with these established programs would ensure that the project would not result in substantial discharges of typical stormwater pollutants. A less than significant impact would occur.

- b) *Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? **Determination: Less Than Significant Impact.***

The project involves the installation of a new RCB channel and no groundwater supplies would be utilized during construction or operations. However, the project could encounter groundwater during construction activities. As discussed in Section 4.9, Hazards and Hazardous Materials, the project would comply with federal Occupational Safety and Health Administration (OSHA) regulations (29 CFR 1910.120) and Cal/OSHA regulations (8 CCR Title 8, Section 5192) that describes relevant safety protocols should groundwater be encountered. Substantial groundwater loss from construction activities is not anticipated and would not result in substantially decreasing groundwater supplies in a manner that could impede sustainable

groundwater management of any groundwater basins. As such, impacts would be less than significant in this regard.

- c) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river or through the addition of impervious surfaces, in a manner which would:*

- i. *Result in substantial erosion or siltation on- or off-site? **Determination: Less Than Significant Impact.***

The project would construct drainage infrastructure to prevent flooding and to provide proper runoff conveyance during a 100-year rain event. The project is expected to convey water through improved infrastructure and would not substantially increase future erosion potential on or off site. Additionally, during construction of the project, a SWPPP including BMPs would be implemented to minimize erosion potential and water quality degradation of the project site. Therefore, impacts associated with the project to streams or rivers due to erosion or siltation are considered less than significant.

- ii. *Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? **Determination: No Impact.***

The project would provide the area with improved drainage and flood protection, thereby reducing the rate or amount of surface runoff and flooding within the project area. No impact would occur.

- iii. *Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? **Determination: No Impact.***

The project has been designed to convey 100-year runoff from the Stage 5 channel to the existing Stage 2 channel at Heacock Street; and provide adequate outlet to proposed developments west of the project within the city of Perris. Thus, the project would not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. No impact would occur in this regard.

- iv. *Impede or redirect flood flows? **Determination: No Impact.***

Refer to the responses above. No impact would occur.

- d) *In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? **Determination: No Impact.***

According to the applicable Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) (6065C1410G and 06065C1430H)⁶, the project site is not located in an area designated as a special flood hazard area. The project site is located approximately four miles southeast of Lake Elsinore and 25 miles east of the Pacific Ocean. Due to the distance from a large body of water it would not be subject to seiche or tsunami. Therefore, the project would not be at risk of releasing pollutants as a result of flood hazard, tsunami or seiche. No impact would occur.

⁶ Federal Emergency Management Agency, FEMA Flood Map Service Center. <https://msc.fema.gov/portal/home>. Accessed: April 21, 2022.

- e) *Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? **Determination: Less Than Significant Impact.***

The project would construct improved drainage facilities and comply with the requirements of the local NPDES Stormwater Program by implementing a SWPPP listing BMPs to prevent construction pollutants and products from violating any water quality standards or waste discharge requirements. The project is located within Riverside County Lower San Jacinto River Watershed Management Area (WMA) and would comply with the requirements of the Regional MS4 Permit (Order No. R9-2013-0001, as amended by R9-2015-0001 and R9-2015-0100) issued by the California Regional Water Quality Control Board. Therefore, construction and operation of the project would not conflict or obstruct implementation of the local water quality control plan. Impacts would be less than significant in this regard.

4.10.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.11 LAND USE AND PLANNING

4.11.1 Environmental Setting

As an underground RCB storm drain, there are no applicable land use plans, policies, or regulations adopted for avoiding or mitigating an environmental effect which apply to the project.

4.11.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
LAND USE AND PLANNING – Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Would the project:

- a) *Physically divide an established community?* **Determination: No Impact.**

The key factor with respect to this threshold is the potential to create physical barriers that change the connectivity between areas of a community to the extent that persons are separated from other areas of the community. The project site is located within the limits of MARB and the City of Perris in Western Riverside County, east of the I-215. Within the project limits, a west perimeter security fence borders MARB. Rather than divide an established community, the project would tie into the existing PVC Lateral B, Stage 2 facility at Heacock Street and the Perris Valley Channel Lateral B, Stage 5 facility that is under construction as part of the VIP 215 project to the northwest. Based on existing MARB security fencing and the nature of the proposed project, the project would not divide an established community and no impacts would occur in this regard.

- b) *Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?* **Determination: No Impact.**

As an underground RCB storm drain, there are no applicable land use plans, policies, or regulations adopted for avoiding or mitigating an environmental effect which apply to the project. No impact would occur in this regard.

4.11.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.12 MINERAL RESOURCES

4.12.1 Environmental Setting

There is no evidence of past mining excavation, prospects, tunnels or claim marker boundaries along or near to the project area. According to the Riverside County General Plan EIR (Figure 4.14-1, Mineral Resource Zones), the proposed project area is within the zoning classification of MRZ-1 (No significant mineral deposits) and MRZ-3 (Significance of mineral deposits unknown).

4.12.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
MINERAL RESOURCES – Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Would the project:

- a) *Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?* **Determination: No Impact.**

The State Mining and Geology Board (SMGB) has established Mineral Resources Zones (MRZs) to designate lands that contain mineral deposits. The classifications used by the State to define MRZs are as follows:

- MRZ-1: Areas where the available geologic information indicates no significant likelihood of significant mineral deposits.
- MRZ-2a: Areas where the available geologic information indicates that there are significant mineral deposits.
- MRZ-2b: Areas where the available geologic information indicates that there is a likelihood of significant mineral deposits.
- MRZ-3a: Areas where the available geologic information indicates that mineral deposits exist, however, the significance of the deposit is undetermined.
- MRZ-3b: Areas where the available geologic information indicates that mineral deposits are likely to exist, however, the significance of the deposit is undetermined.
- MRZ-4: Areas where there is not enough information available to determine the presence of a known mineral deposit.

The California State Geologist has classified areas into MRZs and Scientific Resource Zones (SRZs). The zones identify the Statewide or regional significance of mineral deposits based on the economic value of the deposits and accessibility. According to the Riverside County General Plan EIR (Figure 4.14-1, *Mineral Resource Zones*), the proposed project area is within the zoning classification of MRZ-1 (No significant mineral deposits) and MRZ-3 (Significance of mineral

deposits unknown). Therefore, the project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State. No impact would occur.

- b) *Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?* **Determination: No Impact.**

Refer to Impact 4.12(a). As stated above, the County of Riverside General Plan EIR designates the project site as MRZ-1 (no significant mineral deposits) and MRZ-3 (significance of mineral deposits unknown). Therefore, the project is not forecasted to result in the loss of availability of a locally important mineral resource recovery site. No impact would occur.

4.12.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

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4.13 NOISE

4.13.1 Environmental Setting

Noise Fundamentals

Noise is generally defined as sound that is loud, disagreeable, or unexpected. The selection of a proper noise descriptor for a specific source is dependent on the spatial and temporal distribution, duration, and fluctuation of the noise. The noise descriptors most often encountered when dealing with traffic, community, and environmental noise include an overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear (A-weighted decibels or dBA). Regarding increases in A-weighted noise levels (dBA), the following relationships should be noted for understanding this analysis:

- Except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived by humans.
- Outside of the laboratory, a 3 dBA change is considered a just-perceivable difference.
- A change in level of at least 5 dBA is required before any noticeable change in community response would be expected. An increase of 5 dBA is typically considered substantial.
- A 10 dBA change is subjectively heard as an approximate doubling in loudness and would almost certainly cause an adverse change in community response (FICON 1992).

Noise can be generated by a number of sources, including mobile sources, such as automobiles, trucks, and airplanes, and stationary sources, such as construction sites, machinery, and industrial operations. The rate depends on the ground surface and the number or type of objects between the noise source and the receiver. Mobile transportation sources, such as highways, and hard and flat surfaces, such as concrete or asphalt, have an attenuation rate of 3.0 dBA per doubling of distance. Soft surfaces, such as uneven or vegetated terrain, have an attenuation rate of about 4.5 dBA per doubling of distance from the source. Noise generated by stationary sources (i.e., construction) typically attenuates at a rate of approximately 6.0 to 7.5 dBA per doubling of distance from the source.

Sound levels can be reduced by placing barriers between the noise source and the receiver. In general, barriers contribute to decreasing noise levels only when the structure breaks the “line of sight” between the source and the receiver. Buildings, concrete walls, and berms can all act as effective noise barriers. Wooden fences or broad areas of dense foliage can also reduce noise, but are less effective than solid barriers.

Noise-Sensitive Receptor Locations

Some land uses are considered more sensitive to noise than others due to the types of activities typically involved at the receptor location, and the effect that noise can have on those activities and the persons engaged in them. Typically, residences, schools, motels and hotels, libraries, religious institutions, hospitals, nursing homes, and parks are generally more sensitive to noise than commercial and industrial land uses.

The predominant existing noise sources near the project site are aircraft noise from MARB to the east and roadway noise from I-215, which is adjacent to the west. Secondary noise sources include commercial-related activities associated with loading dock/delivery truck activities, trash compaction, and refuse service activities.

The nearest sensitive receptors to the project site are the residences located approximately 0.5-mile southeast of the site, on the southeast quadrant of the Webster Avenue/Markham Street intersection.

Vibration-Sensitive Receptor Locations

Typically, groundborne vibration generated by man-made activities (i.e., rail and roadway traffic, operation of mechanical equipment and typical construction equipment) diminishes rapidly with distance from the vibration source. The Caltrans *Transportation and Construction Vibration Guidance Manual* (Caltrans Manual) provides vibration structure damage criteria for: (1) Extremely fragile historic buildings, ruins, ancient monuments; (2) Fragile buildings; (3) Historic and some old buildings; (4) Older residential structures; (5) New residential structures; and (6) Modern industrial/commercial buildings. The Caltrans Manual also provides vibration human annoyance criteria. There are no vibration-sensitive receptors that could be exposed to short-term construction vibration impacts for human annoyance near the project site. As stated above, the nearest residences to the site are located 0.5-mile to the southeast.

Local Noise Standards

Local noise issues are addressed through implementation of General Plan policies, including noise and land use compatibility guidelines, and through enforcement of noise ordinance standards. A city or county's noise ordinance will typically include regulations that restrict the amount and duration of noise from various noise sources occurring within its jurisdiction as well as prescribe noise limits for different land use types. Noise regulations and standards of the District, MJPA, and City of Perris planning areas are considered with respect to evaluating the proposed project's noise impacts on the surrounding environment. These planning areas are being considered because construction activities will increase noise levels within each of these jurisdictions.

4.13.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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NOISE – Would the project result in:

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Would the project result in:

- a) *Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?* **Determination: Less Than Significant Impact.**

Construction Impacts

Relative to construction-related noise, the MIPA does not have its own Noise Ordinance. Rather, it applies the standards for noise regulation from Riverside County Ordinances 457 and 847. Ordinance 457 Section G(1) regulates construction noise impacts for all projects within one-quarter mile from an occupied residence or residences. Ordinance 847 sets forth land use compatibility relating to noise.

The project would follow the District's Standard Operating Procedures limiting construction between the hours of 7:00 AM to 5:00 PM. The City of Perris's permitted hours of construction are less stringent and allow construction to occur between the hours of 7:00 AM to 7:00 PM (or on a legal holiday, with the exception of Columbus Day and Washington's Birthday, or on Sundays), per the Perris Municipal Code Section 7.34.060, *Noise Control*. However, because the more conservative construction hours of the District would be adhered to, and since noise generated by the construction of the project would be temporary, construction-related noise impacts would be less than significant.

Operational Impacts

Due to the nature of the project as a public infrastructure (storm drain) project, operational noise upon completion of construction is not anticipated.

- b) *Generation of excessive groundborne vibration or groundborne noise levels? **Determination: Less Than Significant Impact.***

Construction of the project would involve the temporary use of large construction equipment, which would result in temporary vibrational noise. Vibrational noise is a concern when sensitive receptors are in close proximity to the vibration sources. However as discussed previously, the project site is located in an area where the predominant existing noise sources are roadway noise from I-215 and aircraft noise from the MARB, in addition to noise associated with commercial-related activities such as loading dock/delivery truck activities, trash compaction, and refuse service activities. There are no sensitive receptors within or adjacent to the project site.

In addition, construction and operational maintenance activities would be restricted to daytime hours consistent with the MIPA Municipal Code and Perris Municipal Code (refer to the response for Impact 4.13(a), above), thereby eliminating the potential for vibration impacts during sensitive nighttime hours. Once operational, the project would not be a source of groundborne vibration; therefore, impacts would be less than significant.

- c) *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? **Determination: Less Than Significant Impact.***

Construction Impacts

The project's location in the MARB AIA may expose people working on the project site to potentially significant noise levels. The project site is located in airport compatibility zone B2, is between the 65 and 75 CNEL noise contour, and would be exposed to airport noise at or below 75 dBA CNEL. However, the project would be required to implement protective measures for construction workers for occupational noise exposure, based on federal and State employee health and safety regulations (i.e., regulations of the Occupational Safety and Health Administration of the U.S. Department of Labor [OSHA] and the California Division of Occupational

Safety and Health [Cal/OSHA]). Therefore, construction impacts relative to airport noise would be less than significant.

Operational Impacts

Due to the nature of the project as a public infrastructure (storm drain) project, operations of the project is not anticipated to expose people residing or working in the project area to excessive noise levels. Therefore, operational impacts relative to airport noise would be less than significant.

4.13.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.14 POPULATION AND HOUSING

4.14.1 Environmental Setting

The project site is currently vacant and there is no existing housing within or adjacent to the project site. The nearest residences to the project site are located approximately 0.5-mile southeast of the site, on the southeast quadrant of the Webster Avenue/Markham Street intersection.

4.14.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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POPULATION AND HOUSING – Would the project:

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Would the project:

- a) *Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?* **Determination: No Impact.**

The project does not propose the construction of new housing or businesses and therefore is not anticipated to induce population growth directly or indirectly in the area. The project involves the construction of stormwater drainage and flood protection facilities in order to improve safety on MARB. The project would also provide flood protection to the existing adjacent warehouse development to the west of MARB. No impact would occur.

- b) *Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?* **Determination: No Impact.**

Because the project site is vacant and does not contain any existing houses, project implementation would not result in the displacement of existing housing. Therefore, the proposed project would result in no impacts on existing housing.

4.14.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

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4.15 PUBLIC SERVICES

4.15.1 Environmental Setting

Fire Protection Services

Fire services in the MIPA Planning Area and the City of Perris are provided by the Riverside County Fire Department (RCFD) through a cooperative agreement with the California Department of Forestry and Fire Protection (CalFire). RCFD services include providing fire suppression, emergency medical, rescue, and fire prevention services while serving as the operational area coordinator for the California Fire and Rescue Mutual Aid System for all fire service jurisdictions in Riverside County.

Fire protection services for the project site and vicinity are provided by existing County of Riverside fire stations in Perris and non-County fire stations from MARB (i.e., March Air Reserve Fire Department at 16499 Heacock Street) through mutual aid agreements. Existing Riverside County Fire - Mead Valley Station No. 59 located at 21510 Pinewood Street in Perris is the nearest County fire station and would provide fire response to the project site. This fire station is located approximately 2.9 miles southwest of the project site.

Police Protection Services

Law enforcement services in the MIPA Planning Area are provided by the Riverside County Sheriff's Department (RCSD). Riverside County provides community policing and operates and maintains correctional facilities. Sheriff substations are located within the cities of Riverside, Perris, and Moreno Valley (to the north of the project site). Services provided by the RCSD include first responder service, police services, search and rescue services, mutual aid coordination services, enforcement of criminal law on Tribal Lands, jail system services, court services, Coroner-Public Administrator services, and Joint Task Force services.

The RCSD operates the Moreno Valley Police Department station in the City of Moreno Valley, providing law enforcement services to that City and surrounding non-county jurisdictions under contract. The primary station that would serve the project site is the Moreno Valley Station located at 22850 Calle San Juan De Los Lagos, Moreno Valley, approximately 3.7 miles north of the project site.

Schools

The project site is served by the Val Verde Unified School District (VVUSD). The VVUSD's schools serves approximately 20,200 students residing in cities Perris, Moreno Valley, and portions of unincorporated Riverside County.

Parks

The nearest park to the project site is located in the City of Perris, Morgan Street Park located at 600 E. Morgan Street, approximately 2.7 miles to the southeast.

4.15.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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PUBLIC SERVICES

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:*

1) *Fire protection? **Determination: No Impact.***

The proposed project would not result in the construction of any habitable structures and would not directly or indirectly induce significant population growth; refer to Impact 4.14(a), above. As a storm drain construction project, the proposed improvements would not result in the need for additional new or altered fire protection services and would not alter acceptable service ratios or response times. Rather, the project would result in improved stormwater drainage and public safety within the project area. In addition, operation of the project would not create a substantial number of jobs that would induce population growth necessitating additional services or extending response times for fire protection services. As such, project implementation would not create new demand for the development of new or physically altered fire protection services or facilities. Therefore, no impact would occur.

2) *Police protection? **Determination: No Impact.***

The proposed project would not directly or indirectly induce significant population growth. As a storm drain construction project, the project would not result in the need for additional new or altered police protection services and would not alter acceptable service ratios or response times. Further, project implementation would not create the need for the development of additional police facilities. Therefore, no impact would occur.

3) *Schools? **Determination: No Impact.***

The proposed project would not directly or indirectly induce significant population growth. As a storm drain construction project, the project would not generate additional school-aged students that would create new demand on local schools for educational services. No impact would occur in this regard.

4) *Parks? **Determination: No Impact.***

The proposed project would not directly or indirectly induce significant population growth. As a storm drain construction project, the project would not necessitate the need for additional local parks or other public facilities. No impact would occur in this regard.

5) *Other public facilities? **Determination: No Impact.***

The proposed project would not directly or indirectly induce significant population growth. As a storm drain construction project, the project would not result in the need for new or physically altered government facilities nor affect time or other performance objective. No impact would occur.

4.15.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

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4.16 RECREATION

4.16.1 Environmental Setting

As discussed in Section 4.15.1, the nearest park/recreational facility to the project site is located in the City of Perris, Morgan Street Park located at 600 E. Morgan Street. Morgan Street Park is a 15-acre park that is located approximately 3.7 miles from the project site. Recreational amenities include 3 lighted soccer fields, 2 basketball courts, a tot lot, a concession stand with patio tables, restrooms, group picnic shelters, open space, picnic tables and a parking lot.

4.16.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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RECREATION

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?* **Determination: No Impact.**

Refer to Impact 4.15(a)(4). No impact would occur.

b) *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?* **Determination: No Impact.**

Refer to Impact 4.15(a)(4). No impact would occur.

4.16.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

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4.17 TRANSPORTATION

4.17.1 Environmental Setting

The project site is located in an area within the limits of MARB with the MIPA airstrip situated directly to the northeast and light industrial commercial uses situated directly to the southeast. The proposed alignment would be located between the existing PVC Lateral B, Stage 2 facility at Heacock Street and the Perris Valley Channel Lateral B, Stage 5 facility that is under construction as part of the VIP 215 project to the northwest.

4.17.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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TRANSPORTATION– Would the project:

a) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Would the project:

- a) *Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?* **Determination: Less Than Significant Impact.**

Traffic impacts associated with the project would be limited to the construction period and during maintenance activities of the proposed project. As discussed, construction of the RCB culvert and associated storm drain improvements would mostly occur within MARB right of way with the exception of the work performed to installation of the transition RCB connector at the intersection of Heacock Street and Perris Valley Boulevard. If lane closures are anticipated, the project would implement a traffic control plan that provides precautionary measures (i.e., detour signage, flagging) to address any temporary circulation impacts at this intersection. A less than significant impact would occur in this regard.

- b) *Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?* **Determination: Less Than Significant Impact.**

CEQA Guidelines section 15064.3, subdivision (b) details the use of vehicle miles traveled (VMT) to assess the significance of transportation impacts. As detailed in CEQA Guidelines section 15064.3, subdivision (c), a lead agency may elect to be governed by the provisions of this section immediately. Beginning on July 1, 2020, the provisions of this section shall apply statewide. The

project meets the Governor's Office of Planning and Research's (OPR's) definition of a small project (less than 110 daily trips) and would be screened out of a VMT analysis:

Screening Threshold for Small Projects. Many local agencies have developed screening thresholds to indicate when detailed analysis is needed. Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day) generally may be assumed to cause a less than significant transportation impact (OPR 2018).

Routine maintenance activities for the RCB channel would not exceed the Screening Threshold for Small Projects (110 daily trips). As such, the project would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b). Impacts would be less than significant in this regard.

- c) *Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?* **Determination: Less Than Significant Impact.**

No hazardous design features are proposed as part of the project and no alteration to the existing circulation system would occur. Further, as concluded in Impact 4.17(a), a Traffic Control Plan would be implemented to ensure construction activities do not adversely impact traffic flow along the project alignment, including potential construction hazards along the roadways. As an underground RCB storm drain, the project would not involve a new use that would generate new or additional vehicle trips in the area at project completion nor would the project include any incompatible uses. As such, project construction and operations would not substantially increase hazards due to a geometric design feature or incompatible use. Impacts would be less than significant..

- d) *Result in inadequate emergency access?* **Determination: Less Than Significant Impact.**

Refer to Impact 4.9(f) for a discussion concerning the applicable emergency response procedures and evacuation plans. Short-term construction trips would include the delivery of construction equipment, construction worker trips, and hauling trips for the import/export of construction materials. Construction activities would occur over a period of 12 months and would cease upon project completion. All construction equipment would be staged away from existing roadways to eliminate potential access issues for emergency vehicles and passing motorists. As such, pedestrian and vehicle access within the project vicinity would be maintained with the potential for some temporary lane closures. A Traffic Control Plan would be prepared and implemented that would ensure traffic control and public safety during all stages of project construction. Impacts would be less than significant.

4.17.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.18 TRIBAL CULTURAL RESOURCES

4.18.1 Environmental Setting

As of July 1, 2015, California Assembly Bill 52 (AB 52) was enacted and expanded CEQA by establishing a formal consultation process for California tribes within the CEQA process. The bill specifies that any project may affect or cause a substantial adverse change in the significance of a tribal cultural resource would require a lead agency to “begin consultation with a California Native American tribe that is traditional and culturally affiliated with the geographic area of the proposed project.” Section 21074 of AB 52 also defines a new category of resources under CEQA called “tribal cultural resources.” Tribal cultural resources are defined as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe” and is either listed on or eligible for the California Register of Historical Resources (CRHR) or a local historic register, or if the lead agency chooses to treat the resource as a tribal cultural resource.

On February 19, 2016, the California Natural Resources Agency proposed to adopt and amend regulations as part of AB 52 implementing Title 14, Division 6, Chapter 3 of the California Code of Regulations, CEQA Guidelines, to include consideration of impacts to tribal cultural resources pursuant to Government Code Section 11346.6. On September 27, 2016, the California Office of Administrative Law approved the amendments to Appendix G of the CEQA Guidelines, and these amendments are addressed within this Initial Study.

In compliance with AB 52, the District distributed an “Invitation to Consult” letter on March 29, 2022 to notify the Agua Caliente Band of Cahuilla Indians, Pala Band of Mission Indians, Pechanga Band of Luiseño Indians, Ramona Band of Cahuilla Indians, Rincon Band of Luiseño Indians, and Soboba Band of Luiseño Indians of the opportunity to consult on the project and assist the District in determining whether there were potential tribal cultural resources associated with the project area. The Agua Caliente Band of Cahuilla Indians, Pechanga Band of Luiseño Indians, and Soboba Band of Luiseño Indians responded during the mandated 30-day timeframe and requested additional information or to initiate consultation pursuant to Public Resources Code section 21080.3.1. The result of the consultation meetings coupled with the results of the Cultural Resources Assessment prepared for this project have informed the District’s significance determination regarding Tribal Cultural Resources pursuant to CEQA.

4.18.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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TRIBAL CULTURAL RESOURCES – Would the project:

Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California native American tribe, and that is:

- a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?, or

*Draft Initial Study/Mitigated Negative Declaration
Perris Valley Channel Lateral B, Stage 4 Project*

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Would the project:

- a) *Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?* **Determination: Less Than Significant Impact.**

As discussed in [Section 4.5.2](#), four historic-age built environment resources were identified within the APE and no archaeological resources were identified during the background research and pedestrian field survey for the project. Based on the Cultural Resources Assessment, the four historic-age built environment resources were found ineligible for the National Register, CRHR, or local designation. As such, these resources are not considered a historical resource under CEQA and development of the proposed project would not result in impacts to historic resources.

- b. *Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.* **Determination: Less Than Significant with Mitigation Incorporated.**

Although the Perris Valley area has connections to tribes that historically inhabited or passed by the area, the project site is located on a disturbed and developed portion of an established air force base. The disturbance limits of the project area consist of a paved perimeter road likely underlain by fill material, flattened areas adjacent, and an existing grouted man-made channel. As previously mentioned, the contextual relationships and likelihood of tribal cultural resource finds in the project impact area is considered very low due to previous disturbance for development of the base. However, based on discussion with the AB 52 Consulting Tribe(s)/Band(s), the project has the potential to impact TCRs. As such, the following mitigation measures shall be implemented in order to minimize potential impacts to unknown TCRs. With the inclusion and implementation of Mitigation Measures TCR-1 and TCR-2, impacts to TCRs would be reduced to less than significant.

4.18.3 Mitigation Measures

TCR-1 The District shall prepare or cause for the preparation of a Tribal/Cultural Resources Management Plan (TCRMP) prior to ground disturbing activities. The CRMP shall be based on the final construction grading plans prepared by the District and may include requirements for pre-construction cultural sensitivity training, notification, and monitoring protocol. The TCRMP will consider concerns of the consulting Tribes and the consulting Tribes will have an opportunity to review and comment on the draft TRCRMP.

In the event that the consulting Tribes are not able to reasonably accommodate the District's requests and/or needs regarding monitoring, the District may proceed with Mitigation Measure TCR-2 as needed:

TCR-2 The District may, at its discretion, conduct archaeological monitoring and/or reconnaissance of the project site using a qualified archaeologist that is not a Tribal monitor or representative of a Native American Tribe. This would occur only a needed during ground-disturbing construction activities.

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4.19 UTILITIES AND SERVICE SYSTEMS

4.19.1 Environmental Setting

Water Service

The project site is served by two different water purveyors, the Western Municipal Water District (WMWD) and the Eastern Municipal Water District (EMWD). WMWD is a member agency of the Metropolitan Water District of Southern California (MWD), that purchases imported water (both treated and raw water) from the Colorado River and the Bay-Delta, which is conveyed to southern California through the Colorado River Aqueduct and State Water Project. WMWD also purchases local groundwater supplies from Meeks and Daley Water Company, Riverside Highland Water Company, and when available, from the City of Riverside. Water is typically purchased from the City of Riverside on an emergency or off-season basis. Additional local groundwater supplies are obtained from the Temecula-Murrieta portion of the Temecula Valley Groundwater Basin and the San Bernardino Basin Area for retail supplies, and from the Arlington Subsection of the Riverside-Arlington Groundwater Basin for wholesale supplies.

WMWD provides wholesale and retail water within its district boundaries such as City of Riverside, the water agencies of Box Springs Mutual Water Company, and retail customers in unincorporated areas such as MARB. WMWD has fourteen wholesale customers and approximately 24,000 retail customers. The WMWD general district consists of a 527-square mile area of western Riverside County and an estimated population of more than 860,000.

EMWD provides potable water, wastewater treatment, and recycled water services for portions of Riverside County, including cities and agencies such as the cities of Perris and Moreno Valley and WMWD. EMWD is a member agency of MWD, and its supply is a combination of imported, ground, and recycled water. EMWD has connections with approximately 148,000 domestic water service accounts, 125 agriculture accounts, 246,000 sewer accounts, and more than 400 recycled water service accounts. The EMWD water supply consists of 49 percent imported via the Department of Water Resources (DWR) State Water Project (SWP) and MWD, and the remaining 51 percent consisted of 16 percent supplied by local groundwater and desalters and 35 percent as recycled water.

Wastewater

WMWD provides wastewater services to a portion of its service area, and participates in the Western Riverside County Regional Wastewater Authority (WRCRWA). Wastewater facilities operated by the WMWD include Western Riverside County Regional Wastewater Treatment Plant (WRCRWTP) and Western Water Recycling Facility (WWRF), formerly the March Wastewater Treatment Plant. The WRCRWTP is a regional wastewater treatment facility owned by the WRCRWA. The WRCRWA is a joint powers authority with the cities of Norco and Corona, Jurupa Community Services District, Home Gardens Sanitary District, and WMWD.

The WRCRWTP has a capacity of 8 million gallons per day (MGD) and has a planned expansion of 14 MGD and ultimate capacity of 32 MGD. The WWRF treats domestic wastewater from MARB. The WWRF produces tertiary treated wastewater to be discharged to an impoundment and then pumped to supply the recycled water system, which then provides recycled water to the Riverside National Cemetery, General Old Golf Course, and various landscaping, agricultural and commercial use sites.

Stormwater

The MIPA Planning Area is located within the limits of the Perris Valley Area Drainage Plan (ADP) and the Lake Mathews ADP of the District. Surface drainage in and around the MIPA Planning Area includes ephemeral (temporary) streams during periods of rainfall. In general, surface water runoff within the MIPA Planning Area is directed southeast through a series of storm drains and surface drainage ditches.

The primary drainage facilities within the MIPA Planning Area include the Cactus Channel, which runs in an east-west direction parallel to Cactus Avenue along the northern boundary of the Northeast Planning Subarea, and the Heacock Channel, which runs in a north-south direction adjacent to Heacock Street in the Northeast Planning Subarea. Surface runoff from existing impervious surfaces such as runways, aviation tarmacs, roadways, and buildings are collected by a series of manmade drains, which are eventually tributary to the larger Perris Valley Storm Drain System.

Solid Waste

The Riverside County Department of Waste Resources (RCDWR) owns and operates six landfills that serve the Riverside County residents. Landfills that could potentially serve the proposed project include the Badlands, Lambs Canyon, and El Sobrante landfills. Table 4.19-1 summarizes landfill locations, permitted refuse and capacity information, and expected closure date for each landfill.

Table 4.19-1: Landfill Capacity in the Project Region

Landfill	Distance from Project Site	Maximum Permitted Daily Load (tons/day)	Average Remaining Disposal Capacity (Tons)	Expected Closure Date
Badlands Landfill	15 miles	4,800	15,748,799	2022
Lamb Canyon Landfill	25 miles	5,000	19,242,950	2032
El Sobrante Landfill	30 miles	16,054	143,977,170	2051
Source: California Department of Resources Recycling and Recovery. https://www2.calrecycle.ca.gov/SolidWaste/Site/Search Badlands Landfill (33-AA-0006); Lamb Canyon Landfill (33-AA-0007); El Sobrante Landfill (33-AA-0217) Accessed April 22, 2022.				

Electrical and Natural Gas Service

Electrical and natural gas services to customers in the project area are provided by Southern California Edison (SCE) and the Southern California Gas Company (SoCalGas) respectively.

SCE provides electricity to approximately 15 million people, 180 incorporated cities, 15 counties, 5,000 large businesses, and 280,000 small businesses throughout its 50,000-square-mile service area. SCE produces and purchases their energy from a mix of conventional and renewable generating sources.

SoCalGas is the principal distributor of natural gas in Southern California, serving residential, commercial, and industrial markets. SoCalGas serves approximately 21.6 million customers in more than 500 communities encompassing approximately 20,000 square miles throughout Central and Southern California, from the City of Visalia to the Mexican border. SoCalGas receives gas supplies from several sedimentary basins in the western United States and Canada, including supply basins located in New Mexico (San Juan Basin), West Texas (Permian Basin), the Rocky Mountains, and Western Canada as well as local California supplies.

4.19.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
UTILITIES AND SERVICE SYSTEMS – Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Would the project:

- a) *Require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?* **Determination: Less Than Significant Impact.**

The project involves the construction of flood control facilities in order to improve public safety. As discussed in [Section 2.5.2, Utility Line Relocation](#), project implementation would not require utility line relocation. Where necessary, mitigation measures have been incorporated to reduce all potentially significant impacts related to construction and operation of the proposed stormwater drainage project. As such, a less than significant impact would occur.

- b) *Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?* **Determination: Less Than Significant Impact.**

The project does not involve activities that would require permanent water supplies. Water supplies required during the construction of the project would be limited to water utilized for dust suppression on site. New or expanded entitlements would not be required for the project. As such, a less than significant impact would occur.

- c) *Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? **Determination: No Impact.***

The project would improve stormwater management and would not produce wastewater. No new wastewater treatment facilities are required as a result of the project. No impacts would occur.

- d) *Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? **Determination: Less Than Significant Impact.***

Due to the nature of the project, maintenance activities are not anticipated to generate substantial on-going solid waste during operation. Any waste generated during construction would be minimal and would be disposed of at the nearest landfill permitted to accept the construction waste. For this reason, the project would prohibit achieving State and/or local solid waste reduction goals. A less than significant impact would occur.

- e) *Comply with federal, State, and local management and reduction statutes and regulations related to solid waste? **Determination: Less Than Significant Impact.***

All construction activities would be required to demonstrate compliance with existing federal, State, and local management and reduction statutes and regulations for solid waste disposal, including the 50 percent diversion of solid waste requirement established by the California Integrated Waste Management Act of 1989 (AB 939). Conformance with AB 939 would ensure compliance with federal, State, and local management and reduction statutes and regulations related to solid waste for project construction. Additionally, project operations would not involve a change in land use with the potential to conflict with federal, State, and local management and reduction statutes and regulations related to solid waste. Overall, impacts would be less than significant.

4.19.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.20 WILDFIRE

4.20.1 Environmental Setting

The project site is located in a generally flat area within the limits of MARB with the MJPA airstrip situated directly to the northeast and light industrial commercial uses situated directly to the southeast. The proposed alignment would be located between the existing PVC Lateral B, Stage 2 facility at Heacock Street and the Perris Valley Channel Lateral B, Stage 5 facility that is under construction as part of the VIP 215 project to the northwest. The project area of construction consists of low-cut, ruderal growth vegetation consisting of native seasonal grasses that occur along the proposed area for the RCB alignment.

According to the Fire Hazard Severity Zones in State Responsibility Areas (SRA) Map for Riverside County (west), the project site is not located on, or near to land designated as moderate, high, or very high fire hazard severity zone in SRA⁷.

4.20.2 Environmental Checklist and Discussion

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
WILDFIRE – If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Would the project:

- a) *Substantially impair an adopted emergency response plan or emergency evacuation plan?*
Determination: No Impact.

According to the Fire Hazard Severity Zones in SRA Map for Riverside County (west), the project site is not located on, or near to land designated as moderate, high, or very high fire hazard severity zone in SRA. No impact would occur in this regard.

⁷ CalFire Fire Hazard Severity Zone Viewer (FHSZ). 2022. <https://egis.fire.ca.gov/FHSZ/>, accessed March 11, 2022.

- b) *Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire? **Determination: No Impact.***

Refer to Impact 4.20(a).

- c) *Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? **Determination: No Impact.***

Refer to Impact 4.20(a).

- d) *Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? **Determination: No Impact.***

Refer to Impact 4.20(a).

4.20.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.21 MANDATORY FINDINGS OF SIGNIFICANCE

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a) *Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory? **Determination: Less Than Significant With Mitigation Incorporated.***

As discussed in Impact 4.4(a) in Section 4.4, *Biological Resources*, BUOW focused surveys in accordance with the survey guidelines and protocols provided in the *Burrowing Owl Survey Instructions for the Western Riverside County Multiple Species Habitat Conservation Plan Area* were conducted for the project site and a 500 feet buffer. The results of the focused surveys were negative. Although the survey results were negative, direct impacts to burrowing owl through ground disturbance and habitat loss and indirect impacts from construction noise and vibrations may occur. Impacts to burrowing owl would be reduced to less than significant with the implementation of Mitigation Measure BIO-1 that would require a preconstruction BUOW survey 30 days prior to commencement of construction activities. If BUOW are observed during the preconstruction survey, impacts shall be avoided through implementation of BUOW avoidance measures as described in the MSHCP.

Project implementation is not anticipated to result in impacts to known cultural or tribal cultural resources; refer to Section 4.5, *Cultural Resources*, and Section 4.18, *Tribal Cultural Resources*. In the unlikely event that archaeological resources are encountered during project construction, Mitigation Measure CUL-1 would require all project construction efforts to halt until an archaeologist examines the site, identifies the archaeological significance of the find, and

recommends a course of action. Based on discussion with the AB 52 Consulting Tribe(s)/Band(s), the project has the potential to impact TCRs. As such, Mitigation Measures TCR-1 and TCR-2 shall be implemented in order to minimize potential impacts to unknown TCRs. With the inclusion and implementation of these mitigation measures, impacts to TCRs would be reduced to less than significant.

- b) *Does the project have impacts that are individually limited, but cumulatively considerable?*
Determination: Less Than Significant With Mitigation Incorporated.

A significant impact may occur if a proposed project, in conjunction with related projects, would result in impacts that are less than significant when viewed separately, but would be significant when viewed together. As concluded in Section 4.1 through Section 4.20, the proposed project would not result in any significant impacts in any environmental categories with implementation of project mitigation measures. Implementation of mitigation measures at the project-level would reduce the potential for the incremental effects of the proposed project to be considerable when viewed in connection with the effects of past projects, current projects, or probable future projects. Impacts would be reduced to less than significant with mitigation incorporated in this regard.

- c) *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?* **Determination: Less Than Significant With Mitigation Incorporated.**

Previous sections of this Initial Study reviewed the proposed project's potential impacts related to aesthetics, air quality, noise, hazards and hazardous materials, traffic, and other issues. As concluded in these previous discussions, the proposed project would not have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly, following conformance with the existing regulatory framework and implementation of project mitigation measures. Impacts would be reduced to less than significant with mitigation incorporated in this regard.

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7.0 LIST OF APPENDICES

The following technical appendices can be made available upon request at Riverside County Flood Control and Water Conservation District. Please contact Jerry Aguirre with information requests about this project at 951.955.1245 or jeraguir@rivco.org.

Appendix A: Air Quality Memorandum

Appendix B-1: Biological Resources Assessment and MSHCP Consistency Analysis

Appendix B-2: Delineation of State and Federal Jurisdictional Waters

Appendix B-3: Burrowing Owl Focused Survey

Appendix C: Cultural Resources Assessment

Appendix D: Paleontological Resources Identification Memo

Appendix E: Greenhouse Gas Emissions Memorandum

Appendix F: Phase I Environmental Site Assessment

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Appendix A

Air Quality Memorandum

PERRIS VALLEY CHANNEL LATERAL B, STAGE 4 PROJECT

PERRIS VALLEY CHANNEL LATERAL B, STAGE 4 PROJECT

CITY OF PERRIS, COUNTY OF RIVERSIDE, CALIFORNIA

Air Quality Technical Memorandum

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PURPOSE

The purpose of this technical memorandum is to evaluate potential short- and long-term air quality impacts that could result from the proposed Perris Valley Channel Lateral B, Stage 4 Project (project), located within the limits of March Air Reserve Base (MARB) and the City of Perris (City), California.

PROJECT LOCATION

The project site is partially located within the limits of the City of Perris and lands owned by March Joint Powers Authority (MJPA) and MARB in southwestern Riverside County. The proposed alignment would be located between the existing Perris Valley Channel (PVC) Lateral B, Stage 2 facility at Heacock Street and the PVC Lateral B, Stage 5 facility that is under construction as part of the VIP 215 project to the northwest. The project is located within Township 3 South, Range 4 West, Section 36 San Bernardino Baseline Meridian within Assessor's Parcel Numbers (APNs) 294-220-003, 294-200-002, 294-180-007, 294-180-006, 294-180-037, 294-180-055, and 294-180-017.

EXISTING SITE CONDITIONS

The project area is characterized as developed and undeveloped-disturbed land. The surrounding areas consists of MARB to the east and scattered industrial development to the north, south, and west. An existing drainage course is located within MARB property approximately 350 feet west of the existing runway and 300 feet east of the western perimeter fence boundary of MARB. Runoff in this area drains from the north to south via this natural drainage course towards a soft bottom open channel at Heacock Street (Heacock Channel) eventually draining east towards Perris Valley Channel.

PROJECT DESCRIPTION

The project would construct PVC Lateral B Stage 4 which consists of approximately 6,000 feet of reinforced concrete box (RCB) culvert starting at Heacock Street (at the upstream end of PVC Lateral B, Stage 2) to the downstream terminus of the PVC Lateral B Stage 5 facility, which is currently under construction as part of the VIP-215 project. The project's general alignment begins at the downstream terminus of PVC Lateral B Stage 5 and heads south and east adjacent to the MARB west perimeter security fence before tying into the PVC Lateral B Stage 2 facility at Heacock Street. The project would include three transitions structures, four junction structures, twelve bolted down manholes for security, and two inlets along the southernmost end of the alignment to collect onsite flows from MARB. The project would also include two lateral stubs and bulkheads for the future construction of Lateral B-7 and Lateral B-8 in the City of Perris. The project would be located mostly within MARB right of way. This alignment will go through APN 294-180-055; where a 45-foot permanent easement has been dedicated for the construction and maintenance of Stage 4.

Construction activities are anticipated to occur over a period of 12 months. Site preparation is anticipated to take approximately one month, grading would take approximately five months, paving would take approximately one and half months, building construction would take approximately 5 months, and site cleanup would take approximately one months. Approximately 25,000 cubic yards of soil export would be required.

ENVIRONMENTAL SETTING

1.1 REGIONAL TOPOGRAPHY

The State of California is divided geographically into 15 air basins. The project site is located within the South Coast Air Basin (Basin), a 6,600-square mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and the San Jacinto Mountains to the north and east. The Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the San Gorgonio Pass area of Riverside County.

The extent and severity of the air pollution problem in the Basin is a function of the area's natural physical characteristics (weather and topography), as well as man-made influences (development patterns and lifestyle). Factors such as wind, sunlight, temperature, humidity, rainfall, and topography all affect the accumulation and dispersion of air pollutants throughout the Basin.

1.2 CLIMATE

The general region lies in the semi-permanent high-pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. The climate consists of a semi-arid environment with mild winters, warm summers, moderate temperatures, and comfortable humidity. Precipitation is limited to a few winter storms. The usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds.

The average annual temperature varies little throughout the Basin, averaging 75 degrees Fahrenheit (°F). However, with a less-pronounced oceanic influence, the eastern inland portions of the Basin show greater variability in annual minimum and maximum temperatures. All portions of the Basin have had recorded temperatures over 100°F in recent years.

Although the Basin has a semi-arid climate, the air near the surface is moist due to the presence of a shallow marine layer. Except for infrequent periods when dry, continental air is brought into the Basin by offshore winds, the ocean effect is dominant. Periods with heavy fog are frequent, and low stratus clouds, occasionally referred to as "high fog," are a characteristic climate feature. The annual average relative humidity is 70 percent at the coast and 57 percent in the eastern part of the Basin. Precipitation in the Basin is typically nine to 14 inches annually and is rarely in the form of snow or hail due to typically warm weather. The frequency and amount of rainfall are greater in the coastal areas of the Basin.

The height of the inversion is important in determining pollutant concentration. When the inversion is approximately 2,500 feet above sea level, the sea breezes carry the pollutants inland to escape over the mountain slopes or through the passes. At a height of 1,200 feet, the terrain prevents the pollutants from entering the upper atmosphere, resulting in a settlement in the foothill communities. Below 1,200 feet, the inversion puts a tight lid on pollutants, concentrating them in a shallow layer over the entire coastal Basin. Usually, inversions are lower before sunrise than during the day. Mixing heights for inversions are lower in the summer and more persistent, being partly responsible for the high levels of ozone (O₃) observed during the summer months in the Basin. Smog in southern California is generally the result of these temperature inversions combining with coastal day winds and local mountains to contain the pollutants for long periods of time, allowing them to form secondary pollutants by reacting with sunlight. The Basin has a limited ability to disperse these pollutants due to typically low wind speeds.

1.3 CRITERIA AIR POLLUTANTS

The Clean Air Act requires EPA to set National Ambient Air Quality Standards (NAAQS) for six common air pollutants (also known as "criteria air pollutants").¹ These pollutants are found all over the U.S. They can harm your health and the environment, and cause property damage.²

Carbon Monoxide (CO)

CO is an odorless, colorless toxic gas that is emitted by mobile and stationary sources as a result of incomplete combustion of hydrocarbons or other carbon-based fuels. In cities, automobile exhaust can cause as much as 95 percent of all CO emissions. CO replaces oxygen in the body's red blood cells. Individuals with a deficient blood supply to the heart, patients with diseases involving heart and blood vessels, fetuses (unborn babies), and patients with chronic hypoxemia (oxygen deficiency) as seen in high altitudes are most susceptible to the adverse effects of CO exposure. People with heart disease are also more susceptible to developing chest pains when exposed to low levels of CO.

Ozone (O₃)

O₃ occurs in two layers of the atmosphere. The layer surrounding the earth's surface is the troposphere. The troposphere extends approximately 10 miles above ground level, where it meets the second layer, the stratosphere. The stratospheric (the "good" O₃ layer) extends upward from about 10 to 30 miles and protects life on earth from the sun's harmful ultraviolet rays. "Bad" O₃ is a photochemical pollutant, and needs volatile organic compounds (VOCs), nitrogen oxides (NO_x), and sunlight to form; therefore, VOCs and NO_x are O₃ precursors. To reduce O₃ concentrations, it is necessary to control the emissions of these O₃ precursors. Significant O₃ formation generally requires an adequate amount of precursors in the atmosphere and a period of several hours in a stable atmosphere with strong sunlight. High O₃ concentrations can form over large regions when emissions from motor vehicles and stationary sources are carried hundreds of miles from their origins.

¹ United States Environmental Protection Agency, *Criteria Pollutants*, <https://www.epa.gov/criteria-air-pollutants>, accessed May 12, 2022.

² Ibid.

While O₃ in the upper atmosphere (stratosphere) protects the earth from harmful ultraviolet radiation, high concentrations of ground-level O₃ (in the troposphere) can adversely affect the human respiratory system and other tissues. O₃ is a strong irritant that can constrict the airways, forcing the respiratory system to work hard to deliver oxygen. Individuals exercising outdoors, children, and people with pre-existing lung disease such as asthma and chronic pulmonary lung disease are considered to be the most susceptible to the health effects of O₃. Short-term exposure (lasting for a few hours) to O₃ at elevated levels can result in aggravated respiratory diseases such as emphysema, bronchitis and asthma, shortness of breath, increased susceptibility to infections, inflammation of the lung tissue, increased fatigue, as well as chest pain, dry throat, headache, and nausea.

Nitrogen Dioxide (NO₂)

NO_x are a family of highly reactive gases that are a primary precursor to the formation of ground-level O₃ and react in the atmosphere to form acid rain. NO₂ (often used interchangeably with NO_x) is a reddish-brown gas that can cause breathing difficulties at elevated levels. Peak readings of NO₂ occur in areas that have a high concentration of combustion sources (e.g., motor vehicle engines, power plants, refineries, and other industrial operations). NO₂ can irritate and damage the lungs and lower resistance to respiratory infections such as influenza. The health effects of short-term exposure are still unclear. However, continued or frequent exposure to NO₂ concentrations that are typically much higher than those normally found in the ambient air may increase acute respiratory illnesses in children and increase the incidence of chronic bronchitis and lung irritation. Chronic exposure to NO₂ may aggravate eyes and mucus membranes and cause pulmonary dysfunction.

Coarse Particulate Matter (PM₁₀)

PM₁₀ refers to suspended particulate matter, which is smaller than 10 microns or ten one-millionths of a meter. PM₁₀ arises from sources such as road dust, diesel soot, combustion products, construction operations, and dust storms. PM₁₀ scatters light and significantly reduces visibility. In addition, these particulates penetrate into lungs and can potentially damage the respiratory tract. On June 19, 2003, the California Air Resources Board (CARB) adopted amendments to the statewide 24-hour particulate matter standards based upon requirements set forth in the Children's Environmental Health Protection Act (Senate Bill 25).

Fine Particulate Matter (PM_{2.5})

Due to recent increased concerns over health impacts related to fine particulate matter (particulate matter 2.5 microns in diameter or less), both State and Federal PM_{2.5} standards have been created. Particulate matter impacts primarily affect infants, children, the elderly, and those with pre-existing cardiopulmonary disease. In 1997, the U.S. Environmental Protection Agency (EPA) announced new PM_{2.5} standards. Industry groups challenged the new standard in court and the implementation of the standard was blocked. However, upon appeal by the EPA, the United States Supreme Court reversed this decision and upheld the EPA's new standards.

On January 5, 2005, the EPA published a Final Rule in the Federal Register that designates the Basin as a nonattainment area for Federal PM_{2.5} standards. On June 20, 2002, CARB adopted amendments for statewide annual ambient particulate matter air quality standards. These standards were revised/established due to increasing concerns by CARB that previous standards were inadequate, as almost everyone in California is exposed to levels at or above the current State standards during some parts of the year, and the statewide potential for significant health impacts associated with particulate matter exposure was determined to be large and wide-ranging. On July 8, 2016, EPA made a finding that the South Coast has attained the 1997 24-hour and annual PM_{2.5} standards based on 2011-2013 data. However, the Basin remains in nonattainment as the EPA has not determined that California has met the Federal Clean Air Act requirements for redesignating the Basin nonattainment area to attainment.

Sulfur Dioxide (SO₂)

Sulfur dioxide (SO₂) is a colorless, irritating gas with a rotten egg smell; it is formed primarily by the combustion of sulfur-containing fossil fuels. Sulfur dioxide is often used interchangeably with SO_x. Exposure of a few minutes to low levels of SO₂ can result in airway constriction in some asthmatics.

Volatile Organic Compounds (VOC)

VOCs are hydrocarbon compounds (any compound containing various combinations of hydrogen and carbon atoms) that exist in the ambient air. VOCs contribute to the formation of smog through atmospheric photochemical reactions and/or may be toxic. Compounds of carbon (also known as organic compounds) have different levels of reactivity; that is, they do not react at the same speed or do not form O₃ to the same extent when exposed to photochemical processes. VOCs often have an odor, and some examples include gasoline, alcohol, and the solvents used in paints. Exceptions to the VOC designation include: carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate. VOC is not considered a criteria pollutant; however, it is a precursor to O₃, which is a criteria pollutant. Due to the role VOC plays in O₃ formation, it is classified as a precursor pollutant and only a regional emissions threshold has been established. The terms VOC and reactive organic gases (ROG) (see below) are often used interchangeably.

Reactive Organic Gases (ROG)

Similar to VOCs, ROGs are also precursors in forming O₃ and consist of compounds containing methane, ethane, propane, butane, and longer chain hydrocarbons, which are typically the result of some type of combustion/decomposition process. Smog is formed when ROG and NO_x react in the presence of sunlight. ROG is not considered a criteria pollutant; however, it is a precursor to O₃, which is a criteria pollutant. The terms ROG and VOC are often used interchangeably.

1.4 LOCAL AMBIENT AIR QUALITY

CARB monitors ambient air quality at approximately 250 air monitoring stations across the State. Air quality monitoring stations usually measure pollutant concentrations ten feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations. The project site is located within Source

Receptor Area (SRA) 24, Perris Valley. The closest air monitoring station contains three-year data to the project site is the Reseda Monitoring Station. Local air quality data from 2018 to 2020 is provided in [Table 1, Summary of Air Quality Data](#). This table lists the monitored maximum concentrations and number of exceedances of Federal/State air quality standards for each year.

REGULATORY SETTING

1.5 SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Air Quality Thresholds

Under the California Environmental Quality Act (CEQA), the South Coast Air Quality Management District (SCAQMD) is an expert commenting agency on air quality within its jurisdiction or impacting its jurisdiction. Under the Federal Clean Air Act, the SCAQMD has adopted Federal attainment plans for O₃ and PM₁₀. The SCAQMD provides guidance to lead agencies on how to evaluate project air quality impacts related to the following criteria: (1) cause or contribute to any new violation of any air quality standard; (2) increase the frequency or severity of any existing violation of any air quality standard; or (3) delay timely attainment of any air quality standard or any required interim emission reductions or other milestones of any Federal attainment plan.

Table 1 Summary of Air Quality Data

Pollutant	California Standard	Federal Primary Standard	Year	Maximum Concentration ¹	Days (Samples) State/Federal Std. Exceeded
Ozone (O ₃) (1-hour) ²	0.09 ppm for 1 hour	NA ⁶	2018 2019 2020	0.117 ppm 0.118 ppm 0.125 ppm	31 / 0 28 / 0 34 / 1
Ozone (O ₃) (8-hour) ²	0.070 ppm for 8 hours	0.070 ppm for 8 hours	2018 2019 2020	0.103 ppm 0.095 ppm 0.106 ppm	68 / 67 66 / 64 77 / 74
Carbon Monoxide (CO) (1-hour) ³	20 ppm for 1 hour	35 ppm for 1 hour	2018 2019 2020	1.128 ppm 1.605 ppm 0.914 ppm	0 / 0 0 / 0 0 / 0
Nitrogen Dioxide (NO ₂) ³	0.180 ppm for 1 hour	0.100 ppm for 1 hour	2018 2019 2020	0.041 ppm 0.038 ppm 0.044 ppm	0 / 0 0 / 0 0 / 0
Fine Particulate Matter (PM _{2.5}) ^{3, 4}	No Separate Standard	35 µg/m ³ for 24 hours	2018 2019 2020	31.3 µg/m ³ 17.6 µg/m ³ 41.6 µg/m ³	NA / * NA / * NA / *
Particulate Matter (PM ₁₀) ^{2, 4, 5}	50 µg/m ³ for 24 hours	150 µg/m ³ for 24 hours ⁶	2018 2019 2020	64.4 µg/m ³ 97.0 µg/m ³ 92.3 µg/m ³	2 / 0 4 / 0 6 / 0
ppm = parts per million; PM ₁₀ = particulate matter 10 microns in diameter or less; µg/m ³ = micrograms per cubic meter; PM _{2.5} = particulate matter 2.5 microns in diameter or less; NA = not applicable; * = insufficient data available to determine the value					
Notes:					
1. Maximum concentration is measured over the same period as the California standards.					
2. Data collected from the Perris Monitoring Station located at 237 North D Street, Perris, California, 92570.					

3. Data collected from the Lake Elsinore – West Flint Street Monitoring Station located at 506 W Flint Street, Lake Elsinore, California 92530.
 4. PM₁₀ and PM_{2.5} exceedances are derived from the number of samples exceeded, not days.
 5. PM₁₀ exceedances are based on State thresholds established prior to amendments adopted on June 20, 2002.
 6. The Federal standard for 1-hour ozone was revoked in June 2005.
 7. The Federal standard for average PM₁₀ was revoked in December 2006.
- Sources:
 California Air Resources Board, *ADAM Air Quality Data Statistics*, <http://www.arb.ca.gov/adam/>, accessed April 29, 2022.
 California Air Resources Board, *AQMIS2: Air Quality Data*, <https://www.arb.ca.gov/aqmis2/aqdselect.php>, accessed April 29, 2022.

The SCAQMD’s *CEQA Air Quality Handbook* also provides significance thresholds for both construction and operation of projects within the SCAQMD jurisdictional boundaries. If the SCAQMD thresholds are exceeded, a potentially significant impact could result. However, ultimately the lead agency determines the thresholds of significance for impacts. If a project generates emissions in excess of the established mass daily emissions thresholds, as outlined in Table 2, South Coast Air Quality Management District Mass Daily Emissions Thresholds, a significant air quality impact may occur and additional analysis is warranted to fully assess the significance of impacts. In addition, SCAQMD establishes an odor threshold, which identifies that project creating an odor nuisance pursuant to SCAQMD Rule 402 would cause a significant impact.

Table 2: South Coast Air Quality Management District Mass Daily Emissions Thresholds

Phase	Pollutant (lbs/day)					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Construction	75	100	550	150	150	55
Operational	55	55	550	150	150	55
ROG = reactive organic gases; NO _x = nitrogen oxides; CO = carbon monoxide; SO _x = sulfur oxides; PM ₁₀ = particulate matter up to 10 microns; PM _{2.5} = particulate matter up to 2.5 microns; lbs = pounds Source: South Coast Air Quality Management District, <i>South Coast AQMD Significance Thresholds</i> , April 2019.						

Localized Significance Thresholds

Localized Significance Thresholds (LSTs) were developed in response to SCAQMD Governing Boards’ Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the *Final Localized Significance Threshold Methodology* (dated July 2008) for guidance. The LST methodology assists lead agencies in analyzing localized impacts associated with project-specific level proposed projects. The SCAQMD provides the LST lookup tables for one-, two-, and five-acre projects emitting CO, NO_x, PM₁₀, or PM_{2.5}. The LST methodology and associated mass rates are not designed to evaluate localized impacts from mobile sources traveling over the roadways.

1.6 CITY OF PERRIS

Comprehensive General Plan 2030

The City of Perris approved the *Perris Comprehensive General Plan 2030* (General Plan 2030) on April 26, 2005. General Plan 2030 is a 30-year guide for local government decision on growth, capital investment,

and physical development in the City of Perris. It guides future development plans and gives direction on how to make the future happen. Goals and policies applicable to the proposed project include:

Healthy Community Element

Goal H-6: Healthy Environment – Support efforts of local businesses and regional agencies to improve the health of our region’s environment.

- Policy HC 6.3 Promote measures that will be effective in reducing emissions during construction activities
 - Perris will ensure that construction activities follow existing South Coast Air Quality Management District (SCAQMD) rules and regulations
 - All construction for public and private projects will also comply with California Air Resources Board’s vehicle standards. For projects that may exceed daily construction emissions established by the SCAQMD, Best Available Control Measure will be incorporated to reduce construction emissions to below daily emission standards established by the SCAQMD
 - Project proponents will be required to prepare and implement a Construction Management Plan which will include Best Available Control Measures among others. Appropriate control measures will be determined on a project by project basis and should be specific to the pollutant for which the daily threshold is exceed.

1.7 MARCH JOINT POWER AUTHORITY

March Joint Power Authority General Plan

The *General Plan of the March Joint Powers Authority* (MJPA General Plan) is a long-range comprehensive plan designed to outline and delineate use and development of an area known formerly as March Air Force Base, prior to the base realignment in April 1996 to March Air Reserve Base. The MJPA General Plan defines reuse and development opportunities of the area, while preserving the environmental quality. The MJPA General Plan has seven mandatory elements: Land Use Element, Transportation Element, Noise/Air Quality Element, Housing Element, Resource Management Element, and Safety/Risk Management Element. Within the Noise/Air Quality Element, discussion applicable to the proposed project include:

New Construction: The March JPA Planning Area has no special controls on fugitive dust other than complying with the SCAQMD’s nuisance regulations. Developers must submit a grading plan before receiving a grading permit; the plan must include dust control on site, such as periodic watering, soil binders, etc. Trucks are not required to cover their loads on public streets.

The MIPA General Plan establishes goals and polices to reach long-term objectives, and establishes long-term policy for day-to-day decisions, based upon those objectives. Goals and policies applicable to the proposed project include:

Noise/Air Quality Element

Goal 5: Maximum the effectiveness of air quality control programs through coordination with other governmental entities.

- Policy 5.1 Require end-users to demonstrate that South Coast Air Quality Management District permits have been obtained.
- Policy 5.2 Support state and federal legislation that results in improved air quality in the South Coast Air Basin.

Goal 8: Reduce air pollution emissions and impacts through siting and building design.

- Policy 8.1 Support the use of low polluting construction materials and coatings.
- Policy 8.2 Encourage the separation of sensitive receptors, such as schools and hospitals, from sources of toxic emissions.

Goal 9: Reduce fugitive dust and particulate matter emissions.

- Policy 9.1 Require all feasible fugitive dust reduction techniques to be utilized during construction activities.
- Policy 9.3 Support land division design which minimizes grading and maintains the natural topography to the maximum extent feasible.
- Policy 9.4 Create standards to implement rules governed through the South Coast Air Quality Management District, such as Rules 403 and 1186.

1.8 REGIONAL

South Coast Air Quality Management District

In 2008, the South Coast Air Quality Management District (SCAQMD) released draft guidance regarding interim CEQA GHG significance thresholds.³ Within its October 2008 document, the SCAQMD proposed the use of a percent emission reduction target to determine significance for commercial/residential projects that emit greater than 3,000 metric tons carbon dioxide equivalent (MTCO₂e) per year. Under this proposal, commercial/residential projects that emit fewer than 3,000 MTCO₂e per year would be assumed to have a

³ South Coast Air Quality Management District, *Draft Guidance Document—Interim CEQA Greenhouse Gas (GHG) Significance Threshold*, October 2008.

less than significant impact on climate change. On December 5, 2008, the SCAQMD Governing Board adopted the staff proposal for an interim GHG significance threshold of 10,000 MTCO₂e per year for stationary source/industrial projects where the SCAQMD is the lead agency. However, the SCAQMD has yet to adopt a GHG significance threshold for application by local lead agencies in their review of land use development projects (e.g., residential/commercial projects).

CALIFORNIA ENVIRONMENTAL QUALITY ACT THRESHOLDS

In accordance with the CEQA Guidelines, project impacts are evaluated to determine whether significant adverse environmental impacts would occur. This analysis will focus on the project's potential impacts and provide mitigation measures, if required, to reduce or avoid any potentially significant impacts that are identified. Accordingly, a project would have a significant adverse impact related to air quality if it would cause one or more of the following to occur:

- Conflict with or obstruct implementation of the applicable air quality plan (refer to Impact AQ-1);
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable Federal or State ambient air quality standard (refer to Impact AQ-2);
- Expose sensitive receptors to substantial pollutant concentrations (refer to Impact AQ-3); and/or
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people (refer to Impact AQ-4).

IMPACT ANALYSIS

IMPACT AQ-1: WOULD THE PROJECT CONFLICT WITH OR OBSTRUCT IMPLEMENTATION OF THE APPLICABLE AIR QUALITY PLAN?

Less Than Significant Impact. The project site is located within the South Coast Air Basin (Basin). The SCAQMD has jurisdiction in the Basin, which has a history of recorded air quality violations and is an area where both State and Federal ambient air quality standards are exceeded. Areas that meet ambient air quality standards are classified as attainment areas, while areas that do not meet these standards are classified as nonattainment areas. The SCAQMD is required, pursuant to the Federal Clean Air Act, to reduce emissions of the air pollutants for which the Basin is in nonattainment.

In order to reduce emissions, the SCAQMD adopted the *2016 Air Quality Management plan for the South Coast Air Basin* (2016 AQMP) which establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving State and Federal air quality standards. The 2016 AQMP is a regional and

multi-agency effort including the SCAQMD, CARB, the Southern California Association of Governments (SCAG), and the EPA.

The 2016 AQMP pollutant control strategies are based on the latest scientific and technical information and planning assumptions, including the *2016-2040 Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS), updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts. SCAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans. The SCAQMD considers projects that are consistent with the 2016 AQMP, which is intended to bring the Basin into attainment for all criteria pollutants, to also have less than significant cumulative impacts. While SCAG has recently adopted the *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy* (2020-2045 RTP/SCS), SCAQMD has not released an updated AQMP that utilizes information from the 2020-2045 RTP/SCS. The SCAQMD is planning to adopt the updated AQMP in late 2022. As such, this consistency analysis is based off the 2016 AQMP and 2016-2040 RTP/SCS.

The project proposes to construct a storm drain facility to provide flood protection to MARB and the adjacent area. During project construction, the project would comply with SCAQMD Rule 403 in reducing fugitive dust emissions. Project operation would be similar to existing conditions. Maintenance activities that may be required during project operation would occur on an as needed basis. Typical maintenance activities for a storm drain facility would include vegetation removal or thinning, sediment removal, debris and trash removal, bank stabilization, and in-channel erosion repair, none of which would have the potential to result in significant air pollution. As such, the proposed storm drain facility would not conflict with applicable land use plans, including the General Plan 2030 and MJPA General Plan, during project construction and operation. It should be noted that the proposed storm drain facility would not involve any uses that have the potential to affect SCAG forecasts on population, housing, and employment in the region. As the SCAQMD has incorporated these forecasts into the 2016 AQMP, it could be implied that the proposed project would be consistent with the 2016 AQMP.

In addition, the project's short-term construction and long-term operational emissions would not exceed SCAQMD thresholds; refer to Impact AQ-2 below. As such, the proposed project would not conflict with or obstruct implementation of the 2016 AQMP.

Mitigation Measures: No mitigation is required.

IMPACT AQ-2: WOULD THE PROJECT RESULT IN A CUMULATIVELY CONSIDERABLE NET INCREASE OF ANY CRITERIA POLLUTANT FOR WHICH THE PROJECT REGION IS NON-ATTAINMENT UNDER AN APPLICABLE FEDERAL OR STATE AMBIENT AIR QUALITY STANDARD?

Less Than Significant Impact

SHORT-TERM (CONSTRUCTION) EMISSIONS

The project involves construction activities associated with site preparation, grading, construction, paving, and site cleanup. Project construction would occur for approximately 12 months. Earthwork would result in approximately 71,000 cubic yards of cut and 46,000 cubic yards of fill, resulting in 25,000 cubic yards of soil to be exported. Exhaust emission factors for typical diesel-powered heavy equipment are based on the program defaults of the most recent version of the California Emissions Estimator Model (CalEEMod), version 2020.4.0. Variables factored into estimating the total construction emissions include the level of activity, length of construction period, number of pieces and types of equipment in use, site characteristics, weather conditions, number of construction personnel, and the amount of materials to be transported on- or off-site. The analysis of daily construction emissions has been prepared using CalEEMod, refer to [Appendix A, Air Quality Emissions Data, Table 3, Short-Term Construction Emissions](#), presents the anticipated daily short-term construction emissions.

Table 3: Short-Term Construction Emissions

Emissions Source	Maximum Daily Emissions (pounds/day) ¹					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Year 1	10.83	97.55	125.67	0.23	11.35	7.12
Year 2	0.63	5.17	7.58	0.01	0.29	0.25
Maximum Daily Emissions ²	10.83	97.55	125.67	0.23	11.35	7.12
SCAQMD Thresholds	75	100	550	150	150	55
Is Threshold Exceeded?	No	No	No	No	No	No
Notes: Emissions were calculated using CalEEMod, version 2020.4.0. Winter emissions represent the worst-case scenario. Modeling assumptions include compliance with SCAQMD Rule 403 which requires: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stockpiles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour.						
Source: Refer to Appendix A for detailed model input/output data.						

Fugitive Dust Emissions

Construction activities are a source of fugitive dust emissions that may have a substantial, temporary impact on local air quality. In addition, fugitive dust may be a nuisance to those living and working in the project area. Fugitive dust emissions are associated with land clearing, ground excavation, cut-and-fill, and truck travel on unpaved roadways. Fugitive dust emissions vary substantially from day to day, depending on the level of activity, specific operations, and weather conditions. Fugitive dust from demolition, grading, and construction is expected to be short-term and would cease upon project completion. It should be noted that most of this material is inert silicates, rather than the complex organic particulates released from combustion sources, which are more harmful to health.

Dust (larger than 10 microns) generated by such activities usually becomes more of a local nuisance than a serious health problem. Of particular health concern is the amount of PM₁₀ generated as a part of fugitive

dust emissions. PM₁₀ poses a serious health hazard alone or in combination with other pollutants. PM_{2.5} is mostly produced by mechanical processes. These include automobile tire wear, industrial processes such as cutting and grinding, and re-suspension of particles from the ground or road surfaces by wind and human activities such as construction or agriculture. PM_{2.5} is mostly derived from combustion sources, such as automobiles, trucks, and other vehicle exhaust, as well as from stationary sources. These particles are either directly emitted or are formed in the atmosphere from the combustion of gases such as NO_x and SO_x combining with ammonia. PM_{2.5} components from material in the earth's crust, such as dust, are also present, with the amount varying in different locations.

Construction activities would comply with SCAQMD Rule 402, which prohibits fugitive dusts from creating a nuisance, and Rule 403, which requires that fugitive dust emissions controls such as regular watering or other dust prevention measures to be implemented. Adherence to SCAQMD Rule 402 and Rule 403 would greatly reduce PM₁₀ and PM_{2.5} concentrations and ensure project consistency with SCAQMD requirements and General Plan 2030. As depicted in Table 3, total PM₁₀ and PM_{2.5} emissions would not exceed the SCAQMD thresholds during construction. Thus, construction-related air quality impacts from fugitive dust emissions would be less than significant.

Construction Equipment and Worker Vehicle Exhaust

Exhaust emissions (e.g., NO_x and CO) from construction activities include emissions associated with the transport of machinery and supplies to and from the project site, emissions produced on-site as the equipment is used, and emissions from trucks transporting materials to/from the site. As presented in Table 3, construction equipment and worker vehicle exhaust emissions would be below the established SCAQMD thresholds. Therefore, air quality impacts from equipment and vehicle exhaust emissions would be less than significant.

Total Daily Construction Emissions

In accordance with the SCAQMD Guidelines, CalEEMod was utilized to model construction emissions for ROG, NO_x, CO, SO_x, PM₁₀, and PM_{2.5}. As indicated in Table 3, criteria pollutant emissions during construction of the proposed project would not exceed the SCAQMD significance thresholds. Thus, construction-related air quality impacts from criteria pollutant emissions would be less than significant.

Asbestos

Asbestos is a term used for several types of naturally occurring fibrous minerals that are a human health hazard when airborne. The most common type of asbestos is chrysotile, but other types such as tremolite and actinolite are also found in California. Asbestos is classified as a known human carcinogen by State, Federal, and international agencies and was identified as a toxic air contaminant by the CARB in 1986.

Asbestos can be released from serpentinite and ultramafic rocks when the rock is broken or crushed. At the point of release, the asbestos fibers may become airborne, causing air quality and human health hazards. These rocks have been commonly used for unpaved gravel roads, landscaping, fill projects, and other improvement projects in some localities. Asbestos may be released to the atmosphere due to vehicular traffic on unpaved roads, during grading for development projects, and at quarry operations. All

of these activities may have the effect of releasing potentially harmful asbestos into the air. Natural weathering and erosion processes can act on asbestos bearing rock and make it easier for asbestos fibers to become airborne if such rock is disturbed. According to the Department of Conservation Division of Mines and Geology, A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos Report, serpentinite and ultramafic rocks are not known to occur within the project area.⁴ Thus, there would be no impact in this regard.

LONG-TERM (OPERATIONAL) EMISSIONS

The project proposes the construction of a storm drain facility. As discussed above, project operation would be similar to existing conditions and maintenance activities that may be required would occur on an as needed basis. As such, the project would not generate additional traffic trips when compared to existing conditions or result in significant operational emissions. No impacts would occur in this regard.

Air Quality Health Impacts

Adverse health effects induced by criteria pollutant emissions are highly dependent on a multitude of interconnected variables (e.g., cumulative concentrations, local meteorology and atmospheric conditions, and the number and character of exposed individual [e.g., age, gender]). In particular, ozone precursors ROG_s and NO_x affect air quality on a regional scale. Health effects related to ozone are therefore the product of emissions generated by numerous sources throughout a region. Existing models have limited sensitivity to small changes in criteria pollutant concentrations, and, as such, translating project-generated criteria pollutants to specific health effects or additional days of nonattainment would produce meaningless results. In other words, the project's less than significant increases in regional air pollution from criteria air pollutants would have nominal or negligible impacts on human health.

The issue of correlating regional air pollution to human health effects was raised in litigation regarding the Friant Ranch project, which is a 942-acre master-planned community in Fresno County. In 2011, litigation was filed by the Sierra Club and other groups challenging the adequacy of Fresno County's EIR for failing to comply with CEQA. The Superior Court upheld all aspects of the EIR, but an appeal then followed, ultimately reversing the decision as it held that the EIR was deficient in its informational discussion of air quality impacts as they connect to adverse human health effects. In the appeal process the South Coast Air Quality Management District (SCAQMD) and San Joaquin Valley Air Pollution Control District (SJVAPCD) took the lead on behalf of air quality regulating agencies to file amicus briefs to identify the infeasibility of conducting this type of analysis using the tools that are currently available. As noted in the Brief of Amicus Curiae by the SCAQMD, the SCAQMD acknowledged that it would be extremely difficult, if not impossible to quantify health impacts of criteria pollutants for various reasons including modeling limitations as well as where in the atmosphere air pollutants interact and form.⁵ Further, as noted in the Brief of Amicus Curiae by the

⁴ Department of Conservation Division of Mines and Geology, *A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos Report*, August 2000, https://ww3.arb.ca.gov/toxics/asbestos/ofr_2000-019.pdf, accessed May 3, 2022.

⁵ South Coast Air Quality Management District, *Application of the South Coast Air Quality Management District for Leave to File Brief of Amicus Curiae in Support of Neither Party and Brief of Amicus Curiae. In the Supreme*

SJVAPCD, SJVAPCD has acknowledged that currently available modeling tools are not equipped to provide a meaningful analysis of the correlation between an individual development project's air emissions and specific human health impacts.⁶

The SCAQMD acknowledges that health effects quantification from ozone, as an example is correlated with the increases in ambient level of ozone in the air (concentration) that an individual person breathes. SCAQMD's Brief of Amicus Curiae states that it would take a large amount of additional emissions to cause a modeled increase in ambient ozone levels over the entire region. The SCAQMD states that based on their own modeling in the SCAQMD's *2012 Air Quality Management Plan*, a reduction of 432 tons (864,000 pounds) per day of NO_x and a reduction of 187 tons (374,000 pounds) per day of VOCs would reduce ozone levels at highest monitored site by only nine parts per billion. As such, the SCAQMD concludes that it is not currently possible to accurately quantify ozone-related health impacts caused by NO_x or VOC emissions from relatively small projects (defined as projects with regional scope) due to photochemistry and regional model limitations. As such, for the purpose of this analysis, since the project would not exceed SCAQMD thresholds for construction and operational air emissions, the project would have a less than significant impact for air quality health impacts as well.

Mitigation Measures: No mitigation is required.

IMPACT AQ-3: WOULD THE PROJECT EXPOSE SENSITIVE RECEPTORS TO SUBSTANTIAL POLLUTANT CONCENTRATIONS?

Less Than Significant Impact. The closest sensitive receptor for the purpose of an LST analysis is the single-family residence located approximately 145 feet to west from project site at 5137 Patterson Avenue. In order to identify impacts to sensitive receptors, the SCAQMD recommends addressing LSTs for construction and operations impacts (area sources only).

Localized Significance Thresholds

LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the Final Localized Significance Threshold Methodology (dated June 2003 [revised 2008]) for guidance.⁷ The LST methodology assists lead agencies in analyzing localized air quality impacts. The SCAQMD provides the LST screening lookup tables for one-, two-, and five-acre projects emitting CO, NO_x, PM_{2.5}, or PM₁₀. The LST methodology and associated mass rates are not designed

Court of California. Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno, 2014.

⁶ San Joaquin Valley Air Pollution Control District, Application for Leave to File Brief of Amicus Curiae Brief of San Joaquin Valley Unified Air Pollution Control District in Support of Defendant and Respondent, County of Fresno and Real Party In Interest and Respondent, Friant Ranch, L.P. In the Supreme Court of California. *Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno*, 2014.

⁷ South Coast Air Quality Management District, *Final Localized Significance Threshold Methodology*, July 2008.

to evaluate localized impacts from mobile sources traveling over the roadways. The project is located in SRA 24 (Perris Valley).

Construction

The LST thresholds for two-acre projects were utilized for the construction LST analysis per SCAQMD guidance. The nearest sensitive use is a single-family residence located approximately 145 feet (44.2 meters) to the west of the project site. Therefore, the LSTs for 25 meters were utilized as this is the most conservative threshold for sensitive use located at this distance. Table 4, Localized Significance of Construction Emissions, shows the localized construction-related emissions. It is noted that the localized emissions presented in Table 4 are less than those in Table 3 because localized emissions include only on-site emissions (i.e., from construction equipment and fugitive dust). As shown in Table 4, emissions would not exceed the LST mass rate screening thresholds for SRA 24.

Operations

According to SCAQMD localized significance threshold methodology, LSTs would apply to the operational phase of a proposed project if the project includes stationary sources or attracts mobile sources that may spend extended periods queuing and idling at the site (e.g., warehouse or transfer facilities). The proposed project does not include such uses and would not cause any emissions in operations as the project is a flood control facility. Thus, due to the lack of such emissions, no long-term localized significance threshold analysis is necessary. Operational LST impacts would be less than significant in this regard.

Table 4: Localized Significance of Construction Emissions

Maximum Emissions	Maximum Daily Emissions (pounds/day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Year 1 ^{1,3}	58.41	81.11	5.52	3.10
Year 2 ^{2,3}	5.16	7.44	0.23	0.23
Maximum Daily Emissions	58.41	81.11	5.52	3.10
<i>Localized Significance Threshold Mass Rate Screening Criteria</i> ⁴	170	883	7	4
Thresholds Exceeded?	No	No	No	No
Note: Maximum on-site daily emissions occur during site preparation for PM ₁₀ , and PM _{2.5} , and grading phase for NO _x , and CO during Year 1. Maximum on-site daily emissions occur during paving phase for NO _x , CO, PM ₁₀ , and PM _{2.5} during Year 2. Modeling assumptions include compliance with SCAQMD Rule 403 which requires: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stock piles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour. The Localized Significance Threshold Mass Rate Screening Criteria was determined using Appendix C of the SCAQMD <i>Final Localized Significant Threshold Methodology</i> guidance document for pollutants NO _x , CO, PM ₁₀ , and PM _{2.5} . The Localized Significance Threshold Mass Rate Screening Threshold was based on the anticipated daily acreage disturbance for construction (two-acre site), the distance to sensitive receptors (25 meters), and the source receptor area (SRA 24).				

Conclusion

The nearest sensitive receptors are single-family residence located west of the project site. As discussed under Impact AQ-2, the project would not exceed the SCAQMD's land use screening thresholds during construction or operational activities. Additionally, the project would be required to comply with SCAQMD Rule 402, which prohibits fugitive dusts from creating a nuisance; and Rule 403, which aims to reduce construction-related fugitive dust emissions by requiring best management practices such as properly maintain mobile and other construction equipment, replace ground cover in disturbed areas quickly, water exposed surfaces three times daily, cover stockpiles with tarps, water all haul roads twice daily, and limit speeds on unpaved roads to 15 miles per hour. Further, construction equipment would not be confined to one area and the associated emissions would fluctuate throughout the day as well as within each phase of construction depending on the quantity, duration, and type of equipment used at the time. As such, the project would not concentrate construction emissions near sensitive receptors for an extended period of time, and sensitive receptors would not be exposed to substantial pollutant concentrations during operation of the proposed project. Impacts would be less than significant in this regard.

Mitigation Measures: No mitigation is required.

**IMPACT AQ-4: RESULT IN OTHER EMISSIONS (SUCH AS THOSE LEADING TO ODORS)
 ADVERSELY AFFECTING A SUBSTANTIAL NUMBER OF PEOPLE?**

Less Than Significant Impact. California Health and Safety Code, Division 26, Part 4, Chapter 3, Section 41700 prohibits the emission of any material which causes nuisance to a considerable number of persons or endangers the comfort, health, or safety of the public. Projects required to obtain permits from SCAQMD, typically industrial and some commercial projects, are evaluated by SCAQMD staff for potential odor nuisance and conditions may be applied (or control equipment required) where necessary to prevent occurrence of public nuisance. The proposed project would not require such a permit from SCAQMD.

According to the SCAQMD *CEQA Air Quality Handbook*, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed project does not include any uses identified by the SCAQMD as being associated with odors. Construction activities associated with the project may generate detectable odors from heavy-duty equipment exhaust and architectural coatings. However, construction-related odors would be short-term in nature and cease upon project completion. In addition, the project would be required to comply with the California Code of Regulations, Title 13, Sections 2449(d)(3) and 2485, which minimizes the idling time of construction equipment either by shutting it off when not in use or by reducing the time of idling to no more than five minutes. This would further reduce the detectable odors from heavy-duty equipment exhaust. No other types of emissions beyond those analyzed above would be generated by the proposed flood control facility. As such, the project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. Impacts would be less than significant in this regard.

Mitigation Measures: No mitigation is required.

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Appendix A Air Quality Emissions Data

Appendix A Air Quality Emissions Data

Perris Valley - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Perris Valley

Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	6.00	1000sqft	0.14	6,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - per construction questionnaire

Off-road Equipment - per PD
other material handling equipment is for moving RCB during construction

Off-road Equipment - off-highway trucks includes 2 water trucks and 15 haul trucks

Off-road Equipment - per PD

Off-road Equipment - per PD

Off-road Equipment - per PD

Trips and VMT - per construction questionnaire

Grading - per construction questionnaire

Construction Off-road Equipment Mitigation - Rule 403

Perris Valley - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	100.00	150.00
tblConstructionPhase	NumDays	2.00	150.00
tblConstructionPhase	NumDays	5.00	44.00
tblConstructionPhase	NumDays	5.00	22.00
tblConstructionPhase	NumDays	1.00	22.00
tblGrading	MaterialExported	0.00	25,000.00
tblOffRoadEquipment	HorsePower	247.00	187.00
tblOffRoadEquipment	LoadFactor	0.40	0.41
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	HaulingTripLength	20.00	5.00

2.0 Emissions Summary

Perris Valley - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	10.8302	97.5541	125.6661	0.2260	16.6127	4.6711	21.2838	7.2470	4.2977	11.5447	0.0000	21,949.3271	21,949.3271	6.8028	0.0751	22,141.7734
2024	0.6278	5.1675	7.5791	0.0136	0.0559	0.2349	0.2908	0.0148	0.2348	0.2497	0.0000	1,290.5631	1,290.5631	0.0982	1.1200e-003	1,292.2917
Maximum	10.8302	97.5541	125.6661	0.2260	16.6127	4.6711	21.2838	7.2470	4.2977	11.5447	0.0000	21,949.3271	21,949.3271	6.8028	0.0751	22,141.7734

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	10.8302	97.5541	125.6661	0.2260	6.6810	4.6711	11.3521	2.8251	4.2977	7.1229	0.0000	21,949.3271	21,949.3271	6.8028	0.0751	22,141.7734
2024	0.6278	5.1675	7.5791	0.0136	0.0559	0.2349	0.2908	0.0148	0.2348	0.2497	0.0000	1,290.5631	1,290.5631	0.0982	1.1200e-003	1,292.2917
Maximum	10.8302	97.5541	125.6661	0.2260	6.6810	4.6711	11.3521	2.8251	4.2977	7.1229	0.0000	21,949.3271	21,949.3271	6.8028	0.0751	22,141.7734

Perris Valley - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.6400e-003	1.0000e-005	6.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3100e-003	1.3100e-003	0.0000		1.4000e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.6400e-003	1.0000e-005	6.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1.3100e-003	1.3100e-003	0.0000	0.0000	1.4000e-003

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.6400e-003	1.0000e-005	6.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3100e-003	1.3100e-003	0.0000		1.4000e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.6400e-003	1.0000e-005	6.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1.3100e-003	1.3100e-003	0.0000	0.0000	1.4000e-003

Perris Valley - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/3/2023	5/2/2023	5	22	
2	Grading	Grading	5/1/2023	11/24/2023	5	150	
3	Building Construction	Building Construction	5/1/2023	11/24/2023	5	150	
4	Paving	Paving	1/1/2024	2/29/2024	5	44	
5	Site Cleanup	Paving	3/1/2024	4/1/2024	5	22	

Acres of Grading (Site Preparation Phase): 22

Acres of Grading (Grading Phase): 375

Acres of Paving: 0.14

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rollers	1	8.00	80	0.38
Site Preparation	Rubber Tired Dozers	2	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Other Material Handling Equipment	17	8.00	168	0.40

Perris Valley - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading	Scrapers	2	8.00	367	0.48
Building Construction	Cranes	2	8.00	231	0.29
Building Construction	Excavators	1	8.00	158	0.38
Building Construction	Other Material Handling Equipment	7	8.00	168	0.40
Paving	Pumps	2	8.00	84	0.74
Site Cleanup	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	21	53.00	0.00	3,125.00	14.70	6.90	5.00	LD_Mix	HDT_Mix	HHDT
Building Construction	10	3.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Cleanup	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Perris Valley - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					13.1047	0.0000	13.1047	6.7350	0.0000	6.7350			0.0000			0.0000
Off-Road	1.3677	14.2073	8.9047	0.0190		0.6625	0.6625		0.6095	0.6095		1,839.2094	1,839.2094	0.5948		1,854.0803
Total	1.3677	14.2073	8.9047	0.0190	13.1047	0.6625	13.7672	6.7350	0.6095	7.3444		1,839.2094	1,839.2094	0.5948		1,854.0803

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0342	0.0234	0.2979	8.9000e-004	0.1118	5.2000e-004	0.1123	0.0296	4.8000e-004	0.0301		91.1710	91.1710	2.2900e-003	2.4000e-003	91.9438
Total	0.0342	0.0234	0.2979	8.9000e-004	0.1118	5.2000e-004	0.1123	0.0296	4.8000e-004	0.0301		91.1710	91.1710	2.2900e-003	2.4000e-003	91.9438

Perris Valley - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.8553	0.0000	4.8553	2.4953	0.0000	2.4953			0.0000			0.0000
Off-Road	1.3677	14.2073	8.9047	0.0190		0.6625	0.6625		0.6095	0.6095	0.0000	1,839.2094	1,839.2094	0.5948		1,854.0803
Total	1.3677	14.2073	8.9047	0.0190	4.8553	0.6625	5.5178	2.4953	0.6095	3.1048	0.0000	1,839.2094	1,839.2094	0.5948		1,854.0803

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0342	0.0234	0.2979	8.9000e-004	0.1118	5.2000e-004	0.1123	0.0296	4.8000e-004	0.0301		91.1710	91.1710	2.2900e-003	2.4000e-003	91.9438
Total	0.0342	0.0234	0.2979	8.9000e-004	0.1118	5.2000e-004	0.1123	0.0296	4.8000e-004	0.0301		91.1710	91.1710	2.2900e-003	2.4000e-003	91.9438

Perris Valley - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6724	0.0000	2.6724	0.2895	0.0000	0.2895			0.0000			0.0000
Off-Road	6.5159	58.4108	81.1084	0.1404		2.8083	2.8083		2.5837	2.5837		13,595.72 30	13,595.72 30	4.3971		13,705.65 13
Total	6.5159	58.4108	81.1084	0.1404	2.6724	2.8083	5.4807	0.2895	2.5837	2.8731		13,595.72 30	13,595.72 30	4.3971		13,705.65 13

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0285	0.8908	0.4413	3.3600e-003	0.0915	6.4900e-003	0.0980	0.0251	6.2100e-003	0.0313		358.6116	358.6116	5.2300e-003	0.0565	375.5782
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1815	0.1242	1.5789	4.7200e-003	0.5924	2.7800e-003	0.5952	0.1571	2.5600e-003	0.1597		483.2065	483.2065	0.0121	0.0127	487.3020
Total	0.2100	1.0150	2.0201	8.0800e-003	0.6839	9.2700e-003	0.6932	0.1822	8.7700e-003	0.1910		841.8181	841.8181	0.0174	0.0692	862.8802

Perris Valley - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.9901	0.0000	0.9901	0.1073	0.0000	0.1073			0.0000			0.0000
Off-Road	6.5159	58.4108	81.1084	0.1404		2.8083	2.8083		2.5837	2.5837	0.0000	13,595.72 30	13,595.72 30	4.3971		13,705.65 13
Total	6.5159	58.4108	81.1084	0.1404	0.9901	2.8083	3.7984	0.1073	2.5837	2.6909	0.0000	13,595.72 30	13,595.72 30	4.3971		13,705.65 13

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0285	0.8908	0.4413	3.3600e-003	0.0915	6.4900e-003	0.0980	0.0251	6.2100e-003	0.0313		358.6116	358.6116	5.2300e-003	0.0565	375.5782
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1815	0.1242	1.5789	4.7200e-003	0.5924	2.7800e-003	0.5952	0.1571	2.5600e-003	0.1597		483.2065	483.2065	0.0121	0.0127	487.3020
Total	0.2100	1.0150	2.0201	8.0800e-003	0.6839	9.2700e-003	0.6932	0.1822	8.7700e-003	0.1910		841.8181	841.8181	0.0174	0.0692	862.8802

Perris Valley - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6910	23.8559	33.2318	0.0572		1.1901	1.1901		1.0949	1.0949		5,535.4813	5,535.4813	1.7903		5,580.2385
Total	2.6910	23.8559	33.2318	0.0572		1.1901	1.1901		1.0949	1.0949		5,535.4813	5,535.4813	1.7903		5,580.2385

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0400e-003	0.0347	0.0139	1.8000e-004	6.4100e-003	2.9000e-004	6.6900e-003	1.8400e-003	2.7000e-004	2.1200e-003		18.5731	18.5731	1.9000e-004	2.7500e-003	19.3963
Worker	0.0103	7.0300e-003	0.0894	2.7000e-004	0.0335	1.6000e-004	0.0337	8.8900e-003	1.4000e-004	9.0400e-003		27.3513	27.3513	6.9000e-004	7.2000e-004	27.5831
Total	0.0113	0.0417	0.1033	4.5000e-004	0.0399	4.5000e-004	0.0404	0.0107	4.1000e-004	0.0112		45.9244	45.9244	8.8000e-004	3.4700e-003	46.9794

Perris Valley - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6910	23.8559	33.2318	0.0572		1.1901	1.1901		1.0949	1.0949	0.0000	5,535.4813	5,535.4813	1.7903		5,580.2385
Total	2.6910	23.8559	33.2318	0.0572		1.1901	1.1901		1.0949	1.0949	0.0000	5,535.4813	5,535.4813	1.7903		5,580.2385

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0400e-003	0.0347	0.0139	1.8000e-004	6.4100e-003	2.9000e-004	6.6900e-003	1.8400e-003	2.7000e-004	2.1200e-003		18.5731	18.5731	1.9000e-004	2.7500e-003	19.3963
Worker	0.0103	7.0300e-003	0.0894	2.7000e-004	0.0335	1.6000e-004	0.0337	8.8900e-003	1.4000e-004	9.0400e-003		27.3513	27.3513	6.9000e-004	7.2000e-004	27.5831
Total	0.0113	0.0417	0.1033	4.5000e-004	0.0399	4.5000e-004	0.0404	0.0107	4.1000e-004	0.0112		45.9244	45.9244	8.8000e-004	3.4700e-003	46.9794

Perris Valley - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6117	5.1571	7.4396	0.0132		0.2346	0.2346		0.2346	0.2346		1,246.0691	1,246.0691	0.0548		1,247.4395
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6117	5.1571	7.4396	0.0132		0.2346	0.2346		0.2346	0.2346		1,246.0691	1,246.0691	0.0548		1,247.4395

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0160	0.0104	0.1395	4.3000e-004	0.0559	2.5000e-004	0.0561	0.0148	2.3000e-004	0.0151		44.4939	44.4939	1.0400e-003	1.1200e-003	44.8522
Total	0.0160	0.0104	0.1395	4.3000e-004	0.0559	2.5000e-004	0.0561	0.0148	2.3000e-004	0.0151		44.4939	44.4939	1.0400e-003	1.1200e-003	44.8522

Perris Valley - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6117	5.1571	7.4396	0.0132		0.2346	0.2346		0.2346	0.2346	0.0000	1,246.0691	1,246.0691	0.0548		1,247.4395
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6117	5.1571	7.4396	0.0132		0.2346	0.2346		0.2346	0.2346	0.0000	1,246.0691	1,246.0691	0.0548		1,247.4395

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0160	0.0104	0.1395	4.3000e-004	0.0559	2.5000e-004	0.0561	0.0148	2.3000e-004	0.0151		44.4939	44.4939	1.0400e-003	1.1200e-003	44.8522
Total	0.0160	0.0104	0.1395	4.3000e-004	0.0559	2.5000e-004	0.0561	0.0148	2.3000e-004	0.0151		44.4939	44.4939	1.0400e-003	1.1200e-003	44.8522

Perris Valley - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Site Cleanup - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1439	1.4483	2.2356	3.1200e-003		0.0665	0.0665		0.0612	0.0612		301.7667	301.7667	0.0976		304.2067
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.1439	1.4483	2.2356	3.1200e-003		0.0665	0.0665		0.0612	0.0612		301.7667	301.7667	0.0976		304.2067

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.6100e-003	6.2600e-003	0.0837	2.6000e-004	0.0335	1.5000e-004	0.0337	8.8900e-003	1.4000e-004	9.0300e-003		26.6964	26.6964	6.2000e-004	6.7000e-004	26.9113
Total	9.6100e-003	6.2600e-003	0.0837	2.6000e-004	0.0335	1.5000e-004	0.0337	8.8900e-003	1.4000e-004	9.0300e-003		26.6964	26.6964	6.2000e-004	6.7000e-004	26.9113

Perris Valley - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Site Cleanup - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1439	1.4483	2.2356	3.1200e-003		0.0665	0.0665		0.0612	0.0612	0.0000	301.7667	301.7667	0.0976		304.2067
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.1439	1.4483	2.2356	3.1200e-003		0.0665	0.0665		0.0612	0.0612	0.0000	301.7667	301.7667	0.0976		304.2067

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.6100e-003	6.2600e-003	0.0837	2.6000e-004	0.0335	1.5000e-004	0.0337	8.8900e-003	1.4000e-004	9.0300e-003		26.6964	26.6964	6.2000e-004	6.7000e-004	26.9113
Total	9.6100e-003	6.2600e-003	0.0837	2.6000e-004	0.0335	1.5000e-004	0.0337	8.8900e-003	1.4000e-004	9.0300e-003		26.6964	26.6964	6.2000e-004	6.7000e-004	26.9113

Perris Valley - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189

Perris Valley - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Perris Valley - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.6400e-003	1.0000e-005	6.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3100e-003	1.3100e-003	0.0000		1.4000e-003
Unmitigated	2.6400e-003	1.0000e-005	6.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3100e-003	1.3100e-003	0.0000		1.4000e-003

Perris Valley - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.6000e-004					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.1300e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.0000e-005	1.0000e-005	6.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3100e-003	1.3100e-003	0.0000		1.4000e-003
Total	2.6500e-003	1.0000e-005	6.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3100e-003	1.3100e-003	0.0000		1.4000e-003

Perris Valley - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.6000e-004					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.1300e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.0000e-005	1.0000e-005	6.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3100e-003	1.3100e-003	0.0000		1.4000e-003
Total	2.6500e-003	1.0000e-005	6.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3100e-003	1.3100e-003	0.0000		1.4000e-003

7.0 Water Detail

7.1 Mitigation Measures Water

Perris Valley - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Perris Valley - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Perris Valley

Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	6.00	1000sqft	0.14	6,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - per construction questionnaire

Off-road Equipment - per PD
other material handling equipment is for moving RCB during construction

Off-road Equipment - off-highway trucks includes 2 water trucks and 15 haul trucks

Off-road Equipment - per PD

Off-road Equipment - per PD

Off-road Equipment - per PD

Trips and VMT - per construction questionnaire

Grading - per construction questionnaire

Construction Off-road Equipment Mitigation - Rule 403

Perris Valley - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	100.00	150.00
tblConstructionPhase	NumDays	2.00	150.00
tblConstructionPhase	NumDays	5.00	44.00
tblConstructionPhase	NumDays	5.00	22.00
tblConstructionPhase	NumDays	1.00	22.00
tblGrading	MaterialExported	0.00	25,000.00
tblOffRoadEquipment	HorsePower	247.00	187.00
tblOffRoadEquipment	LoadFactor	0.40	0.41
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	HaulingTripLength	20.00	5.00

2.0 Emissions Summary

Perris Valley - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	10.8491	97.4882	126.1087	0.2266	16.6127	4.6711	21.2837	7.2470	4.2977	11.5447	0.0000	22,009.73 43	22,009.73 43	6.8030	0.0744	22,201.98 58
2024	0.6288	5.1671	7.6114	0.0136	0.0559	0.2349	0.2908	0.0148	0.2348	0.2497	0.0000	1,295.165 4	1,295.165 4	0.0982	1.0900e- 003	1,296.886 6
Maximum	10.8491	97.4882	126.1087	0.2266	16.6127	4.6711	21.2837	7.2470	4.2977	11.5447	0.0000	22,009.73 43	22,009.73 43	6.8030	0.0744	22,201.98 58

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	10.8491	97.4882	126.1087	0.2266	6.6810	4.6711	11.3521	2.8251	4.2977	7.1228	0.0000	22,009.73 43	22,009.73 43	6.8030	0.0744	22,201.98 58
2024	0.6288	5.1671	7.6114	0.0136	0.0559	0.2349	0.2908	0.0148	0.2348	0.2497	0.0000	1,295.165 4	1,295.165 4	0.0982	1.0900e- 003	1,296.886 6
Maximum	10.8491	97.4882	126.1087	0.2266	6.6810	4.6711	11.3521	2.8251	4.2977	7.1228	0.0000	22,009.73 43	22,009.73 43	6.8030	0.0744	22,201.98 58

Perris Valley - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.6400e-003	1.0000e-005	6.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3100e-003	1.3100e-003	0.0000		1.4000e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.6400e-003	1.0000e-005	6.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1.3100e-003	1.3100e-003	0.0000	0.0000	1.4000e-003

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.6400e-003	1.0000e-005	6.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3100e-003	1.3100e-003	0.0000		1.4000e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.6400e-003	1.0000e-005	6.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1.3100e-003	1.3100e-003	0.0000	0.0000	1.4000e-003

Perris Valley - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/3/2023	5/2/2023	5	22	
2	Grading	Grading	5/1/2023	11/24/2023	5	150	
3	Building Construction	Building Construction	5/1/2023	11/24/2023	5	150	
4	Paving	Paving	1/1/2024	2/29/2024	5	44	
5	Site Cleanup	Paving	3/1/2024	4/1/2024	5	22	

Acres of Grading (Site Preparation Phase): 22

Acres of Grading (Grading Phase): 375

Acres of Paving: 0.14

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rollers	1	8.00	80	0.38
Site Preparation	Rubber Tired Dozers	2	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Other Material Handling Equipment	17	8.00	168	0.40

Perris Valley - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading	Scrapers	2	8.00	367	0.48
Building Construction	Cranes	2	8.00	231	0.29
Building Construction	Excavators	1	8.00	158	0.38
Building Construction	Other Material Handling Equipment	7	8.00	168	0.40
Paving	Pumps	2	8.00	84	0.74
Site Cleanup	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	21	53.00	0.00	3,125.00	14.70	6.90	5.00	LD_Mix	HDT_Mix	HHDT
Building Construction	10	3.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Cleanup	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Perris Valley - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					13.1047	0.0000	13.1047	6.7350	0.0000	6.7350			0.0000			0.0000
Off-Road	1.3677	14.2073	8.9047	0.0190		0.6625	0.6625		0.6095	0.6095		1,839.2094	1,839.2094	0.5948		1,854.0803
Total	1.3677	14.2073	8.9047	0.0190	13.1047	0.6625	13.7672	6.7350	0.6095	7.3444		1,839.2094	1,839.2094	0.5948		1,854.0803

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0365	0.0226	0.3669	9.8000e-004	0.1118	5.2000e-004	0.1123	0.0296	4.8000e-004	0.0301		100.6203	100.6203	2.3000e-003	2.3500e-003	101.3768
Total	0.0365	0.0226	0.3669	9.8000e-004	0.1118	5.2000e-004	0.1123	0.0296	4.8000e-004	0.0301		100.6203	100.6203	2.3000e-003	2.3500e-003	101.3768

Perris Valley - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.8553	0.0000	4.8553	2.4953	0.0000	2.4953			0.0000			0.0000
Off-Road	1.3677	14.2073	8.9047	0.0190		0.6625	0.6625		0.6095	0.6095	0.0000	1,839.2094	1,839.2094	0.5948		1,854.0803
Total	1.3677	14.2073	8.9047	0.0190	4.8553	0.6625	5.5178	2.4953	0.6095	3.1048	0.0000	1,839.2094	1,839.2094	0.5948		1,854.0803

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0365	0.0226	0.3669	9.8000e-004	0.1118	5.2000e-004	0.1123	0.0296	4.8000e-004	0.0301		100.6203	100.6203	2.3000e-003	2.3500e-003	101.3768
Total	0.0365	0.0226	0.3669	9.8000e-004	0.1118	5.2000e-004	0.1123	0.0296	4.8000e-004	0.0301		100.6203	100.6203	2.3000e-003	2.3500e-003	101.3768

Perris Valley - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6724	0.0000	2.6724	0.2895	0.0000	0.2895			0.0000			0.0000
Off-Road	6.5159	58.4108	81.1084	0.1404		2.8083	2.8083		2.5837	2.5837		13,595.72 30	13,595.72 30	4.3971		13,705.65 13
Total	6.5159	58.4108	81.1084	0.1404	2.6724	2.8083	5.4807	0.2895	2.5837	2.8731		13,595.72 30	13,595.72 30	4.3971		13,705.65 13

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0322	0.8324	0.4291	3.3400e-003	0.0915	6.4500e-003	0.0979	0.0251	6.1700e-003	0.0313		356.6996	356.6996	5.4100e-003	0.0562	373.5809
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1936	0.1197	1.9444	5.2100e-003	0.5924	2.7800e-003	0.5952	0.1571	2.5600e-003	0.1597		533.2876	533.2876	0.0122	0.0124	537.2973
Total	0.2258	0.9521	2.3735	8.5500e-003	0.6839	9.2300e-003	0.6931	0.1822	8.7300e-003	0.1910		889.9872	889.9872	0.0176	0.0686	910.8782

Perris Valley - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.9901	0.0000	0.9901	0.1073	0.0000	0.1073			0.0000			0.0000
Off-Road	6.5159	58.4108	81.1084	0.1404		2.8083	2.8083		2.5837	2.5837	0.0000	13,595.72 30	13,595.72 30	4.3971		13,705.65 13
Total	6.5159	58.4108	81.1084	0.1404	0.9901	2.8083	3.7984	0.1073	2.5837	2.6909	0.0000	13,595.72 30	13,595.72 30	4.3971		13,705.65 13

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0322	0.8324	0.4291	3.3400e-003	0.0915	6.4500e-003	0.0979	0.0251	6.1700e-003	0.0313		356.6996	356.6996	5.4100e-003	0.0562	373.5809
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1936	0.1197	1.9444	5.2100e-003	0.5924	2.7800e-003	0.5952	0.1571	2.5600e-003	0.1597		533.2876	533.2876	0.0122	0.0124	537.2973
Total	0.2258	0.9521	2.3735	8.5500e-003	0.6839	9.2300e-003	0.6931	0.1822	8.7300e-003	0.1910		889.9872	889.9872	0.0176	0.0686	910.8782

Perris Valley - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6910	23.8559	33.2318	0.0572		1.1901	1.1901		1.0949	1.0949		5,535.4813	5,535.4813	1.7903		5,580.2385
Total	2.6910	23.8559	33.2318	0.0572		1.1901	1.1901		1.0949	1.0949		5,535.4813	5,535.4813	1.7903		5,580.2385

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1300e-003	0.0327	0.0135	1.7000e-004	6.4100e-003	2.8000e-004	6.6900e-003	1.8400e-003	2.7000e-004	2.1200e-003		18.5271	18.5271	1.9000e-004	2.7400e-003	19.3477
Worker	0.0110	6.7700e-003	0.1101	2.9000e-004	0.0335	1.6000e-004	0.0337	8.8900e-003	1.4000e-004	9.0400e-003		30.1861	30.1861	6.9000e-004	7.0000e-004	30.4131
Total	0.0121	0.0394	0.1235	4.6000e-004	0.0399	4.4000e-004	0.0404	0.0107	4.1000e-004	0.0112		48.7132	48.7132	8.8000e-004	3.4400e-003	49.7607

Perris Valley - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6910	23.8559	33.2318	0.0572		1.1901	1.1901		1.0949	1.0949	0.0000	5,535.4813	5,535.4813	1.7903		5,580.2385
Total	2.6910	23.8559	33.2318	0.0572		1.1901	1.1901		1.0949	1.0949	0.0000	5,535.4813	5,535.4813	1.7903		5,580.2385

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1300e-003	0.0327	0.0135	1.7000e-004	6.4100e-003	2.8000e-004	6.6900e-003	1.8400e-003	2.7000e-004	2.1200e-003		18.5271	18.5271	1.9000e-004	2.7400e-003	19.3477
Worker	0.0110	6.7700e-003	0.1101	2.9000e-004	0.0335	1.6000e-004	0.0337	8.8900e-003	1.4000e-004	9.0400e-003		30.1861	30.1861	6.9000e-004	7.0000e-004	30.4131
Total	0.0121	0.0394	0.1235	4.6000e-004	0.0399	4.4000e-004	0.0404	0.0107	4.1000e-004	0.0112		48.7132	48.7132	8.8000e-004	3.4400e-003	49.7607

Perris Valley - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6117	5.1571	7.4396	0.0132		0.2346	0.2346		0.2346	0.2346		1,246.0691	1,246.0691	0.0548		1,247.4395
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6117	5.1571	7.4396	0.0132		0.2346	0.2346		0.2346	0.2346		1,246.0691	1,246.0691	0.0548		1,247.4395

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0170	0.0101	0.1718	4.8000e-004	0.0559	2.5000e-004	0.0561	0.0148	2.3000e-004	0.0151		49.0963	49.0963	1.0400e-003	1.0900e-003	49.4470
Total	0.0170	0.0101	0.1718	4.8000e-004	0.0559	2.5000e-004	0.0561	0.0148	2.3000e-004	0.0151		49.0963	49.0963	1.0400e-003	1.0900e-003	49.4470

Perris Valley - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6117	5.1571	7.4396	0.0132		0.2346	0.2346		0.2346	0.2346	0.0000	1,246.0691	1,246.0691	0.0548		1,247.4395
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6117	5.1571	7.4396	0.0132		0.2346	0.2346		0.2346	0.2346	0.0000	1,246.0691	1,246.0691	0.0548		1,247.4395

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0170	0.0101	0.1718	4.8000e-004	0.0559	2.5000e-004	0.0561	0.0148	2.3000e-004	0.0151		49.0963	49.0963	1.0400e-003	1.0900e-003	49.4470
Total	0.0170	0.0101	0.1718	4.8000e-004	0.0559	2.5000e-004	0.0561	0.0148	2.3000e-004	0.0151		49.0963	49.0963	1.0400e-003	1.0900e-003	49.4470

Perris Valley - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Site Cleanup - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1439	1.4483	2.2356	3.1200e-003		0.0665	0.0665		0.0612	0.0612		301.7667	301.7667	0.0976		304.2067
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.1439	1.4483	2.2356	3.1200e-003		0.0665	0.0665		0.0612	0.0612		301.7667	301.7667	0.0976		304.2067

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0102	6.0400e-003	0.1031	2.9000e-004	0.0335	1.5000e-004	0.0337	8.8900e-003	1.4000e-004	9.0300e-003		29.4578	29.4578	6.2000e-004	6.5000e-004	29.6682
Total	0.0102	6.0400e-003	0.1031	2.9000e-004	0.0335	1.5000e-004	0.0337	8.8900e-003	1.4000e-004	9.0300e-003		29.4578	29.4578	6.2000e-004	6.5000e-004	29.6682

Perris Valley - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Site Cleanup - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1439	1.4483	2.2356	3.1200e-003		0.0665	0.0665		0.0612	0.0612	0.0000	301.7667	301.7667	0.0976		304.2067
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.1439	1.4483	2.2356	3.1200e-003		0.0665	0.0665		0.0612	0.0612	0.0000	301.7667	301.7667	0.0976		304.2067

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0102	6.0400e-003	0.1031	2.9000e-004	0.0335	1.5000e-004	0.0337	8.8900e-003	1.4000e-004	9.0300e-003		29.4578	29.4578	6.2000e-004	6.5000e-004	29.6682
Total	0.0102	6.0400e-003	0.1031	2.9000e-004	0.0335	1.5000e-004	0.0337	8.8900e-003	1.4000e-004	9.0300e-003		29.4578	29.4578	6.2000e-004	6.5000e-004	29.6682

Perris Valley - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189

Perris Valley - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	

Perris Valley - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.6400e-003	1.0000e-005	6.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3100e-003	1.3100e-003	0.0000		1.4000e-003
Unmitigated	2.6400e-003	1.0000e-005	6.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3100e-003	1.3100e-003	0.0000		1.4000e-003

Perris Valley - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.6000e-004					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.1300e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.0000e-005	1.0000e-005	6.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3100e-003	1.3100e-003	0.0000		1.4000e-003
Total	2.6500e-003	1.0000e-005	6.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3100e-003	1.3100e-003	0.0000		1.4000e-003

Perris Valley - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.6000e-004					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.1300e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.0000e-005	1.0000e-005	6.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3100e-003	1.3100e-003	0.0000		1.4000e-003
Total	2.6500e-003	1.0000e-005	6.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3100e-003	1.3100e-003	0.0000		1.4000e-003

7.0 Water Detail

7.1 Mitigation Measures Water

Perris Valley - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Perris Valley

Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	6.00	1000sqft	0.14	6,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use -
- Construction Phase - per construction questionnaire
- Off-road Equipment - per PD
other material handling equipment is for moving RCB during construction
- Off-road Equipment - off-highway trucks includes 2 water trucks and 15 haul trucks
- Off-road Equipment - per PD
- Off-road Equipment - per PD
- Off-road Equipment - per PD
- Trips and VMT - per construction questionnaire
- Grading - per construction questionnaire
- Construction Off-road Equipment Mitigation - Rule 403

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	100.00	150.00
tblConstructionPhase	NumDays	2.00	150.00
tblConstructionPhase	NumDays	5.00	44.00
tblConstructionPhase	NumDays	5.00	22.00
tblConstructionPhase	NumDays	1.00	22.00
tblGrading	MaterialExported	0.00	25,000.00
tblOffRoadEquipment	HorsePower	247.00	187.00
tblOffRoadEquipment	LoadFactor	0.40	0.41
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	HaulingTripLength	20.00	5.00

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.7219	6.4047	8.8424	0.0157	0.3992	0.3079	0.7071	0.1104	0.2833	0.3937	0.0000	1,382.0816	1,382.0816	0.4282	4.9800e-003	1,394.2691
2024	0.0155	0.1297	0.1925	3.4000e-004	1.5700e-003	5.9000e-003	7.4700e-003	4.2000e-004	5.8400e-003	6.2600e-003	0.0000	29.0617	29.0617	2.1000e-003	3.0000e-005	29.1229
Maximum	0.7219	6.4047	8.8424	0.0157	0.3992	0.3079	0.7071	0.1104	0.2833	0.3937	0.0000	1,382.0816	1,382.0816	0.4282	4.9800e-003	1,394.2691

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.7219	6.4047	8.8424	0.0157	0.1823	0.3079	0.4902	0.0501	0.2833	0.3334	0.0000	1,382.0800	1,382.0800	0.4282	4.9800e-003	1,394.2675
2024	0.0155	0.1297	0.1925	3.4000e-004	1.5700e-003	5.9000e-003	7.4700e-003	4.2000e-004	5.8400e-003	6.2600e-003	0.0000	29.0617	29.0617	2.1000e-003	3.0000e-005	29.1229
Maximum	0.7219	6.4047	8.8424	0.0157	0.1823	0.3079	0.4902	0.0501	0.2833	0.3334	0.0000	1,382.0800	1,382.0800	0.4282	4.9800e-003	1,394.2675

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	54.13	0.00	30.36	54.43	0.00	15.08	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-3-2023	7-2-2023	2.2533	2.2533
2	7-3-2023	10-2-2023	3.0460	3.0460
3	10-3-2023	1-2-2024	1.7598	1.7598
4	1-3-2024	4-2-2024	0.1384	0.1384
		Highest	3.0460	3.0460

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	4.8000e-004	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-004	1.5000e-004	0.0000	0.0000	1.6000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	4.8000e-004	0.0000	8.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.5000e-004	1.5000e-004	0.0000	0.0000	1.6000e-004

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	4.8000e-004	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-004	1.5000e-004	0.0000	0.0000	1.6000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	4.8000e-004	0.0000	8.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.5000e-004	1.5000e-004	0.0000	0.0000	1.6000e-004

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/3/2023	5/2/2023	5	22	
2	Grading	Grading	5/1/2023	11/24/2023	5	150	
3	Building Construction	Building Construction	5/1/2023	11/24/2023	5	150	

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	Paving	Paving	1/1/2024	2/29/2024	5	44
5	Site Cleanup	Paving	3/1/2024	4/1/2024	5	22

Acres of Grading (Site Preparation Phase): 22

Acres of Grading (Grading Phase): 375

Acres of Paving: 0.14

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rollers	1	8.00	80	0.38
Site Preparation	Rubber Tired Dozers	2	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Other Material Handling Equipment	17	8.00	168	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Cranes	2	8.00	231	0.29
Building Construction	Excavators	1	8.00	158	0.38
Building Construction	Other Material Handling Equipment	7	8.00	168	0.40
Paving	Pumps	2	8.00	84	0.74
Site Cleanup	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	21	53.00	0.00	3,125.00	14.70	6.90	5.00	LD_Mix	HDT_Mix	HHDT

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Building Construction	10	3.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Cleanup	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1442	0.0000	0.1442	0.0741	0.0000	0.0741	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0150	0.1563	0.0980	2.1000e-004		7.2900e-003	7.2900e-003		6.7000e-003	6.7000e-003	0.0000	18.3535	18.3535	5.9400e-003	0.0000	18.5019
Total	0.0150	0.1563	0.0980	2.1000e-004	0.1442	7.2900e-003	0.1514	0.0741	6.7000e-003	0.0808	0.0000	18.3535	18.3535	5.9400e-003	0.0000	18.5019

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6000e-004	2.6000e-004	3.4500e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9310	0.9310	2.0000e-005	2.0000e-005	0.9388
Total	3.6000e-004	2.6000e-004	3.4500e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9310	0.9310	2.0000e-005	2.0000e-005	0.9388

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0534	0.0000	0.0534	0.0275	0.0000	0.0275	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0150	0.1563	0.0980	2.1000e-004		7.2900e-003	7.2900e-003		6.7000e-003	6.7000e-003	0.0000	18.3535	18.3535	5.9400e-003	0.0000	18.5019
Total	0.0150	0.1563	0.0980	2.1000e-004	0.0534	7.2900e-003	0.0607	0.0275	6.7000e-003	0.0342	0.0000	18.3535	18.3535	5.9400e-003	0.0000	18.5019

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6000e-004	2.6000e-004	3.4500e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9310	0.9310	2.0000e-005	2.0000e-005	0.9388
Total	3.6000e-004	2.6000e-004	3.4500e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9310	0.9310	2.0000e-005	2.0000e-005	0.9388

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2004	0.0000	0.2004	0.0217	0.0000	0.0217	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4887	4.3808	6.0831	0.0105		0.2106	0.2106		0.1938	0.1938	0.0000	925.0374	925.0374	0.2992	0.0000	932.5168
Total	0.4887	4.3808	6.0831	0.0105	0.2004	0.2106	0.4111	0.0217	0.1938	0.2155	0.0000	925.0374	925.0374	0.2992	0.0000	932.5168

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.3000e-003	0.0655	0.0326	2.5000e-004	6.7600e-003	4.9000e-004	7.2500e-003	1.8600e-003	4.6000e-004	2.3200e-003	0.0000	24.3241	24.3241	3.6000e-004	3.8300e-003	25.4751
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0129	9.5600e-003	0.1248	3.6000e-004	0.0437	2.1000e-004	0.0439	0.0116	1.9000e-004	0.0118	0.0000	33.6417	33.6417	8.3000e-004	8.8000e-004	33.9253
Total	0.0152	0.0750	0.1574	6.1000e-004	0.0505	7.0000e-004	0.0512	0.0135	6.5000e-004	0.0141	0.0000	57.9658	57.9658	1.1900e-003	4.7100e-003	59.4004

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0743	0.0000	0.0743	8.0400e-003	0.0000	8.0400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4887	4.3808	6.0831	0.0105		0.2106	0.2106		0.1938	0.1938	0.0000	925.0363	925.0363	0.2992	0.0000	932.5157
Total	0.4887	4.3808	6.0831	0.0105	0.0743	0.2106	0.2849	8.0400e-003	0.1938	0.2018	0.0000	925.0363	925.0363	0.2992	0.0000	932.5157

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3.3 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.3000e-003	0.0655	0.0326	2.5000e-004	6.7600e-003	4.9000e-004	7.2500e-003	1.8600e-003	4.6000e-004	2.3200e-003	0.0000	24.3241	24.3241	3.6000e-004	3.8300e-003	25.4751
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0129	9.5600e-003	0.1248	3.6000e-004	0.0437	2.1000e-004	0.0439	0.0116	1.9000e-004	0.0118	0.0000	33.6417	33.6417	8.3000e-004	8.8000e-004	33.9253
Total	0.0152	0.0750	0.1574	6.1000e-004	0.0505	7.0000e-004	0.0512	0.0135	6.5000e-004	0.0141	0.0000	57.9658	57.9658	1.1900e-003	4.7100e-003	59.4004

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2018	1.7892	2.4924	4.2900e-003		0.0893	0.0893		0.0821	0.0821	0.0000	376.6278	376.6278	0.1218	0.0000	379.6730
Total	0.2018	1.7892	2.4924	4.2900e-003		0.0893	0.0893		0.0821	0.0821	0.0000	376.6278	376.6278	0.1218	0.0000	379.6730

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3.4 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.0000e-005	2.5700e-003	1.0200e-003	1.0000e-005	4.7000e-004	2.0000e-005	5.0000e-004	1.4000e-004	2.0000e-005	1.6000e-004	0.0000	1.2619	1.2619	1.0000e-005	1.9000e-004	1.3178
Worker	7.3000e-004	5.4000e-004	7.0600e-003	2.0000e-005	2.4700e-003	1.0000e-005	2.4800e-003	6.6000e-004	1.0000e-005	6.7000e-004	0.0000	1.9043	1.9043	5.0000e-005	5.0000e-005	1.9203
Total	8.1000e-004	3.1100e-003	8.0800e-003	3.0000e-005	2.9400e-003	3.0000e-005	2.9800e-003	8.0000e-004	3.0000e-005	8.3000e-004	0.0000	3.1661	3.1661	6.0000e-005	2.4000e-004	3.2381

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2018	1.7892	2.4924	4.2900e-003		0.0893	0.0893		0.0821	0.0821	0.0000	376.6274	376.6274	0.1218	0.0000	379.6726
Total	0.2018	1.7892	2.4924	4.2900e-003		0.0893	0.0893		0.0821	0.0821	0.0000	376.6274	376.6274	0.1218	0.0000	379.6726

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3.4 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.0000e-005	2.5700e-003	1.0200e-003	1.0000e-005	4.7000e-004	2.0000e-005	5.0000e-004	1.4000e-004	2.0000e-005	1.6000e-004	0.0000	1.2619	1.2619	1.0000e-005	1.9000e-004	1.3178
Worker	7.3000e-004	5.4000e-004	7.0600e-003	2.0000e-005	2.4700e-003	1.0000e-005	2.4800e-003	6.6000e-004	1.0000e-005	6.7000e-004	0.0000	1.9043	1.9043	5.0000e-005	5.0000e-005	1.9203
Total	8.1000e-004	3.1100e-003	8.0800e-003	3.0000e-005	2.9400e-003	3.0000e-005	2.9800e-003	8.0000e-004	3.0000e-005	8.3000e-004	0.0000	3.1661	3.1661	6.0000e-005	2.4000e-004	3.2381

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0135	0.1135	0.1637	2.9000e-004		5.1600e-003	5.1600e-003		5.1600e-003	5.1600e-003	0.0000	24.8691	24.8691	1.0900e-003	0.0000	24.8965
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0135	0.1135	0.1637	2.9000e-004		5.1600e-003	5.1600e-003		5.1600e-003	5.1600e-003	0.0000	24.8691	24.8691	1.0900e-003	0.0000	24.8965

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3.5 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e-004	2.4000e-004	3.2400e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9087	0.9087	2.0000e-005	2.0000e-005	0.9159
Total	3.3000e-004	2.4000e-004	3.2400e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9087	0.9087	2.0000e-005	2.0000e-005	0.9159

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0135	0.1135	0.1637	2.9000e-004		5.1600e-003	5.1600e-003		5.1600e-003	5.1600e-003	0.0000	24.8691	24.8691	1.0900e-003	0.0000	24.8965
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0135	0.1135	0.1637	2.9000e-004		5.1600e-003	5.1600e-003		5.1600e-003	5.1600e-003	0.0000	24.8691	24.8691	1.0900e-003	0.0000	24.8965

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3.5 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e-004	2.4000e-004	3.2400e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9087	0.9087	2.0000e-005	2.0000e-005	0.9159
Total	3.3000e-004	2.4000e-004	3.2400e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9087	0.9087	2.0000e-005	2.0000e-005	0.9159

3.6 Site Cleanup - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5800e-003	0.0159	0.0246	3.0000e-005		7.3000e-004	7.3000e-004		6.7000e-004	6.7000e-004	0.0000	3.0113	3.0113	9.7000e-004	0.0000	3.0357
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.5800e-003	0.0159	0.0246	3.0000e-005		7.3000e-004	7.3000e-004		6.7000e-004	6.7000e-004	0.0000	3.0113	3.0113	9.7000e-004	0.0000	3.0357

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3.6 Site Cleanup - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	7.0000e-005	9.7000e-004	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2726	0.2726	1.0000e-005	1.0000e-005	0.2748
Total	1.0000e-004	7.0000e-005	9.7000e-004	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2726	0.2726	1.0000e-005	1.0000e-005	0.2748

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5800e-003	0.0159	0.0246	3.0000e-005		7.3000e-004	7.3000e-004		6.7000e-004	6.7000e-004	0.0000	3.0113	3.0113	9.7000e-004	0.0000	3.0357
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.5800e-003	0.0159	0.0246	3.0000e-005		7.3000e-004	7.3000e-004		6.7000e-004	6.7000e-004	0.0000	3.0113	3.0113	9.7000e-004	0.0000	3.0357

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3.6 Site Cleanup - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	7.0000e-005	9.7000e-004	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2726	0.2726	1.0000e-005	1.0000e-005	0.2748
Total	1.0000e-004	7.0000e-005	9.7000e-004	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2726	0.2726	1.0000e-005	1.0000e-005	0.2748

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4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated Annual VMT	Mitigated Annual VMT
	Weekday	Saturday	Sunday		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	4.8000e-004	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-004	1.5000e-004	0.0000	0.0000	1.6000e-004
Unmitigated	4.8000e-004	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-004	1.5000e-004	0.0000	0.0000	1.6000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	8.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.9000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-004	1.5000e-004	0.0000	0.0000	1.6000e-004
Total	4.8000e-004	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-004	1.5000e-004	0.0000	0.0000	1.6000e-004

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	8.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.9000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-004	1.5000e-004	0.0000	0.0000	1.6000e-004
Total	4.8000e-004	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-004	1.5000e-004	0.0000	0.0000	1.6000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

Perris Valley - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Perris Valley - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

Perris Valley - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

Perris Valley - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Appendix B-1
Biological Resources Assessment and
MSHCP Consistency Analysis

PERRIS VALLEY CHANNEL LATERAL B, STAGE 4 PROJECT

PERRIS VALLEY CHANNEL LATERAL B, STAGE 4 (PVC – STAGE 4) PROJECT

Biological Resources Assessment and MSHCP Consistency Analysis

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

Jerry Aguirre

MICHAEL BAKER INTERNATIONAL

Ryan Winkleman

**PERRIS VALLEY CHANNEL LATERAL B,
STAGE 4
(PVC – STAGE 4) PROJECT**

Biological Resources Assessment and MSHCP Consistency Analysis

Laron Meyer

Ron W. D.

Executive Summary

Athene cunicularia
Eremophila alpestris actia
Lepus californicus bennettii

Accipiter cooperii

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FIGURES

TABLES

APPENDICES

ACRONYMS AND ABBREVIATIONS

Section 1 Introduction

1.1 PROJECT LOCATION

1.2 ENVIRONMENTAL SETTING



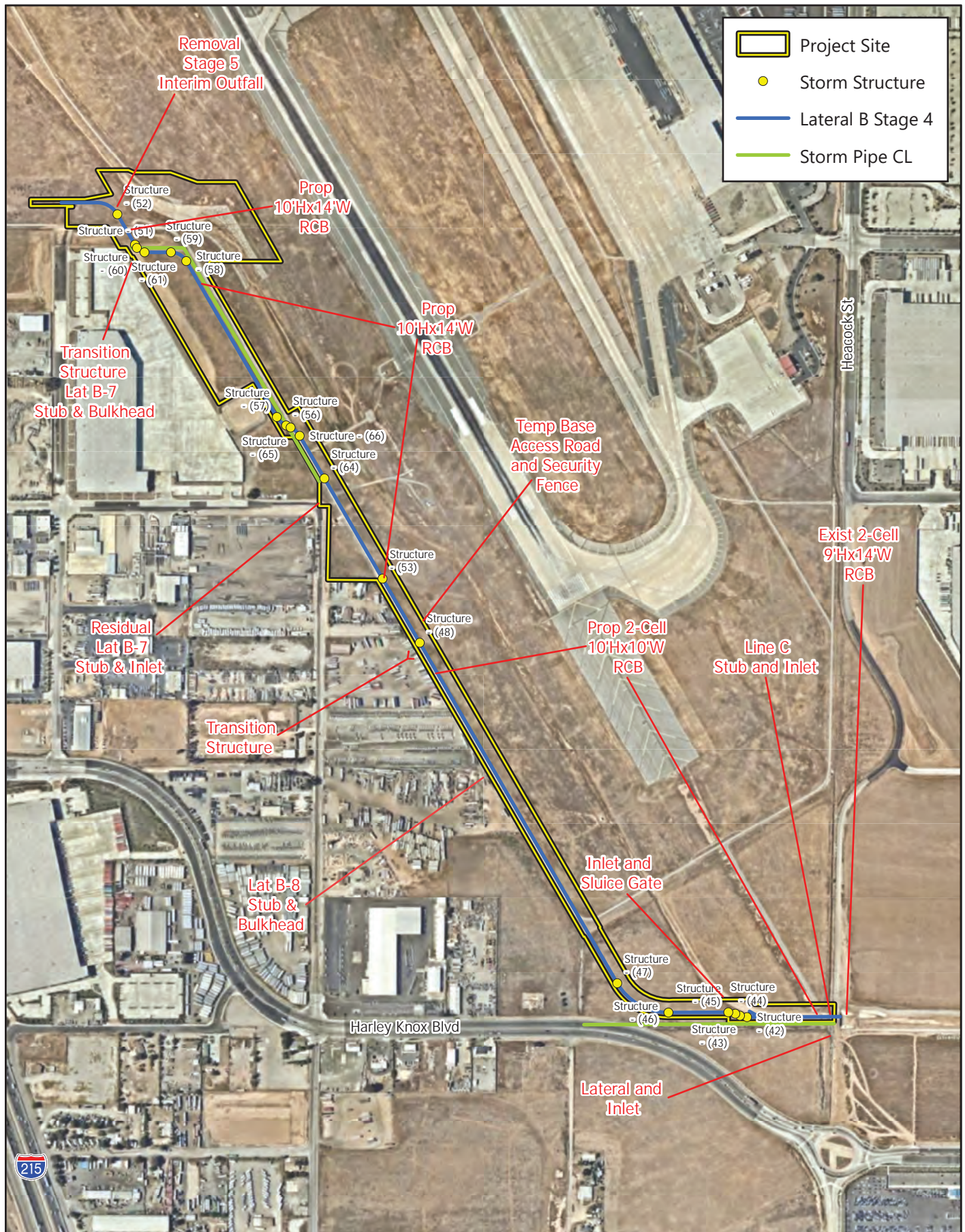
PERRIS VALLEY CHANNEL LATERAL B, STAGE 4 PROJECT
 BIOLOGICAL RESOURCES ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS

Regional Vicinity





Source: ESRI



PERRIS VALLEY CHANNEL LATERAL B, STAGE 4 PROJECT
 BIOLOGICAL RESOURCES ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS

Site Plan





PERRIS VALLEY CHANNEL LATERAL B, STAGE 4 PROJECT
BIOLOGICAL RESOURCES ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS

Project Site



1.3 PROJECT BACKGROUND AND PURPOSE

1.4 PROJECT CHARACTERISTICS

-
-
-
-

Section 2 Methodology

2.1 LITERATURE REVIEW

Steele Peak, Perris, Riverside East, Sunnymead, California

Special Animals List *State and Federally Listed Endangered and
Threatened Animals of California* *Special Vascular Plants, Bryophytes, and Lichens List
State and Federally Listed Endangered, Threatened, and Rare Plants of California*

Report for Western Riverside Area, California *Custom Soil Resource*

Steele Peak, Perris, Riverside East, Sunnymead, California

2.2 FIELD SURVEY

Table 2: Survey Date, Time, Surveyors, and Weather Conditions

Date	Time (start / finish)	Surveyors*	Weather Conditions	
			Temperature (°F) (start / finish)	Wind Speed (mph) (start / finish)

2.3 VEGETATION COMMUNITIES

Manual of California Vegetation et al.

2.4 PLANTS

Jepson Manual: Vascular Plants of California, Second Edition

2.5 WILDLIFE

*The Sibley Guide to Birds
Amphibians*

*A Field Guide to Western Reptiles and
A Field Guide to Mammals of North America*

Checklist of North American Birds
*Scientific and Standard English Names of Amphibians and Reptiles of North America North of
Mexico, with Comments Regarding Confidence in Our Understanding*
Bats of the United States and Canada *Revised Checklist*
of North American Mammals North of Mexico

2.6 OTHER FIELD STUDIES

2.6.1 DELINEATION OF STATE AND FEDERAL JURISDICTIONAL WATERS

*Regional Supplement to the Corps of
Engineers Wetland Delineation Manual: Arid West Region, Version 2.0*

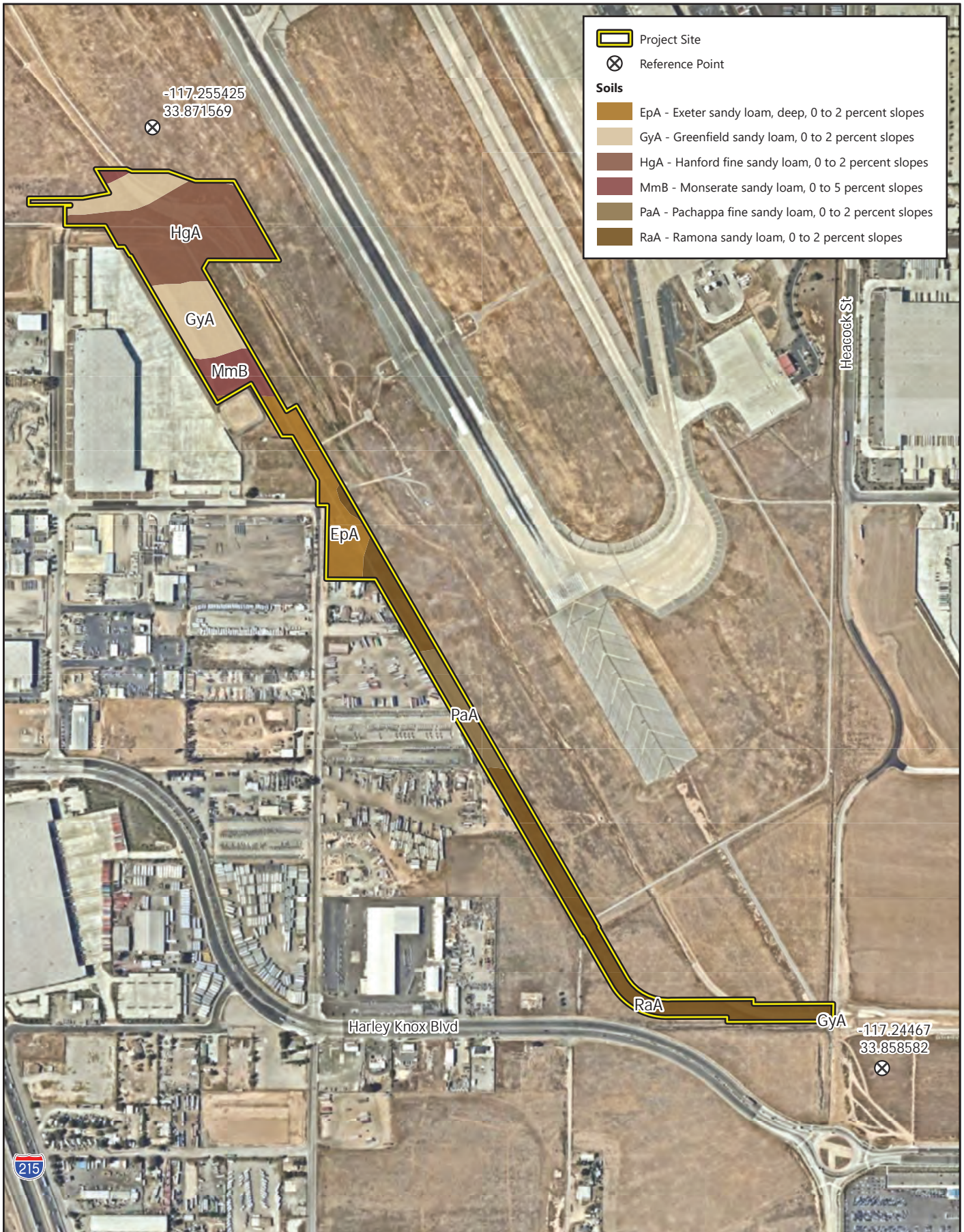
Section 3 Existing Conditions

3.1 TOPOGRAPHY AND SOILS

*Custom Soil Resource Report for Western Riverside County,
California*

USDA Soils

3.2 SURROUNDING LAND USES



PERRIS VALLEY CHANNEL LATERAL B, STAGE 4 PROJECT
 BIOLOGICAL RESOURCES ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS



Section 4 Discussion

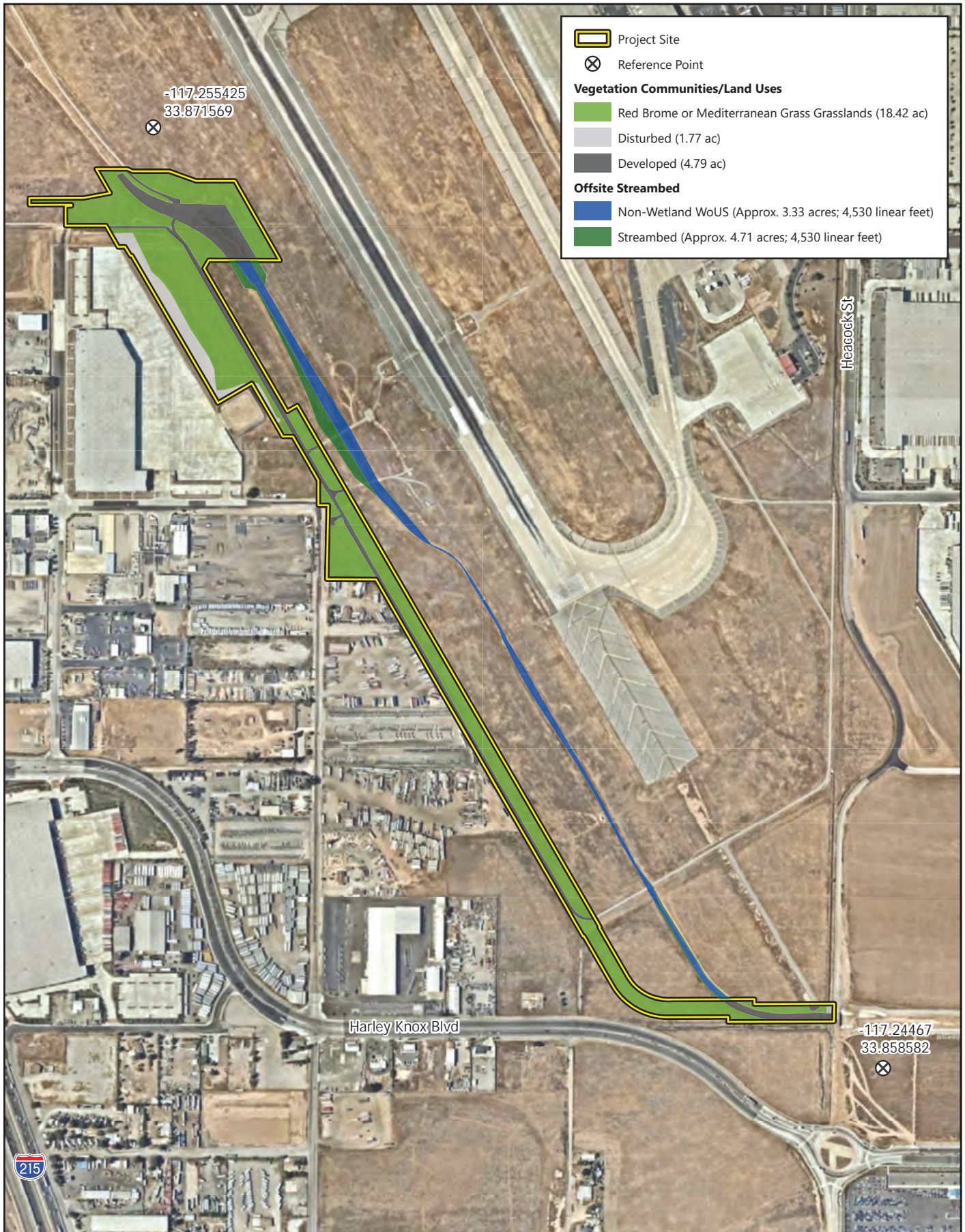
4.1 VEGETATION COMMUNITIES AND LAND COVER TYPES

Vegetation Communities and Other Land Uses

4.1.1 RED BROME OR MEDITERRANEAN GRASS GRASSLANDS

<i>Erodium cicutarium</i>	<i>Schismus barbatus</i>	<i>Centaurea</i>
<i>solstitialis</i>	<i>Plantago lanceolata</i>	
<i>Corethrogyne filaginifolia</i>	<i>Isocoma menziesii</i>	<i>Heterotheca</i>
<i>grandiflora</i>		

4.1.2 DISTURBED



PERRIS VALLEY CHANNEL LATERAL B, STAGE 4 PROJECT
 BIOLOGICAL RESOURCES ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS

Vegetation Communities and Other Land Uses



4.1.3 DEVELOPED

4.2 WILDLIFE

4.2.1 FISH

4.2.2 AMPHIBIANS

4.2.3 REPTILES

Uta stansburiana elegans

Sceloporus occidentalis longipes

Elgaria multicarinata webbii

4.2.4 BIRDS

domesticus

Passerculus sandwichensis

Haemorhous mexicanus

Passer
Sturnella neglecta

Eremophila alpestris

E.a. actia

4.2.5 MAMMALS

Sylvilagus audubonii

Otospermophilus beecheyi

Lepus californicus bennettii

Canis latrans

4.3 MIGRATORY CORRIDORS AND LINKAGES

et. sq.

4.4 SPECIAL-STATUS BIOLOGICAL RESOURCES

Sunnymead, California *Steele Peak, Perris, Riverside East,*

- **Present**
- **High**

- **Moderate**

- **Low**

- **Not Expected**

Peak, Perris, Riverside East, Sunnymead, California

Steele

Table C – 1: Potentially Occurring Special-Status Biological Resources

4.4.1 SPECIAL-STATUS PLANT SPECIES

East, Sunnymead, California *Steele Peak, Perris, Riverside*

Deinandra paniculata

4.4.2 SPECIAL-STATUS WILDLIFE SPECIES

Riverside East, Sunnymead, California *Steele Peak, Perris,*

Accipiter cooperii

4.4.3 SPECIAL-STATUS VEGETATION COMMUNITIES

Riverside East, Sunnymead, California *Steele Peak, Perris,*

4.5 CRITICAL HABITAT

4.6 STEPHENS' KANGAROO RAT HABITAT CONSERVATION PLAN

Dipodomys stephensi

4.7 STATE AND FEDERAL JURISDICTIONAL AREAS

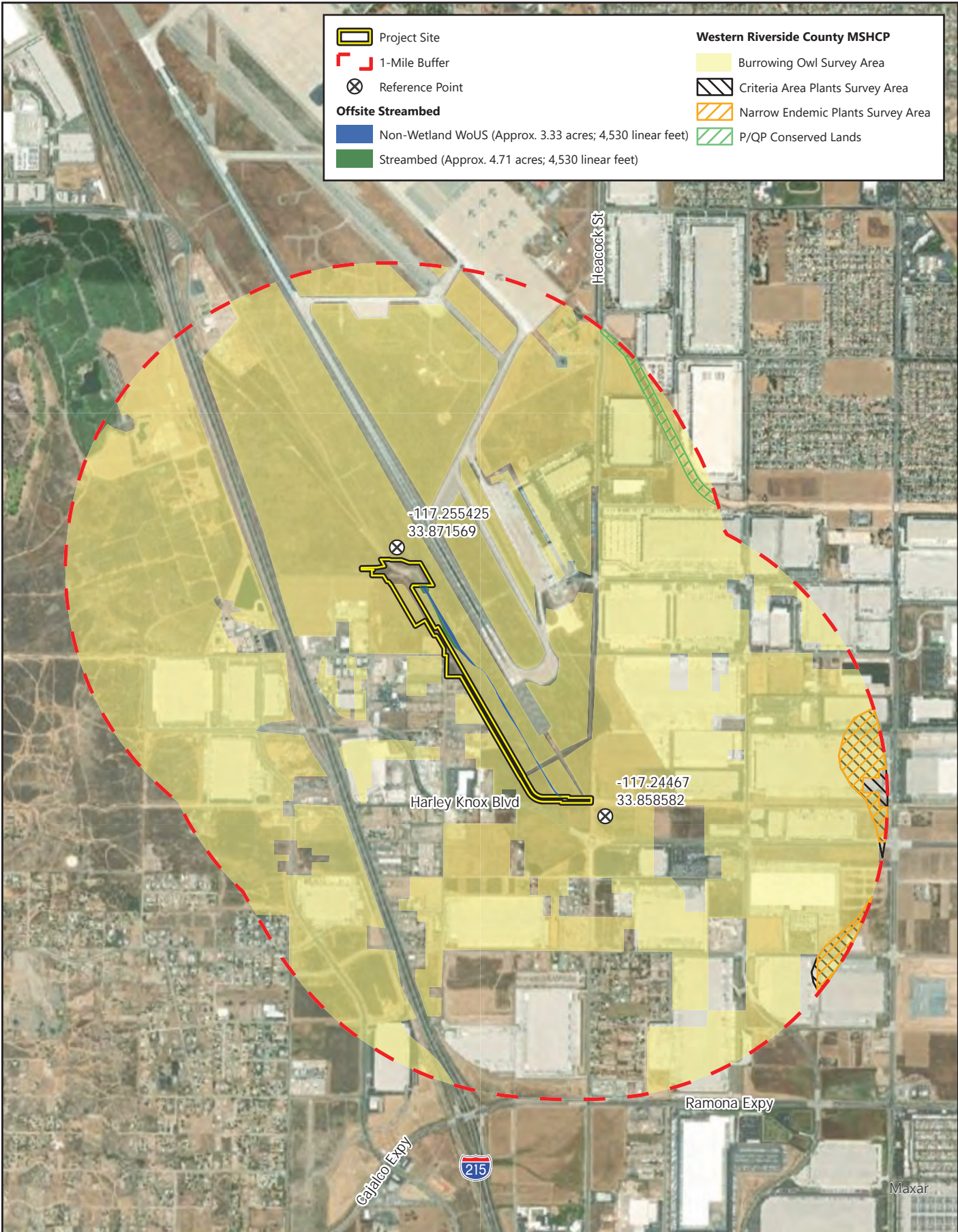
et seq

Section 5 MSHCP Consistency Analysis

5.1 PROJECT INTRODUCTION AND SETTING

5.1.1 PROJECT AREA

5.1.2 PROJECT DESCRIPTION



Project Site	Western Riverside County MSHCP
1-Mile Buffer	Burrowing Owl Survey Area
Reference Point	Criteria Area Plants Survey Area
Offsite Streambed	Narrow Endemic Plants Survey Area
Non-Wetland WoUS (Approx. 3.33 acres; 4,530 linear feet)	P/QP Conserved Lands
Streambed (Approx. 4.71 acres; 4,530 linear feet)	

PERRIS VALLEY CHANNEL LATERAL B, STAGE 4 PROJECT
 BIOLOGICAL RESOURCES ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS

MSHCP Conservation Areas



5.1.3 COVERED ROADS

5.1.4 COVERED PUBLIC ACCESS ACTIVITIES

5.1.5 GENERAL SETTING

5.2 RESERVE ASSEMBLY ANALYSIS

5.2.1 CRITERIA CELL ANALYSIS

MSHCP Conservation

Areas

5.2.2 PUBLIC/QUASI-PUBLIC LANDS ANALYSIS

5.3 VEGETATION MAPPING

Manual of California Vegetation et al.

Vegetation Communities and Other Land Uses

Table 3: Vegetation Communities/Land Cover Types and Proposed Impacts

Vegetation Communities/Land Cover Types	Acreage
	Total Within Project Site
TOTAL*	21.27

5.4 PROTECTION OF SPECIES ASSOCIATED WITH RIPARIAN/RIVERINE RESOURCES AND VERNAL POOLS (MSHCP SECTION 6.1.2)

- *Riparian/Riverine Areas:*

- *Vernal Pools:*

Vernal Pools

wootoni
santarosae).

Brachinecta lynchi

Streptocephalus
Linderiella

5.4.1 RIPARIAN/RIVERINE AREAS



PERRIS VALLEY CHANNEL LATERAL B, STAGE 4 PROJECT
 BIOLOGICAL RESOURCES ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS

Riverine/Riparian Resources

5.4.2 VERNAL POOLS

Custom Soil Resource Report for Western Riverside Area, California,

Custom Soil Resource Report for Western Riverside Area, California

5.4.3 FAIRY SHRIMP

*Steele Peak, Perris, Riverside
East, Sunnymead, California*

*Implementation of the 2021 Integrated Natural Resources Management Plan for March Air Reserve Base,
California Branchinecta lindahli*

Branchinecta lynchi

*Steele Peak, Perris, Riverside East, Sunnymead,
California*

5.4.4 RIPARIAN BIRDS

5.5 PROTECTION OF NARROW ENDEMIC PLANT SPECIES (MSHCP SECTION 6.1.3)

5.6 ADDITIONAL SURVEY NEEDS AND PROCEDURES (MSHCP SECTION 6.3.2)

5.6.1 CRITERIA AREA PLANT SPECIES

5.6.2 AMPHIBIANS

5.6.3 BURROWING OWL

Literature Review and Habitat Assessment Results

et al.

Taxidea taxus

Steele

Peak, Perris, Riverside East, Sunnymead, California

Focused Burrowing Owl Surveys

Burrowing Owl Survey

Instructions for the Western Riverside County Multiple Species Habitat Conservation Plan Area

5.6.4 MAMMALS

5.1 INFORMATION ON OTHER SPECIES (MSHCP SECTION 6.3.2)

5.7.1 DELHI SANDS FLOWER-LOVING FLY

Custom Soil

Resource Report for Western Riverside Area, California

Rhaphiomidas terminatus abdominalis

5.7.2 SPECIES NOT ADEQUATELY CONSERVED

5.2 GUIDELINES PERTAINING TO THE URBAN/WILDLANDS INTERFACE (MSHCP SECTION 6.1.4)

5.3 STANDARD BEST MANAGEMENT PRACTICES

Section 6 Conclusion

Section 7 References

The

Jepson Manual: Vascular Plants of California, Second Edition

Steele Peak, Perris, Riverside East, Sunnymead, California

Special Animals List

*State and Federally Listed Endangered and
Threatened Animals of California*

Bryophytes, and Lichens List *Special Vascular Plants,*

*State and Federally Listed Endangered,
Threatened, and Rare Plants of California*

Check-list of North

American Birds (online)

Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, with Comments Regarding Confidence in Our Understanding

Effects of management practices on grassland birds: Burrowing Owl

Bats of the United States and Canada

Use of Recorded Calls to Detect Burrowing Owls

A Field Guide to Mammals of North America, Fourth Edition

Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area.

Implementation of the 2021 Integrated Natural Resources Management Plan, March Air Reserve Base, California, Environmental Assessment.

A Manual of California Vegetation (Second Edition)

The Sibley Guide to Birds, Second Edition

A Field Guide to Western Reptiles and Amphibians, Third Edition

*Regional Supplement to the Corps of Engineers Wetland
Delineation Manual: Arid West Region (Version 2.0)*

*Custom Soil Resource Report for Western Riverside Area,
California.*

Appendix A Site Photographs



Photograph 1: Standing in the north portion of the project site, facing northwest.



Photograph 2: Standing in the north portion of the project site, facing northeast.



Photograph 3: Standing in the north portion of the project site, facing southwest.



Photograph 4: Standing in the middle of the north portion of the project site, facing south.



Photograph 5: Standing in the northeast portion of the project site, facing west.



Photograph 6: Standing at the center of the project site, facing south.



Photograph 7: Standing at the center portion of the project site, facing south.



Photograph 8: Standing at the center portion of the project site, facing north.



Photograph 9: Standing at the center portion of the project site, facing east.



Photograph 10: Standing at the center portion of the project site, facing northwest.



Photograph 11: Standing at the center of the project site, facing south.



Photograph 12: Standing at the southwest portion of the project site, facing north.



Photograph 13: Standing at the center south boundary of the project site, facing north.



Photograph 14: Standing at the center south boundary of the project site, facing east.



Photograph 15: Standing at the southeast of the project site, facing west.

Appendix B Plant and Wildlife Species Observed

Table B-1: Plant and Wildlife Species Observed List

<i>Scientific Name*</i>	<i>Common Name</i>	<i>Cal-IPC Rating**</i>	<i>Special-Status Rank***</i>
Plants			
<i>Bromus madritensis</i> ssp. <i>rubens</i> *	red brome	High	
<i>Centaurea solstitialis</i> *	yellow star-thistle	High	
<i>Corethrogyne filaginifolia</i>	California aster		
<i>Croton setiger</i>	Turkey-mullein		
<i>Erodium cicutarium</i> *	red-stemmed filaree	Limited	
<i>Malva parviflora</i> *	cheeseweed		
<i>Trifolium repens</i> *	white clover		
<i>Heterotheca grandiflora</i>	telegraph weed		
<i>Hirschfeldia incana</i> *	short-pod mustard	Moderate	
<i>Hordeum murinum</i> *	hare barley	Moderate	
<i>Isocoma menziesii</i>	Menzies' goldenbush		
<i>Parkinsonia aculeata</i> *	Mexican palo verde		
<i>Plantago lanceolata</i> *	ribwort plantain	Limited	
<i>Rumex crispus</i> *	curly dock	Limited	
<i>Salix nigra</i>	black willow		
<i>Salsola tragus</i> *	Russian thistle	Limited	
<i>Schismus barbatus</i> *	Mediterranean grass	Limited	
Birds			
<i>Athene cunicularia</i>	burrowing owl		SSC
<i>Anthus rubescens</i>	American pipit		
<i>Buteo jamaicensis</i>	red-tailed hawk		
<i>Columba livia</i> *	rock pigeon		
<i>Corvus brachyrhynchos</i>	American crow		
<i>Corvus corax</i>	common raven		
<i>Eremophila alpestris actia</i>	California horned lark		WL
<i>Falco sparverius</i>	American kestrel		
<i>Haemorhous mexicanus</i>	house finch		
<i>Larus californicus</i>	California gull		
<i>Mimus polyglottos</i>	northern mockingbird		
<i>Passer domesticus</i> *	house sparrow		
<i>Passerculus sandwichensis</i>	savannah sparrow		
<i>Sayornis nigricans</i>	black phoebe		
<i>Sayornis saya</i>	Say's Phoebe		
<i>Setophaga coronata</i>	yellow-rumped warbler		
<i>Sturnella neglecta</i> *	western meadowlark		
<i>Tyrannus vociferans</i>	Cassin's kingbird		
<i>Zenaida macroura</i>	mourning dove		
Mammals			
<i>Lepus californicus bennettii</i>	San Diego black-tailed jackrabbit		SSC
<i>Otospermophilus beecheyi</i>	California ground squirrel		

Table B-1: Plant and Wildlife Species Observed List

<i>Scientific Name*</i>	<i>Common Name</i>	<i>Cal-IPC Rating**</i>	<i>Special-Status Rank***</i>
<i>Sylvilagus audubonii</i>	Audubon's cottontail rabbit		

* **Non-native species**** **California Invasive Plant Council (Cal-IPC) Ratings**

- High** These species have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. Most are widely distributed ecologically.
- Moderate** These species have substantial and apparent—but generally not severe—ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal, though establishment is generally dependent upon ecological disturbance. Ecological amplitude and distribution may range from limited to widespread.
- Limited** These species are invasive, but their ecological impacts are minor on a statewide level or there was not enough information to justify a higher score. Their reproductive biology and other attributes result in low to moderate rates of invasiveness. Ecological amplitude and distribution are generally limited, but these species may be locally persistent and problematic.

*** **Special-Status Rank***California Department of Fish and Wildlife (CDFW)*

- SSC** Species of Special Concern – any species, subspecies, or distinct population of fish, amphibian, reptile, bird, or mammal native to California that currently satisfies one or more of the following criteria:
- is extirpated from California or, in the case of birds, in its primary seasonal or breeding role;
 - is listed as Federally-, but not State-, threatened or endangered; meets the State definition of threatened or endangered but has not formally been listed.
 - is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status; or
 - has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for State threatened or endangered status.
- WL** Watch List - taxa that were previously designated as “Species of Special Concern” but no longer merit that status, or which do not yet meet SSC criteria, but for which there is concern and a need for additional information to clarify status.

Appendix C Special-Status Biological Resources

Table C-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special- Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
SPECIAL-STATUS WILDLIFE SPECIES					
<i>Accipiter cooperii</i> Cooper's hawk	WL G5 S4	Yearlong resident of California. Generally, found in forested areas up to 3,000 feet above mean sea level (amsl) in elevation, especially near edges and rivers. Prefers hardwood stands and mature forests, but can be found in urban and suburban areas where there are tall trees (25 to 50 feet high) for nesting. Prefers pines, oaks, Douglas-firs, beeches, spruces for nesting. Common in open areas during nesting season.	Yes	No	High (Foraging), Not Expected (Nesting): Widespread, suitable foraging habitat. No suitable nesting habitat.
<i>Agelaius tricolor</i> tricolored blackbird	ST SSC G2G3 S1S2	Range is limited to the coastal areas of the Pacific coast of North America, from Northern California to upper Baja California. Can be found in a wide variety of habitat including annual grasslands, wet and dry vernal pools and other seasonal wetlands, agricultural fields, cattle feedlots, and dairies. Occasionally forage in riparian scrub habitats along marsh borders. Basic habitat requirements for breeding include open accessible water, protected nesting substrate freshwater marsh dominated by cattails (<i>Typha</i> spp.), willows (<i>Salix</i> spp.), and bulrushes (<i>Schoenoplectus</i> spp.), and either flooded or thorny/spiny vegetation and suitable foraging space providing adequate insect prey.	Yes	No	Not Expected: Suitable nesting and foraging habitats consisting of annual grasslands, seasonal wetlands, freshwater marsh, and open accessible water are not present within the project site. Additionally, there are no occurrence records for this species within 5 miles of the project site (CDFW 2022a).
<i>Aimophila ruficeps canescens</i> southern California rufous-crowned sparrow	WL G5T3 S3	Yearlong resident that is typically found between 3,000 and 6,000 feet amsl. Breed in sparsely vegetated scrubland on hillsides and canyons. Prefers coastal sage scrub dominated by California sagebrush (<i>Artemisia californica</i>), but they can also be found breeding in coastal bluff scrub, low-growing serpentine chaparral, and along the edges of tall chaparral habitats.	Yes	No	Not Expected: This species is not expected to nest or forage because there are little to no shrubs and no coastal scrub habitat within or adjacent to the project site
<i>Anniella stebbinsi</i> Southern California legless lizard	SSC G3 S3	Locally abundant specimens are found in coastal sand dunes and a variety of interior habitats, including sandy washes and alluvial fans. A large, protected population persists in the remnant of the once extensive El Segundo Dunes at Los Angeles International Airport.	No	No	Not Expected: Sandy wash and alluvial fan habitats preferred by this species are not present within the project site. The project site is composed of non-native grassland habitat that is subject to routine weed abatement, resulting in heavily disturbed and minimal vegetation cover which likely precludes this species from occurring. Additionally, there are no occurrence records for this species within 5 miles of the project site (CDFW 2022a).

Table C-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
<i>Arizona elegans occidentalis</i> California glossy snake	SSC G5T2 S2	Inhabits arid scrub, rocky washes, grasslands, and chaparral habitats. Appears to prefer microhabitats of open areas and areas with soil loose enough for easy burrowing.	No	No	Not Expected: Arid scrub, rocky washes, and grassland habitats preferred by this species are not present within the project site. The project site is composed of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils which likely precludes this species from occurring.
<i>Artemisospiza belli belli</i> Bell's sage sparrow	WL G5T2T3 S3	This species has a wide, but sparse distribution in western Riverside County, specifically within the "Riverside lowlands, San Jacinto Foothills, Santa Ana Mountains, and Desert Transition Bioregions. Yearlong resident on the coastal side of southern California mountains. Breeds in coastal sage scrub and chaparral habitats from February to August. They require semi-open habitats with evenly spaced shrubs one to two meters high. Occurs in chaparral dominated by fairly dense stands of chamise (<i>Adenostoma fasciculatum</i>).	Yes	No	Not Expected: The chaparral and coastal sage scrub habitats preferred by this species for foraging and nesting are not present within the project site. In addition, this species is possibly extirpated from the area (CDFW 2022a).
<i>Asio otus</i> long-eared owl	G5 S3?	Nests in conifer, oak, riparian, pinyon-juniper, and desert woodlands that are either open or are adjacent to grasslands, meadows, or shrublands. Key habitat components are some dense cover for nesting and roosting, suitable nest platforms, and open foraging areas.	No	No	Low (Foraging), Not Expected (Nesting): This species is not expected to nest because there are no conifer trees present on site. However, there is a low expectancy to forage because of open grassland habitat and frequent rodent activity on site.
<i>Aspidoscelis hyperythra</i> orange-throated whiptail	WL G5 S2S3	Uncommon to fairly common over much of its range in Orange, Riverside, and San Diego counties. Also occurs in southwestern San Bernardino County near Colton. Semi-arid brushy areas typically with loose soil and rocks, including washes, streamsides, rocky hillsides, and coastal chaparral.	Yes	No	Not Expected: This species is not expected because there are little to no shrubs and no coastal scrub habitat within or adjacent to the project site
<i>Aspidoscelis tigris stejnegeri</i> coastal whiptail	G5T5 S3	This subspecies is found in coastal southern California, mostly west of the Peninsular Ranges and south of the Transverse Ranges, and north into Ventura County. Ranges south into Baja California. Found in a variety of ecosystems, primarily hot and dry open areas with sparse vegetation in chaparral, woodland, and riparian areas. Associated with rocky areas with little vegetation or sunny microhabitats within shrub or grassland associations.	Yes	No	Not Expected: This species is not expected because there are no chaparral or riparian habitat within or adjacent to the project site

Table C-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special- Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
<i>Athene cunicularia</i> burrowing owl	SSC G4 S3	Yearlong resident of California. Primarily a grassland species, but it persists and even thrives in some landscapes highly altered by human activity. Occurs in open, annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. The overriding characteristics of suitable habitat appear to be burrows for roosting and nesting and relatively short vegetation with only sparse shrubs and taller vegetation.	Yes (c)	Yes	Present: Two (2) pairs were observed during the field survey adjacent to the project site.
<i>Branchinecta lynchi</i> vernal pool fairy shrimp	FT G3 S3	Endemic to California and only found in vernal pools. Vernal pool habitats form in depressions above an impervious substrate layer, or claypan/duripan. This species does not occur in riverine, marine, or other permanent bodies of water. When the temporary pools dry, offspring persist in suspended development as desiccation-resistant embryos (commonly called cysts) in the pool substrate until the return of winter rains and appropriate temperatures allow some of the cysts to hatch.	Yes (a)	No	Not Expected: The project site does not contain suitable soils to support vernal pools and does not contain adequate depressions to support vernal pool habitat or fairy shrimp. This species is not known to occur within 5 miles of the project site.
<i>Buteo regalis</i> feruginous hawk	WL G4 S3S4	Common winter resident of grasslands and agricultural areas in southwestern California. Frequents open grasslands, sagebrush flats, desert scrub, low foothills surrounding valleys, and fringes of pinyon-juniper habitats. This species does not breed in California.	Yes	No	Low (Foraging), Not Expected (Nesting): Although the project site has suitable foraging habitat for this species, the general project vicinity on MARB is a high-traffic area with regular disturbance from land and air traffic. Additionally, this species is not known to nest this far south.
<i>Chaetodipus fallax fallax</i> northwestern San Diego pocket mouse	SSC G5T3T4 S3S4	Found terrestrially in a wide variety of temperate habitats ranging from chaparral and grasslands to scrub forests and deserts. Open habitat on the Pacific slope from southwestern San Bernardino County to northwestern Baja California. Habitat types include coastal sage scrub, sage scrub/grassland ecotones, and chaparral communities. Major habitat requirement is the presence of low growing vegetation or rocky outcroppings, as well as sandy soil to dig burrows.	Yes	No	Not Expected: Suitable coastal sage scrub/grassland and chaparral habitats with low growing vegetation and rocky outcroppings are not present within the project site. The project site is composed of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils which likely precludes this species from occurring.

Table C-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	FE SCE G5T2T3 S1	Uncommon summer resident where its breeding distribution is restricted to isolated sites in the Sacramento, Armargosa, Kern, Santa Ana, and Colorado River valleys. The species requires large patches of multi-layered riparian forest, with cottonwoods and willows. The presence of standing or flowing surface water under the riparian canopy is also preferred. Mesquite (<i>Prosopis</i> spp.) groves may also be used, but usually only when cottonwood-willow habitat is unavailable.	Yes (a)	No	Not Expected: Suitable riparian habitat preferred by this species is not present within the project site.
<i>Crotalus ruber</i> red-diamond rattlesnake	SCC G4 S3	Found in southwestern California, from the Morongo Valley west to the coast and south along the peninsular ranges to mid Baja California. It can be found from the desert, through dense chaparral in the foothills (it avoids the mountains above around 4,000 feet amsl), to warm inland mesas and valleys, all the way to the cool ocean shore. It is most commonly associated with heavy brush with large rocks or boulders. Dense chaparral in the foothills, boulders associated coastal sage scrub, oak/pine woodlands, and desert slope scrub associations; however, chamise and red shank (<i>Adenostoma sparsifolium</i>) associations may offer better structural habitat for refuges and food resources for this species than other habitats.	Yes	No	Not Expected: Suitable desert and chaparral habitat preferred by this species is not present within the project site.
<i>Danaus plexippus</i> (California overwintering population) monarch butterfly	FC G4T2T3 S2S3	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts are located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	No	No	Not Expected: The project site does not provide any suitable roosting habitat for this species.
<i>Dipodomys merriami parvus</i> San Bernardino kangaroo rat	FE SCE G5T1 S1	Primarily found in Riversidian alluvial fan sage scrub and sandy loam soils, alluvial fans and flood plains, and along washes with nearby sage scrub. May occur at lower densities in Riversidian upland sage scrub, chaparral and grassland in uplands and tributaries in proximity to Riversidian alluvial fan sage scrub habitats. Tend to avoid rocky substrates and prefer sandy loam substrates for digging of shallow burrows.	Yes (c)	No	Not Expected: Suitable Riversidian alluvial fan sage scrub habitat with sandy soils preferred by this species for burrowing are not present within the project site. The quality of surface soils within the project site (e.g., heavily disturbed/compacted), ongoing weed abatement, and disconnection of the project site from natural fluvial processes likely precludes this species from occurring within the project site.

Table C-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
<i>Dipodomys stephensi</i> Stephens' kangaroo rat	FE (dropped to FT after 3/31/22) ST G2 S2	Occur in arid and semi-arid habitats of open grassland or sparse shrublands with less than 50% protective cover. Require soft, well-drained substrate for building burrows and are typically found in areas with sandy soil in areas with <30 percent slope.	Yes	No	Not Expected: Suitable open grassland and sparse shrubland habitats with soft, sandy soils preferred by this species for burrowing are not present within the project site. The project site is composed of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils which likely precludes this species from occurring. Additionally, there are no occurrence records for this species within 5 miles of the project site (CDFW 2022a).
<i>Elanus leucurus</i> white-tailed kite	FP G5 S3S4	Yearlong resident along the coastal ranges and valleys of California. Occurs in low elevation, open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Uses trees with dense canopies for cover. Important prey item is the California vole (<i>Microtus californicus</i>). Nests in tall (20 to 50 feet) coast live oaks (<i>Quercus agrifolia</i>).	Yes	No	Low (Foraging), Not Expected (Nesting): This species is not expected to nest because there are no trees present on site. However, there is a low expectancy to forage because there is frequent rodent activity on site.
<i>Empidonax traillii extimus</i> southwestern willow flycatcher	FE SE G5T2 S1	Uncommon summer resident in southern California primarily found in lower elevation riparian habitats occurring along streams or in meadows. The structure of suitable breeding habitat typically consists of a dense mid-story and understory and can also include a dense canopy. Nest sites are generally located near surface water or saturated soils. The presence of surface water, swampy conditions, standing or flowing water under the riparian canopy are preferred.	Yes (a)	No	Not Expected: Suitable riparian habitat preferred by this species is not present within the project site.
<i>Emys marmorata</i> western pond turtle	SCC G3G4 S3	Found in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches, with abundant vegetation, either rocky or muddy bottoms, in woodland, forest, and grassland. In streams, prefers pools to shallower areas. Logs, rocks, cattail mats, and exposed banks are required for basking. May enter brackish water and even seawater. Found at elevations from sea level to over 5,900 feet amsl.	Yes	No	Not Expected: There are no perennial water sources with abundant vegetation within or adjacent to the project site. Additionally, there are no occurrence records for this species within 5 miles of the project site (CDFW 2022a).

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Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
<i>Eremophila alpestris actia</i> California horned lark	WL G5T4Q S4	Yearlong resident of California. This subspecies is typically found in coastal regions. Breed in level or gently sloping shortgrass prairie, montane meadows, "bald" hills, open coastal plains, fallow grain fields, and alkali flats. Within southern California, California horned larks breed primarily in open fields, (short) grasslands, and rangelands. Nests on the open ground.	Yes	Yes	Present: This species was widespread and present throughout the whole project site.
<i>Eumops perotis californicus</i> western mastiffbat	SSC G4G5T4 S3S4	Primarily a cliff-dwelling species, roost generally under exfoliating rock slabs. Roosts are generally high above the ground, usually allowing a clear vertical drop of at least 3 meters below the entrance for flight. In California, it is most frequently encountered in broad open areas. Its foraging habitat includes dry desert washes, flood plains, chaparral, oak woodland, open ponderosa pine forest, grassland, and agricultural areas.	No	No	Low: Although there were three occurrences within 5 miles of the project site (CDFW 2022a), and there may be suitable open foraging habitat preferred by this species within the project site and around MARB in general, there is a low expectancy to occur because there is no roosting habitat in the project site.
<i>Euphydryas editha quino</i> Quino checkerspot butterfly	FE G5T1T2 S1S2	Occupies a variety of habitat types that support California plantain (<i>Plantago erecta</i>), the species primary larval host plant, including grasslands, coastal sage scrub, chamise chaparral, red shank chaparral, juniper woodland, and semi-desert scrub. Can also be found in desert canyons and washes at the lower edge of chaparral habitats.	Yes	No	Not Expected: The project site does not provide suitable habitat for this species.
<i>Haliaeetus leucocephalus</i> bald eagle	SCE FP G5 S3	Locally common yearlong resident of southern California. Typically prefer areas near large water bodies such as sea coasts, coastal estuaries and inland lakes and rivers, in many areas, these birds are found within two miles of a water source. Most populations, specifically those in northern regions, migrate to southern, milder climates annually. Generally, these birds nest in the canopy of tall, coniferous trees, surrounded by smaller trees. They have been reported nesting on the ground, on cliffs, on cellular phone towers, on electrical poles and in artificial nesting towers.	Yes	No	Not Expected: This species prefers being near large bodies of water with coniferous trees with tall canopies to nest in, features that are not present on the project site.

Table C-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special- Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
<i>Icteria virens</i> yellow-breasted chat	SSC G5 S3	Summer resident of California. Primarily found in tall, dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories. Breeding habitat within southern California primarily consists of dense, wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories. Nesting areas are associated with streams, swampy ground, and the borders of small ponds. It winters south the Central America. Found at elevations ranging from 820 to 2,625 feet amsl.	Yes	No	Not Expected: The project site lacks any riparian scrub or riparian habitat.
<i>Lanius ludovicianus</i> loggerhead shrike	SSC G4 S4	Yearlong resident of California. Prefers open habitats with bare ground, scattered shrubs, and areas with low or sparse herbaceous cover including open-canopied valley foothill hardwood, riparian, pinyon-juniper desert riparian, creosote bush scrub, and Joshua tree woodland. Requires suitable perches including trees, posts, fences, utility lines, or other perches. Nests in branches up to 14 feet above the ground frequently in a shrub with thorns or with tangled branching habitats.	Yes	No	Not Expected: This species is nearly extirpated as a breeding bird on the coastal slope of southern California, and furthermore there is no chaparral or shrub habitat on-site to nest in. Although coastal southern California receives an influx of shrikes during the winter, the lack of any shrubby habitat at all in or around the project site would likely preclude this species' occurrence.
<i>Lasiurus xanthinus</i> western yellow bat	SSC G4G5 S3	Uncommon in California, known only in Los Angeles and San Bernardino Counties. Occurs in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Prefers to roost and feed in, and near, palm oases and riparian habitats. Commonly found in the southwestern U.S. roosting in the skirt of dead fronds in both native and non-native palm trees.	No	No	Low: Although there were three occurrences within 5 miles of the project site, there is a low expectancy for the species to be present on-site and forage because this species is not expected to roost within the project site due to the lack of palm oases and riparian habitats
<i>Laterallus jamaicensis coturniculus</i> California black rail	ST FP G3G4T1 S1	Suitable habitat generally includes salt marshes, freshwater marshes, and wet meadows. Typical associated vegetation includes pickle weed (<i>Salicornia virginica</i>) in salt marshes and bulrushes in less saline habitats.	No	No	Not Expected: Although a historic breeder, this species no longer occurs in coastal southern California except as extremely accidental. There is no suitable habitat on-site.
<i>Lepus californicus bennettii</i> San Diego black- tailed jackrabbit	SSC G5T3T4 S3S4	Occupies many diverse habitats, but primarily is found in arid regions supporting short-grass habitats, agricultural fields, or sparse coastal scrub.	Yes	Yes	Present: This species was observed on-site during the field survey.

Table C-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
<i>Neotoma lepida intermedia</i> San Diego desert woodrat	SSC G5T3T4 S3S4	Occurs in coastal scrub communities between San Luis Obispo and San Diego Counties. Found in a variety of shrub and desert habitats, primarily associated with rock outcroppings, boulders, cacti, or areas of dense undergrowth. Woodrats often are associated with cholla cactus which they use for water and dens or boulders and boulder piles. The most common natural habitats for records are chaparral, coastal sage scrub (including RSS and Diegan coastal sage scrub) and grassland.	Yes	No	Not Expected: This species is not expected due to the lack of suitable habitat.
<i>Nyctinomops femorosaccus</i> pocketed free-tailed bat	SSC S3S4 S3	Often found in pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree woodland, and palm oasis habitats. Prefers rocky desert areas with high cliffs or rock outcrops, which are used as roosting sites. Considered a resident in San Diego County.	No	No	Not Expected: This species is not expected due to a lack of suitable roosting or foraging habitat. Although there is a single record from March Air Reserve Base in 1985 (CDFW 2022a), based on the lack of on-site habitat and the general lack of records in Riverside County, the 1985 record was likely accidental and not indicative of long-term residency.
<i>Onychomys torridus ramona</i> southern grasshopper mouse	SSC G5T3 S3	Common in arid desert habitats of the Mojave and southern Central Valley of California. Known elevation range is generally below 3,000 feet amsl. Little is known about habitat requirements; however, it is commonly found in scrub habitats with friable soils for digging in desert areas. It is believed that alkali desert scrub and desert scrub habitats are preferred, with somewhat lower densities expected in other desert habitats, including succulent shrub, wash, and riparian areas. Also occurs in coastal scrub, mixed chaparral, sagebrush, low sage, and bitterbrush habitats.	No	No	Not Expected: This species is not expected to occur on site because there is no suitable shrub habitat within or adjacent to the project site. Although there is an occurrence of this species within 3.5 miles of the project site, it is on the other side of I-215 which greatly decreases the likelihood of this species occurring on the project site (CDFW 2022a).
<i>Perognathus longimembris brevinasus</i> Los Angeles pocket mouse	SSC G5T2 S1S2	Occurs in lower elevation grasslands and coastal sage scrub communities in and around the Los Angeles Basin. Prefers open ground with fine sandy soils. May not dig extensive burrows, but instead will seek refuge under weeds and dead leaves instead.	Yes (c)	No	Not Expected: Suitable grassland and coastal sage scrub habitats with fine sandy soils preferred by this species for burrowing are not present within the project site. The project site is composed of non-native grasslands, developed and disturbed habitat that is subject to routine weed abatement, resulting in low vegetation and no shrubs.

Table C-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
<i>Phrynosoma blainvillii</i> coast horned lizard	SSC G3G4 S3S4	Occurs in a wide variety of vegetation types including coastal sage scrub, annual grassland, chaparral, oak woodland, riparian woodland and coniferous forest. Its elevational range extends up to 4,000 feet in the Sierra Nevada foothills and up to 6,000 feet in the mountains of southern California. In inland areas, this species is restricted to areas with pockets of open microhabitat, created by disturbance (e.g. fire, floods, unimproved roads, grazing lands, and fire breaks). The key elements of such habitats are loose, fine soils with a high sand fraction; an abundance of native ants or other insects; and open areas with limited overstory for basking and low, but relatively dense shrubs for refuge.	Yes	No	Not Expected: Loose, fine sandy soils preferred by this species are not present within the project site. The project site is composed of non-native grasslands, developed and disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils which likely precludes this species from occurring. The lack of connectivity to naturally-occurring native habitats further reduces the likelihood of this species occurring on-site.
<i>Poliophtila californica californica</i> coastal California gnatcatcher	FT SSC G4G5T3Q S2	Yearlong resident of sage scrub habitats that are dominated by California sagebrush. This species generally occurs below 750 feet amsl in coastal regions and below 1,500 feet amsl inland. Ranges from the Ventura County, south to San Diego County and northern Baja California and it is less common in sage scrub with a high percentage of tall shrubs. Prefers habitat with more low-growing vegetation.	Yes	No	Not Expected: Coastal sage scrub habitat is not present within the project site.
<i>Salvadora hexalepis virgulata</i> coast patch-nosed snake	SSC G5T4 S2S3	Occurs in brushy vegetation including coastal scrub and chaparral from the coast to the mountains. Takes refuge in existing small mammal burrows.	No	No	Not Expected: Coastal sage scrub habitat or chaparral habitat are not present within the project site.
<i>Spea hammondii</i> western spadefoot	SSC G3 S3	Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Rain pools which do not contain American bullfrogs (<i>Lithobates catesbeianus</i>), predatory fish, or crayfish are necessary for breeding. Estivates in upland habitats adjacent to potential breeding sites in burrows approximating 3 feet in depth.	Yes	No	Not Expected: Suitable breeding and aestivating habitat is not present within the project site.
<i>Spinus lawrencei</i> Lawrence's goldfinch	WL G3G4 S4	Closely associated with oaks. It nests in open oak or other arid woodland and chaparral, near water. It forages near herbaceous habitats.	No	No	Not Expected: Suitable open oak, arid woodland or chaparral habitat are not present within the project site. Additionally, there are no occurrence records for this species within 5 miles of the project site (CDFW 2022a).

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Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
<i>Streptocephalus woottoni</i> Riverside fairy shrimp	FE G1G2 S1S2	Restricted to deep seasonal vernal pools, vernal pool like ephemeral ponds, and stock ponds and other human modified depressions. Basins that support Riverside fairy shrimp are typically dry a portion of the year, but usually are filled by late fall, winter, or spring rains, and may persist through May. Endemic to western Riverside, Orange, and San Diego Counties in tectonic swales/earth slump basins in grassland and coastal sage scrub. In Riverside County, the species been found in pools formed over the following soils: Murrieta stony clay loams, Las Posas series, Wyman clay loam, and Willows soils. All known habitat lies within annual grasslands, which may be interspersed through chaparral or coastal sage scrub vegetation.	Yes (a)	No	Not Expected: The project site does not contain suitable soils to support vernal pools and does not contain adequate depressions to support vernal pool habitat or fairy shrimp. This species is not known to occur within 5 miles of the project site.
<i>Taxidea taxus</i> American badger	SSC G5 S3	Occupies a wide variety of habitats including dry, open grassland, sagebrush, and woodland habitats. Require dry, friable, often sandy soil to dig burrows for cover, food storage, and giving birth. Occasionally found in riparian zones and open chaparral with less than 50% plant cover.	No	No	Not Expected: Although the project site does provide suitable dry, open grassland for the species to occur it is not expected to because the site is surrounded with human infrastructure. Additionally, there are no occurrence records for this species within 5 miles of the project site (CDFW 2022a).
<i>Vireo bellii pusillus</i> least Bell's vireo	FE SE SSC G5T2 S2	Summer resident in southern California. Breeding habitat generally consists of dense, low, shrubby vegetation in riparian areas, and mesquite brushlands, often near water in arid regions. Early successional cottonwood-willow riparian groves are preferred for nesting. The most critical structural component of nesting habitat in California is a dense shrub layer that is 2 to 10 feet above ground. The presence of water, including ponded surface water or moist soil conditions, may also be a key component for nesting habitat.	Yes (a)	No	Not Expected: Suitable riparian habitat preferred by this species is not present within the project site.
SPECIAL-STATUS PLANT SPECIES					
<i>Abronia villosa</i> var. <i>aurita</i> chaparral sand-verbena	1B.1 G5T2? S2	Annual herb. Occurs on sandy soils within chaparral, coastal scrub, and desert dunes. Grows in elevations ranging from 246 to 5,250 feet above mean sea level (amsl). Blooming period is (January) March through September.	No	No	Not Expected: The project site is composed of non-native grasslands, developed and disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils which likely precludes this species from occurring.

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Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
<i>Allium munzii</i> Munz's onion	FE SCE 1B.1 G1 S1	Perennial bulbiferous herb. Found on mesic, clay soils within chaparral, cismontane woodland, coastal scrub, pinyon and juniper woodland, and valley and foothill grassland habitats. Found at elevations ranging from 974 to 3,510 feet amsl. Blooming period is from March to May.	Yes (b)	No	Not Expected: The project site is composed of non-native grasslands, developed and disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils which likely precludes this species from occurring.
<i>Ambrosia pumila</i> San Diego ambrosia	FE 1B.1 G1 S1	Perennial rhizomatous herb. Occurs on sandy loam or clay soils (often in disturbed areas and often in mesic soils) and sometimes alkaline soils. Habitats include chaparral, coastal scrub, valley and foothill grassland, and vernal pools. Grows in elevation ranging from 66 to 1,362 feet amsl. Blooming period is from April to October.	Yes (b)	No	Not Expected: The project site is composed of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils which likely precludes this species from occurring.
<i>Arenaria paludicola</i> marsh sandwort	FE SE 1B.1 G1 S1	Perennial stoloniferous herb. Found on sandy, openings within marshes and swamps (freshwater or brackish). Found at elevations ranging from 12 to 558 feet amsl. Blooming period is May through August.	No	No	Not Expected: The project site is outside of the known elevation range for this species. In addition, the only occurrence record(s) of this species in the project vicinity (5-mile radius) are considered extirpated (CDFW 2022a).
<i>Artemisia palmeria</i> San Diego sagewort	4.2 G3? S3?	Perennial deciduous herb. Found on sandy, mesic soils within chaparral, coastal scrub, riparian forest, riparian scrub, and riparian woodland habitats. Found at elevations ranging from 49 to 3,002 feet amsl. Blooming period is from (February) May to September.	No	No	Not Expected: The project site is composed of non-native grasslands, developed and disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils which likely precludes this species from occurring.
<i>Atriplex coronata</i> <i>var. notatior</i> San Jacinto Valley crownscale	FE 1B.1 G4T1 S1	Annual herb. Occurs on alkaline soils within playas, valley and foothill grassland (mesic), and vernal pool habitats. Grows in elevations ranging from 456 to 1,640 feet amsl. Blooming period is from April to August.	Yes (d)	No	Not Expected: The project site is composed of non-native grasslands, developed and disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils which likely precludes this species from occurring.
<i>Atriplex parishii</i> Parish's brittle-scale	1B.1 G1G2 S1	Annual herb. Blooms June through October. Usually found on drying alkali flats with fine soils in vernal pools, chenopod scrub, wet meadows, and playas. Known elevations range from 15 to 4,660 feet amsl.	Yes (d)	No	Not Expected: The project site is composed of non-native grasslands, developed and disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils which likely precludes this species from occurring.

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Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
<i>Atriplex serenana</i> <i>var. davidsonii</i> Davidson's saltscale	1B.2 G5T1 S1	Annual herb. Occurs on alkaline soils within coastal bluff scrub and coastal scrub habitats. Grows in elevations ranging from 33 to 656 feet amsl. Blooming period is from April to October.	Yes (d)	No	Not Expected: The project site is composed of non-native grasslands, developed and disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils which likely precludes this species from occurring.
<i>Berberis nevinii</i> Nevin's barberry	FE SCE 1B.1 G1 S1	Perennial evergreen shrub. Occurs on sandy or gravelly soils in chaparral, cismontane woodland, coastal scrub, and riparian scrub. Found at elevations ranging from 899 to 2,707 feet amsl. Blooming period is (February) March through June.	Yes (d)	No	Not Expected: The project site is composed of non-native grasslands, developed and disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils which likely precludes this species from occurring.
<i>Brodiaea filifolia</i> thread-leaved brodiaea	FT SCE 1B.1 G2 S2	Perennial bulbiferous herb. Often found on clay soils within chaparral (openings), cismontane woodland, coastal scrub, playas, valley and foothill grassland, and vernal pools. Found at elevations ranging from 82 to 3,675 feet amsl. Blooming period is from March to June.	Yes (d)	No	Not Expected: The project site is composed of non-native grasslands, developed and disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils which likely precludes this species from occurring.
<i>Calochortus plummerae</i> Plummer's mariposa-lily	4.2 G4 S4	Perennial bulbiferous herb. Occurs on granitic and rocky soils within chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and valley/foothill grassland. Grows in elevations ranging from 328 to 5,577 feet amsl. Blooming period is May through July.	Yes (e)	No	Not Expected: The project site is composed of disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils which likely precludes this species from occurring.
<i>Caulanthus simulans</i> Payson's jewelflower	4.2 G4 S4	Annual herb. Occurs on sandy, granitic soils in chaparral and coastal scrub habitats. Found at elevations ranging from 295 to 7,218 feet amsl. Blooming period is from (February) March to May (June).	Yes	No	Not Expected: The project site is composed of non-native grasslands, developed and disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils which likely precludes this species from occurring.
<i>Centromadia pungens ssp. laevis</i> smooth tarplant	1B.1 G3G4T2 S2	Annual herb. Occurs in alkaline soils within chenopod scrub, meadows and seeps, playas, riparian woodland, and valley/foothill grassland habitats. Grows in elevation from 0 to 2,100 feet amsl. Blooming period is from April to September.	Yes (d)	No	Not Expected: The project site is composed of non-native grasslands, developed and disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils which likely precludes this species from occurring.

Table C-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
<i>Chloropyron maritimum ssp. maritimum</i> salt marsh bird's-beak	1B.2 G4?T1 S1	Annual herb (hemiparasitic). Occurs on coastal dunes and marshes and swamps (coastal salt). Found at elevations ranging from 0 to 98 feet amsl. Blooming period is May through October (November).	No	No	Not Expected: The project site is composed of non-native grasslands, developed and disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils which likely precludes this species from occurring. Further, it is outside of the elevation range this species is known to inhabit.
<i>Chorizanthe leptotheca</i> Peninsular spineflower	4.2 G3 S3	Annual herb. Blooms May through August. Prefers chaparral, coastal scrub, and lower montane coniferous forest habitats. Found at elevations ranging from 985 to 6235 feet.	Yes (e)	No	Not Expected: The project site is composed of non-native grasslands, developed and disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils which likely precludes this species from occurring.
<i>Chorizanthe parryi var. parryi</i> Parry's spineflower	1B.1 G3T2 S2	Annual herb. Occurs on sandy and/or rocky soils in chaparral, coastal sage scrub, and sandy openings within alluvial washes and margins. Found at elevations ranging from 951 to 3,773 feet amsl. Blooming period is April through June.	Yes (e)	No	Not Expected: The project site is composed of non-native grasslands, developed and disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils which likely precludes this species from occurring.
<i>Chorizanthe polygonoides var. longispina</i> long-spined spineflower	1B.2 G5T3 S3	Annual herb. Occurs on clay soils within chaparral, coastal scrub, meadows and seeps, valley and foothill grassland, and vernal pools. Found at elevations ranging from 98 to 5,020 feet amsl. Blooming period is from April to July.	Yes	No	Not Expected: The project site is composed of non-native grasslands, developed and disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils which likely precludes this species from occurring.
<i>Chorizanthe xanti var. leucotheca</i> white-bracted spineflower	1B.2 G4T3 S3	Annual herb. Prefers coastal scrub (alluvial fans), Mojavean desert scrub, and pinyon and juniper woodland habitats. Found at elevations ranging from 985 to 3935 feet. Blooms April through June.	No	No	Not Expected: The project site is composed of non-native grasslands, developed and disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils which likely precludes this species from occurring.
<i>Convolvulus simulans</i> small-flowered morning-glory	4.2 G4 S4	Annual herb. Prefers chaparral (openings), coastal scrub, and valley and foothill grassland habitats. Found at elevations ranging from 100 to 2430 feet. Blooms March through July.	Yes	No	Low: The project site is composed of non-native grasslands, developed and disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils which likely precludes this species from occurring.

Table C-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special- Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
<i>Deinandra paniculata</i> paniculate tarplant	4.2 G4 T4	Annual herb. Prefers coastal scrub, valley and foothill grassland, and vernal pool habitats. Found at elevations ranging from 80 to 3085 feet. Blooms (March) April through November.	No	No	Moderate: Although there are no records in the vicinity in the CNDDDB (CDFW 2022a), this species is generally fairly widespread and is commonly found in disturbed grasslands in Riverside County. It is known to occur on MARB.
<i>Harpagonella palmeri</i> Palmer's grapplinghook	4.2 G4 S3	Annual herb. Occurs on clay soils within open grassy areas within chaparral, coastal scrub, and valley and foothill grassland habitats. Found at elevations ranging from 66 to 3,133 feet amsl. Blooming period is from March to May.	Yes	No	Not Expected: The project site is composed of non-native grasslands, developed and disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils which likely precludes this species from occurring.
<i>Hordeum intercedens</i> vernal barley	3.2 G3G4 S3S4	Annual herb. Prefers coastal dunes, coastal scrub, valley and foothill grassland (depressions, saline flats), and vernal pool habitats. Found at elevations ranging from 15 to 3280 feet. Blooms March through June.	Yes	No	Not Expected: The project site is composed of non-native grasslands, developed and disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils which likely precludes this species from occurring.
<i>Juglans californica</i> Southern California black walnut	4.2 G4 S4	Perennial deciduous tree. Prefers chaparral, cismontane woodland, coastal scrub, and riparian woodland habitats. Found at elevations ranging from 165 to 2955 feet. Blooms March through August.	Yes	No	Not Expected: The project site is composed of non-native grasslands, developed and disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils which likely precludes this species from occurring.
<i>Lasthenia glabrata ssp. coulteri</i> Coulter's goldfields	1B.1 G4T2 S2	Annual herb. Prefers playas, vernal pools, and coastal salt marshes and swamps. Found at elevations ranging from 3 to 4,003 feet amsl. Blooming period is from February to June.	Yes (d)	No	Not Expected: The project site is composed of non-native grasslands, developed and disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils which likely precludes this species from occurring.
<i>Lepidium virginicum var. robinsonii</i> Robinson's pepper-grass	4.3 G5T3 S3	Annual herb. Dry soils on chaparral and coastal sage scrub. Found at elevations ranging from 66 to 4,396 feet amsl. Blooming period is January through July.	No	No	Not Expected: The project site is composed of non-native grasslands, developed and disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils which likely precludes this species from occurring.

Table C-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
<i>Myosurus minimus ssp. apus</i> little mousetail	3.1 G5T2Q S2	Annual herb. Occurs on valley and foothill grassland and vernal pools (alkaline). Found at elevations ranging from 66 to 2,100 feet amsl. Blooming period is from March to June.	Yes (d)	No	Not Expected: The project site is composed of non-native grasslands, developed and disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils which likely precludes this species from occurring.
<i>Navarretia fossalis</i> spreading navarretia	FT 1B.1 G2 S2	Annual herb. Habitats include chenopod scrub, marshes and swamps (assorted shallow freshwater), playas, and vernal pools. Grows in elevation ranging from 98 to 2,149 feet amsl. Blooming period is from April to June.	Yes (b)	No	Not Expected: The project site is composed of non-native grasslands, developed and disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils which likely precludes this species from occurring.
<i>Phacelia stellaris</i> Brand's star phacelia	1B.1 G1 S1	Annual herb. Prefers coastal dunes and coastal scrub habitats. Found at elevations ranging from 5 to 1310 feet. Blooms March through June.	Yes (b)	No	Not Expected: The project site is composed of non-native grasslands, developed and disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils which likely precludes this species from occurring.
<i>Romneya coulteri</i> Coulter's matilija poppy	4.2 G4 S4	Perennial rhizomatous herb. Prefers chaparral and coastal scrub habitat. Found at elevations ranging from 65 to 3935 feet. Blooms March through July (August).	Yes (e)	No	Not Expected: The project site is composed of non-native grasslands, developed and disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils which likely precludes this species from occurring.
<i>Senecio aphanactis</i> chaparral ragwort	2B.2 G3 S2	Annual herb. Grows on alkaline soils within chaparral, cismontane woodland, and coastal scrub habitats. Found at elevations ranging from 49 to 2,625 feet amsl. Blooming period is January through April (May).	No	No	Not Expected: The project site is composed of non-native grasslands, developed and disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils which likely precludes this species from occurring.
<i>Symphyotrichum defoliatum</i> San Bernardino aster	1B.2 G2 S2	Perennial rhizomatous herb. Occurs near ditches, streams, and springs within cismontane woodland, coastal scrub, lower montane coniferous forest, meadows, seeps, marshes, and valley/foothill grassland. Grows in elevations ranging from 0 through 6,700 feet amsl. Blooming period is July through November.	No	No	Not Expected: The project site is composed of non-native grasslands, developed and disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils which likely precludes this species from occurring.

Table C-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special- Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
<i>Texosporium sancti-jacobi</i> woven-spored lichen	3 G3 S2	Lichen. Found in open sites within chaparral. Typically found on soil, small mammal pellets, dead twigs, and on <i>Selaginella</i> . In California, this species is typically associated with <i>Adenostoma fasciculatum</i> , <i>Eriogonum</i> , and <i>Selaginella</i> .	No	No	Not Expected: The project site is composed of non-native grasslands, developed and disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils which likely precludes this species from occurring.
<i>Tortula californica</i> California screw moss	1B.2 G2G3 S2?	Moss. Prefers chenopod scrub, and valley and foothill grassland habitats. Found at elevations 35 to 4790 feet.	No	No	Not Expected: The project site is composed of non-native grasslands, developed and disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils which likely precludes this species from occurring.
<i>Trichocoronis wrightii</i> var. <i>wrightii</i> Wright's trichocoronis	2B.1 G4T3 S1	Annual herb. Found on alkaline soils within meadows and seeps, marshes and swamps, riparian forest, and vernal pool habitats. Grows in elevations ranging from 16 to 1,427 feet amsl. Blooming period is from May to September.	Yes (b)	No	Not Expected: The project site is composed of non-native grasslands, developed and disturbed habitat that is subject to routine weed abatement, resulting in heavily disturbed and compacted surface soils which likely precludes this species from occurring.
SPECIAL-STATUS VEGETATION COMMUNITIES					
CNDDDB/Holland (1986) Southern Coast Live Oak Riparian Forest MCV (1995) Coast Live Oak Series NVCS (2009) <i>Quercus agrifolia</i> Woodland Alliance	G4 S4	Found at elevations ranging from sea level to 3,937 feet amsl in alluvial terraces, canyon bottoms, stream banks, slopes, and flats. Soils are deep, sandy or loamy with high organic matter. Coast live oak is a dominant or co-dominant in the tree canopy with bigleaf maple (<i>Acer macrophyllum</i>), box elder (<i>Acer negundo</i>), madrono (<i>Arbutus menziesii</i>), southern California black walnut, California sycamore, Fremont cottonwood, blue oak (<i>Quercus douglasii</i>), Engelmann oak, California black oak (<i>Quercus kelloggii</i>), valley oak (<i>Quercus lobata</i>), arroyo willow (<i>Salix lasiolepis</i>), and California bay (<i>Umbellularia californica</i>). Trees are less than 98 feet tall; canopy is open to continuous. Shrub layer is sparse to intermittent. Herbaceous layer is sparse or grassy.	-	No	Absent: This vegetation community was not observed within the project site.

Table C-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special-Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
<u>CNDDB/Holland (1986)</u> Southern Cottonwood Willow Riparian Forest <u>MCV (1995)</u> Fremont Cottonwood Series <u>NYCS (2009)</u> <i>Populus fremontii</i> Forest Alliance	G3 S3.2	Found at elevations ranging from sea level to 7,874 feet amsl on floodplains, along low-gradient rivers, perennial or seasonally intermittent streams, springs, in lower canyons in desert mountains, in alluvial fans, and in valleys with a dependable subsurface water supply that varies considerably during the year. Fremont cottonwood is a dominant or co-dominant in the tree canopy with box elder, desert baccharis (<i>Baccharis sergiloides</i>), Oregon ash (<i>Fraxinus latifolia</i>), northern California black walnut (<i>Juglans hindsii</i>), California sycamore, coast live oak, narrowleaf willow (<i>Salix exigua</i>), Goodding's willow (<i>Salix goodingii</i>), polished willow (<i>Salix laevigata</i>), arroyo willow, pacific willow (<i>Salix lasiandra</i> ssp. <i>lasiandra</i>), and yellow willow (<i>Salix lutea</i>). Trees and less than 25 meters tall; canopy is continuous to open. Shrub layer is intermittent to open. Herbaceous layer is variable.	-	No	Absent: This vegetation community was not observed within the project site.
<u>CNDDB/Holland (1986)</u> Southern Sycamore Alder Riparian Woodland <u>MCV (1995)</u> California Sycamore Series <u>NYCS (2009)</u> <i>Platanus racemosa</i> Woodland Alliance	G4 S4	Found at elevations ranging from sea level to 7,874 feet amsl in gullies, intermittent streams, springs, seeps, stream banks, and terraces adjacent to floodplains that are subject to high-intensity flooding. Soils are rocky or cobbly alluvium with permanent moisture at depth. California sycamore is a dominant or co-dominant in the tree canopy with white alder, southern California black walnut, Fremont cottonwood, coast live oak, valley oak, narrowleaf willow, Goodding's willow, polished willow, arroyo willow, yellow willow, Peruvian pepper tree (<i>Schinus mole</i>), and California bay.	-	No	Absent: This vegetation community was not observed within the project site.

* U.S. Fish and Wildlife Service (USFWS)

- FE Endangered – any species which is in danger of extinction throughout all or a significant portion of its range.
- FT Threatened – any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.
- FC Candidate – any species which has been designated as a candidate eligible for considering to be listed under the Federal Endangered Species Act.

California Department of Fish and Wildlife (CDFW)

- SE Endangered – any native species or subspecies of bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease.
- SCE State Candidate for Listing as Endangered – the classification provided to a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Fish and Game Commission has formally noticed as being under review by the Department of Fish and Wildlife for addition to the list of endangered species, or a species for which the commission has published a notice of proposed regulation to add the species to the list of endangered species.
- ST Threatened – any native species or subspecies of bird, mammal, fish, amphibian, reptile, or plant that, although not presently

- threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required under the California Endangered Species Act.
- FP Fully Protected – any native species or subspecies of bird, mammal, fish, amphibian, or reptile that were determined by the State of California to be rare or face possible extinction.
- SSC Species of Special Concern – any species, subspecies, or distinct population of fish, amphibian, reptile, bird, or mammal native to California that currently satisfies one or more of the following criteria:
- is extirpated from California or, in the case of birds, in its primary seasonal or breeding role;
 - is listed as Federally-, but not State-, threatened or endangered; meets the State definition of threatened or endangered but has not formally been listed.
 - is experiencing, or formerly experienced, serious (nonyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status; or
 - has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for State threatened or endangered status.
- WL Watch List - taxa that were previously designated as “Species of Special Concern” but no longer merit that status, or which do not yet meet SSC criteria, but for which there is concern and a need for additional information to clarify status.

California Native Plant Society (CNPS) California Rare Plant Rank

- 1A Presumed extirpated in California and either rare or extinct elsewhere.
- 1B Plants rare, threatened, or endangered in California and elsewhere.
- 2B Plants rare, threatened, or endangered in California but more common elsewhere.
- 4 Plants of limited distribution – Watch List.

Threat Ranks

- .1 Seriously threatened in California (over 80% of occurrences threatened/high degree any immediacy of threat).
- .2 Moderately threatened in California (20 to 80 percent of occurrences threatened/moderate degree and immediacy of threat).
- .3 Not very threatened in California (less than 20 percent of occurrences threatened/low degree and immediacy of threat or no current threats known).

NatureServe Conservation Status Rank

The Global Rank (G#) reflects the overall condition and imperilment of a species throughout its global range. The Intraspecific Taxon Rank (T#) reflects the global situation of just the subspecies or variety. The State Rank (S#) reflects the condition and imperilment of an element throughout its range within California. (G#Q) reflects that the element is very rare but there are taxonomic questions associated with it; the calculated G rank is qualified by adding a Q after the G#. Adding a ? to a rank expresses uncertainty about the rank.

- G1/T1 Critically Imperiled – At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.
- G2/T2 Imperiled— At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.
- G3/T3 Vulnerable— At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.
- G4/T4 Apparently Secure— Uncommon but not rare; some cause for long-term concern due to declines or other factors.
- G5 Secure – Common; widespread and abundant.
- S1 Critically Imperiled – Critically imperiled in the state because of extreme rarity (often 5 or fewer occurrences) or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the State.
- S2 Imperiled – Imperiled in the State because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the nation or State.
- S3 Vulnerable – Vulnerable in the State due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation.
- S4 Apparently Secure – Uncommon but not rare; some cause for long-term concern due to declines or other factors.

**** Western Riverside County Multiple Species Habitat Conservation Plan**

Yes – Fully Covered.

No – Not Covered.

Yes (a) – May require additional surveys as part of wetlands mapping pursuant to Section 6.1.2, *Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools*.

Yes (b) – May require additional surveys within the Narrow Endemic Plant Species survey area pursuant to Section 6.1.3, *Protection of Narrow Endemic Plant Species*.

Yes (c) – May require additional surveys within locations shown on survey maps in Section 6.3.2, *Additional Survey Needs and Procedures*.

Yes (d) – May require surveys in Criteria Area pursuant to Section 6.3.2, *Additional Survey Needs and Procedures*.

Yes (e) – Will be considered to be a Covered Species Adequately Conserved when conservation requirements identified in species-specific conservation objectives have been met as described in Table 9-3 of the MSHCP.

Appendix B-2
Delineation of State and Federal
Jurisdictional Waters

PERRIS VALLEY CHANNEL LATERAL B, STAGE 4 PROJECT

PERRIS VALLEY CHANNEL LATERAL B, STAGE 4 PROJECT

CITY OF PERRIS, COUNTY OF RIVERSIDE, CALIFORNIA

Delineation of State and Federal Jurisdictional Waters

Prepared For:

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July 2022

JN 187014

PERRIS VALLEY CHANNEL LATERAL B, STAGE 4 PROJECT

CITY OF PERRIS, COUNTY OF RIVERSIDE, CALIFORNIA

Delineation of State and Federal Jurisdictional Waters

The undersigned certify that this report is a complete and accurate account of the findings and conclusions of jurisdictional wetland and non-wetland "waters of the U.S.," "waters of the State," and streambed/banks and associated riparian vegetation delineation for the above-referenced project.



Chelita Borbón
Regulatory Specialist
Natural Resources and Regulatory Permitting



Tom Millington
Senior Biologist/Regulatory Specialist
Natural Resources and Regulatory Permitting

July 2022
JN 187014

Executive Summary

On behalf of the Riverside County Flood Control and Water Conservation District (District), Michael Baker International (Michael Baker) has prepared this Delineation of State and Federal Jurisdictional Waters Report for the proposed Perris Valley Channel Lateral B, Stage 4 Project (project) located in the City of Perris, Riverside County, California. This report was prepared to document all aquatic and other hydrological features identified by Michael Baker within the project site that are potentially subject to the jurisdiction of the U.S. Army Corps of Engineers (USACE) pursuant to Section 404 of the federal Clean Water Act (CWA), the Regional Water Quality Control Board (RWQCB) pursuant to Section 401 of the CWA and/or Section 13263 of the California Porter-Cologne Water Quality Control Act, and the California Department of Fish and Wildlife (CDFW) pursuant to Sections 1600 *et seq.* of the California Fish and Game Code (CFGC).

The Perris Valley Channel (PVC) occurs within the project site on March Air Reserve Base (MARB) and is tributary to Canyon Lake (Traditional Navigable Water). Therefore, the PVC falls under the regulatory authority of the USACE and RWQCB. Because the project site is located on federal lands (March Air Reserve Base), CDFW does not have regulatory authority over the state waters within the project site. Based on the results of the field delineation, approximately 1.02 acres (1,393 linear feet) of USACE/RWQCB non-wetland waters of the U.S. (WoUS) occur within the boundaries of the project site. Refer to Table ES-1 below for a summary of State and federal jurisdictional resources within the project site and impacts that would occur as a result of the proposed project.

Table ES-1: State and Federal Jurisdictional Resources and Proposed Impacts

Hydrologic Feature	Latitude / Longitude	Cowardin Class	Class of Aquatic Feature	Acreage		
				USACE/RWQCB Non-Wetland WoUS		
				Total Acreage	Impacts	
Permanent	Temporary					
PVC (North Segment)	33.859205° / -117.244730°	Riverine	Non-Wetland	0.68 (827)	0.00 (0)	0
PVC (South Segment)	33.870352° / -117.254872°	Riverine	Non-Wetland	0.34 (566)	0.28 (511)	0
Offsite Channel	33.870354° / -117.244862°	Riverine	Non-Wetland	3.33 (4,530)	0	0
TOTAL*				4.35 (5,923)	0.28 (511)	0.00

Based on the results of the jurisdictional delineation and review project design plans, the District would need to obtain the following regulatory permits/authorizations prior to any impacts occurring within State and federal jurisdictional areas:

1. **CWA Section 404 Permit** – issuance of a 404 authorization from the USACE for impacts to non-wetland WoUS would be required for temporary and permanent impacts to non-wetland WoUS.

The project meets the requirements of Nationwide Permit 43 (Stormwater Management Facilities) and would require a preconstruction notification (PCN).

2. **CWA Section 401 Water Quality Certification** – Issuance of a Water Quality Certification from the RWQCB, Santa Ana Region or EPA (due to the location of the waters on federal lands (March Air Reserve Base) for temporary and permanent impacts to non-wetland WoUS is required as a condition of the 404 Nationwide Permit process.
3. **1602 Lake and Streambed Alteration Agreement** – The project site is located on federal lands (March Air Reserve Base), therefore, CDFW does not have regulatory authority over the state waters within the project site. No 1602 Streambed Alteration Agreement is required.

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ACRONYMS AND ABBREVIATIONS

°F	degrees Fahrenheit
APN	assessor's parcel number
CDFW	California Department of Fish and Wildlife
CFGC	California Fish and Game Code
CWA	federal Clean Water Act
DBH	diameter at breast height
District	Riverside County Flood Control and Water Conservation District
EPA	Environmental Protection Agency
FAC	Facultative
FACU	Facultative Upland
FACW	Facultative Wetland
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
I-215	Interstate 215
LSAA	Lake or Streambed Alteration Agreement
MARB	March Air Reserve Base
MDP	Perris Valley Master Drainage Plan
Michael Baker	Michael Baker International
MJPA	March Joint Powers Authority
NWPR	Navigable Waters Protection Rule
OBL	Obligated Wetland
OHWM	ordinary high-water mark
Porter-Cologne Act	California Porter-Cologne Water Quality Control Act
project	Perris Valley Channel Lateral B, Stage 4 Project
PVC	Perris Valley Channel
PVC – Stage 4	Perris Valley Channel Lateral B, Stage 4 Project
Rapanos	<i>Rapanos v. United States</i> and <i>Carabell v. United States</i>
RCB	reinforced concrete box
Regional Supplement	<i>Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region, Version 2.0</i>
RPW	Relatively Permanent Waters
RWQCB	Regional Water Quality Control Board
State Procedures	<i>State Wetland Definition and Procedures for Discharges of Dredge or Fill Material to Waters of the State</i>
SWANCC	<i>Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers</i>
SWRCB	State Water Resources Control Board
TNW	Traditional Navigable Waters
UPL	Upland
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VIP-215	Veterans Industrial Park 215
Wetland Manual	<i>1987 Corps Wetland Delineation Manual</i>
WoUS	waters of the U.S.
WQC	Water Quality Certification

Section 1 Introduction

On behalf of the Riverside County Flood Control and Water Conservation District (District), Michael Baker has prepared this Delineation of State and Federal Jurisdictional Waters Report to describe, map, and quantify aquatic features located within the project site of the proposed Perris Valley Channel Lateral B, Stage 4 Project (project). This report describes the regulatory setting, methodologies, and results of the jurisdictional delineation, including recommendations for any proposed impacts to previously documented or potential jurisdictional resources. This report also presents Michael Baker’s best professional effort at determining the jurisdictional boundaries using the most up-to-date regulations, written policy, and guidance from the regulatory agencies; however, only the regulatory agencies can make a final determination of jurisdictional limits.

1.1 PROJECT LOCATION

The project site is located partially within the the City of Perris, and lands owned by March Joint Powers Authority (MJPA) and March Air Reserve Base (MARB) in southwestern Riverside County (Exhibit 1, *Regional Vicinity*). Specifically, the proposed alignment would be located between the existing Perris Valley Channel (PVC) Lateral B, Stage 2 facility at Heacock Street and the PVC Lateral B, Stage 5 facility that is under construction as part of the Veterans Industrial Park 215 (VIP-215) Project to the northwest (refer to Exhibit 2, *Site Plan*, and Exhibit 3, *Project Site*). The project site is located within Township 3 South, Range 4 West, Section 36 San Bernardino Baseline Meridian within assessor’s parcel numbers (APNs) 294-220-003, 294-200-002, 294-180-007, 294-180-006, 294-180-037, 294-180-055, and 294-180-017.

1.2 ENVIRONMENTAL SETTING

The project area is characterized as developed and undeveloped-disturbed land. The surrounding areas consist of MARB to the east and scattered industrial development to the north, south, and west. An existing drainage course is located within MARB approximately 350 feet west of the existing runway and 300 feet east of the western perimeter fence boundary of MARB. Runoff in this area drains from the north to south via this natural drainage course towards a soft bottom open channel at Heacock Street (Heacock Channel) eventually draining east towards PVC.

1.3 PROJECT BACKGROUND AND PURPOSE

The Perris Valley Master Drainage Plan (MDP) was adopted in July 1987 and last revised in 1991 with the purpose of identifying drainage issues and providing a guide for the construction of primary drainage facilities in the Perris Valley area. The MDP Line B (now “Lateral B”) was originally proposed as an open channel on the west side of I-215 from Van Buren Boulevard to just south of Harley Knox Boulevard before extending east to PVC. However, since the MDP was last updated, the Perris Valley area surrounding MARB has experienced new development that has prompted the need to revise the alignment and construct Lateral B to support existing and future drainage needs for the area.

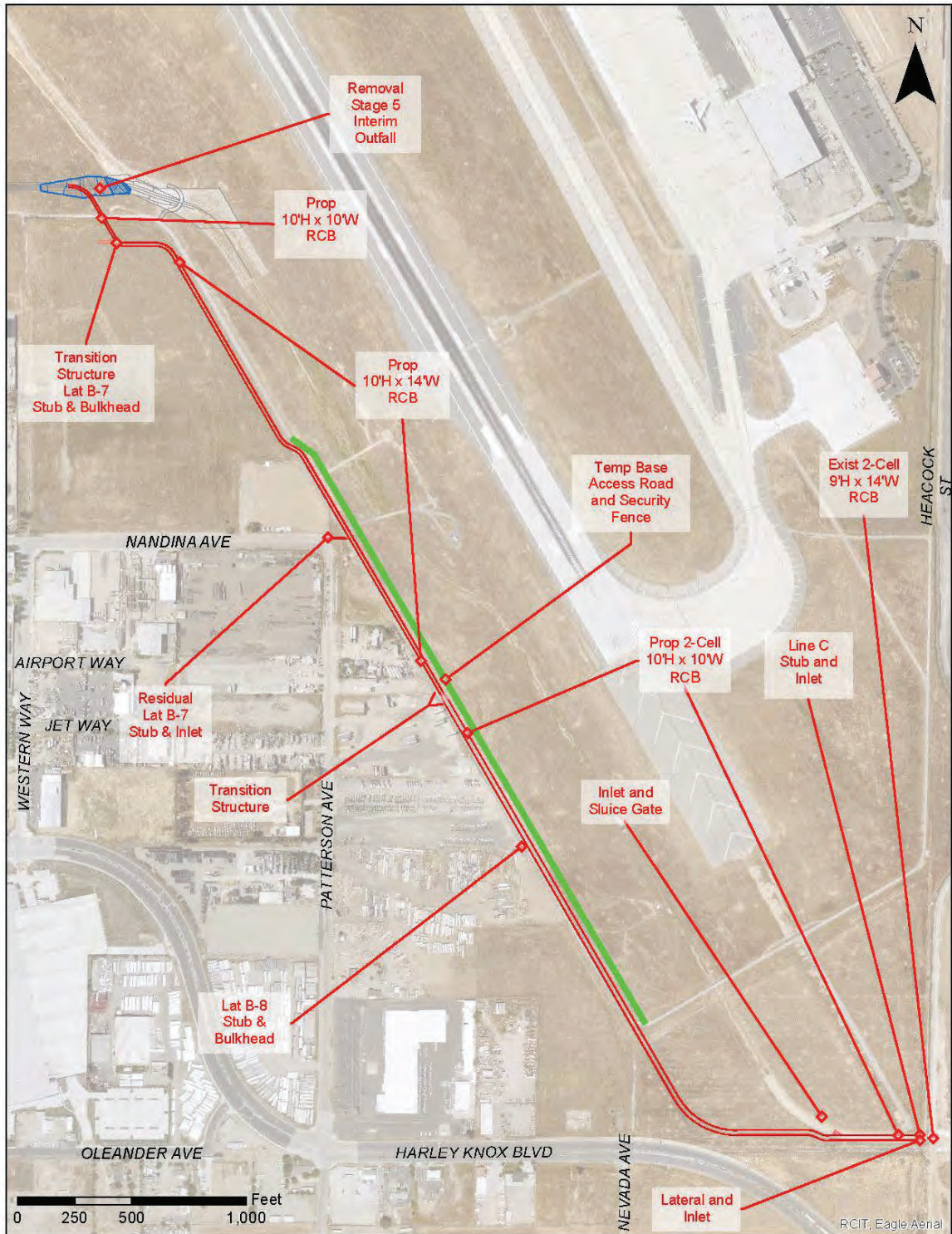


PERRIS VALLEY CHANNEL LATERAL B, STAGE 4 PROJECT
 DELINEATION OF STATE AND FEDERAL JURISDICTIONAL WATERS

Regional Vicinity



Source: ESRI



PERRIS VALLEY CHANNEL LATERAL B, STAGE 4 PROJECT
 DELINEATION OF STATE AND FEDERAL JURISDICTIONAL WATERS



	Project Site
	Photo Point and Direction
	Reference Point

The purpose of the project is to provide flood protection to MARB and the adjacent area by constructing the regional storm drain facility needed to convey 100-year runoff to the existing Lateral B, Stage 2 channel east of Heacock Street. A secondary objective of the project is to provide an adequate outlet for Lateral B-7 and B-8 to be constructed as part of future developments proposed in the City of Perris.

1.4 PROJECT CHARACTERISTICS

The District, in partnership with the MJPA and MARB, is proposing to construct the PVC Lateral B, Stage 4 Project (project). PVC Lateral B-5 Stage 1 and Stage 2 and PVC Lateral B Stage 2 and 3 of the Lateral B system have already been constructed between Heacock Street and I-215. The project would construct PVC Lateral B Stage 4 which consists of approximately 6,000 feet of reinforced concrete box (RCB) culvert starting at Heacock Street (at the upstream end of PVC Lateral B, Stage 2) to the downstream terminus of the PVC Lateral B Stage 5 facility, which is currently under construction as part of the VIP-215 Project. The project's general alignment begins at the downstream terminus of PVC Lateral B Stage 5 and heads south and east adjacent to the MARB west perimeter security fence before tying into the PVC Lateral B Stage 2 facility at Heacock Street; refer to Exhibit 2, *Site Plan*. The project would include three transitions structures, four junction structures, twelve bolted down manholes for security, and two inlets along the southernmost end of the alignment to collect onsite flows from MARB. The project would also include two lateral stubs and bulkheads for the future construction of Lateral B-7 and Lateral B-8 in the City of Perris. The project would be located mostly within MARB right of way, as shown on Exhibit 2, *Site Plan*. This alignment will go through APN 294-180-055; where a 45-foot permanent easement has been dedicated for the construction and maintenance of Stage 4.

As shown on Exhibit 2, *Site Plan*, specific details of the project design include:

- One transition from double 14'x9' RCB to double 10'x10' RCB at STA 10+43.58-10+73.58 located at the intersection of Perris Valley Lateral B Stage 2 and Heacock Street;
- Approximately 3,000 LF of 10'x10' RCB from STA 10+73 located at the intersection of Perris Valley Lateral B Stage 2 and Heacock Street to STA 42+00 at APN 294-200-005;
- One transition from double 10'x10' to 10'x14' RCB at STA 42+00 – STA 42+30;
- Approximately 3,000 LF of 10'x14' RCB from STA 42+30 at APN 294-200-005 to STA 67+50 at APN 294-180-038;
- One transition from 10'x14' RCB to single 10'x10' RCB at STA to STA 67+50 - 67+66.97 at APN 294-180-038;
- Two inlets collecting onsite flows from MARB;
- Two lateral stubs and bulkheads (for Lateral B-7 and Lateral B-8);
- Approximately 12 manholes bolted down for MARB security;
- MARB Perimeter fence replacement at various locations;
- Removal and replacement of MARB perimeter road, as needed; and
- Removal of the Stage 5 interim outlet structure.

1.5 PHASING/CONSTRUCTION

The project would be constructed in one phase. Construction of the Lateral B, Stage 4 facility is expected to begin in Spring 2023 and last approximately 12 months. Construction equipment would include the following: excavator, dozer, scraper, skip loader, backhoe, water truck, crane, concrete pump, haul trucks, motor grader, sheepsfoot roller (or other compacting equipment). The construction equipment mix is shown in Table 1, *Construction Equipment*.

Table 1: Construction Equipment

Construction Phase	Equipment	Quantity
Project construction	Excavator*	1-2
	Dozer*	1-2
	Scraper*	1-2
	Skip Loader	1
	Backhoe	1
	Water Truck*	1-2
	Crane*	1-2
	Concrete Pump*	1-2
	Haul Trucks**	10-15
	Motor Grader	1
	Sheepsfoot Roller	1

*Contingent on the project schedule, there may be up to two of this type of equipment.

**Up to 15 trucks could be on site when a scheduled dirt haul occurs.

Construction of the project would occur 5 days a week [20 days per month] and is estimated to require approximately 20-60 people to be on site each day depending on the nature of construction occurring at any one time.

Section 2 Regulations

Three agencies regulate activities within coastal streams, bays, wetlands, and riparian areas in California. The U.S. Army Corps of Engineers (USACE) Regulatory Division regulates activities pursuant to Section 404 of the federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the California Department of Fish and Wildlife (CDFW) regulates activities under Sections 1600 *et seq.* of the California Fish and Game Code (CFG), the Regional Water Quality Control Board (RWQCB) regulates activities pursuant to Section 401 of the CWA and/or Section 13263 of the California Porter-Cologne Water Quality Control Act (Porter-Cologne Act).

2.1 U.S. ARMY CORPS OF ENGINEERS

Since 1972, the USACE and U.S. Environmental Protection Agency (EPA) jointly regulate discharges of dredged or fill material into “waters of the U.S.” (WoUS), including wetland and non-wetland aquatic features, pursuant to Section 404 of the CWA. Section 404 of the CWA is founded on the findings of a significant nexus (or connection) between the aquatic or other hydrological features in question and interstate commerce via Relatively Permanent Waters (RPW), and ultimately Traditional Navigable Waters (TNW), through direct or indirect connection as defined by USACE regulations. However, the limits to which this is applied have changed over time as discussed below.

SWANCC and Rapanos

In 1984, the Migratory Bird Rule enabled the USACE to expand jurisdiction over isolated waters, and in 1985, the U.S. Supreme Court upheld the inclusion of adjacent wetlands in the regulatory definition of WoUS. However, in 2001, the USACE jurisdiction was narrowly limited following the *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (SWANCC) in which the U.S. Supreme Court held that the use of “isolated” non-navigable intrastate ponds by migratory birds was not, by itself, sufficient basis for the exercise of federal regulatory authority under the CWA. In 2006, a majority of the U.S. Supreme Court overturned two Sixth Circuit Court of Appeals decisions in the consolidated cases of *Rapanos v. United States* and *Carabell v. United States* (collectively referred to as Rapanos), concluding that wetlands isolated by surface connection are WoUS nonetheless if they significantly affect the chemical, physical, and biological integrity of other covered waters (significant nexus). The Navigable Waters Protection Rule (NWPR) eliminated the case specific application of the significant nexus test articulated in the Rapanos decision.

2015 Clean Water Rule

In 2015, the USACE and EPA published the “Clean Water Rule” clarifying the scope of coverage of the CWA. Upon issuance however, numerous lawsuits were filed and consolidated in the Sixth Circuit, immediately putting a “stay” on its implementation. In January 2018, the U.S. Supreme Court ruled that the stay. In August 2018, a federal judge found that the suspension failed to give an adequate public notice and

therefore violated the Administrative Procedure Act. The 2015 Clean Water Rule remained in effect in 22 states, including California, the District of Columbia, and the U.S. territories until the December 23, 2019.

Repeal Of 2015 Clean Water Rule

On October 22, 2019, the EPA and the USACE published a final rule to repeal the 2015 Clean Water Rule and restore the regulatory methodology that existed prior to the 2015 Rule. Under this final rule, which became effective on December 23, 2019, jurisdictional WoUS were defined by the 1986/1988 regulatory definition of WoUS under CWA regulations 40 CFR 230.3(s).

Navigable Waters Protection Rule

On January 23, 2020, the EPA and the USACE finalized the NWPR to define WoUS. On April 21, 2020, the EPA and the USACE published the NWPR in the Federal Register. On June 22, 2020, 60 days after publication in the Federal Register, the NWPR became effective across the nation including the State of California.

Remand and Vacatur of the Navigable Waters Protection Rule

On August 30, 2021, the NWPR was remanded and immediately vacated by the U.S. District Court for the District of Arizona. In light of this order, the EPA and the USACE halted implementation of the NWPR nationwide and reinstated the pre-2015 definition of WoUS. Under the pre-2015 definition of the WoUS, the USACE and EPA require the case specific application of the significant nexus test, as articulated in the Rapanos decision, to determine WoUS.

2.2 REGIONAL WATER QUALITY CONTROL BOARD

Applicants for a federal license or permit (e.g., CWA Section 404 permit) for activities that may discharge to WoUS must seek a Water Quality Certification (WQC) from the State or Indian tribe with jurisdiction.¹ In California, there are nine (9) RWQCBs that issue or deny Certification for discharges within their geographical jurisdiction. Such Certification is based on a finding that the discharge will meet water quality standards, which are defined as numeric and narrative objectives in each RWQCB's Basin Plan, and other applicable requirements. The State Water Resources Control Board (SWRCB) has this responsibility for projects affecting waters within multiple RWQCBs. The RWQCB's jurisdiction extends to all WoUS, including wetlands, and to waters of the State (described below).

The Porter-Cologne Act gives the State very broad authority to regulate waters of the State, which are defined as any surface water or groundwater, including saline waters. The Porter-Cologne Act has become an important tool for the regulatory environment following the SWANCC² and Rapanos³ court cases, with respect to the state's authority over isolated and otherwise insignificant waters. Generally, in the event that there is no nexus to a TNW, any person proposing to discharge waste into waters of the State that could affect its water quality must file a Report of Waste Discharge. Although "waste" is partially defined

¹ Title 33, United States Code, Section 1341; Clean Water Act Section.

² *Solid Waste Agency of Northern Cook County v. U.S. Army Corp of Engineers*, 531 U.S. 159 (2001).

³ *Rapanos v. United States*, 547 U.C. 715 (2006).

as any waste substance associated with human habitation, the RWQCB also interprets this to include fill discharged into water bodies.

On April 2, 2019, the SWRCB adopted a *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (State Procedures; SWRCB 2019), for inclusion in the forthcoming Water Quality Control Plan for Inland Surface Waters and Enclosed Bays and Estuaries and Ocean Waters of California. The State Procedures consist of four major elements: 1) a wetland definition; 2) a framework for determining if a feature that meets the wetland definition is a water of the state; 3) wetland delineation procedures; and 4) procedures for the submittal, review, and approval of applications for WQCs and Waste Discharge Requirements for dredge or fill activities. The State Procedures were approved by the Office of Administrative Law on August 28, 2019 and became effective May 28, 2020.

2.3 CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

Sections 1600 *et seq.* of the CFGC establishes a fee-based process to ensure that projects conducted in and around lakes, rivers, or streams do not adversely affect fish and wildlife resources, or when adverse impacts cannot be avoided, ensures that adequate mitigation and/or compensation is provided. Section 1602 of the CFGC requires any person, State, or local governmental agency or public utility to notify CDFW before beginning any activity that will do one or more of the following: (1) substantially obstruct or divert the natural flow of a river, stream, or lake; (2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or (3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake. This applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the State, including the maintenance of existing drain culverts, outfalls, and other structures. To avoid the need for a Section 1602 Lake or Streambed Alteration Agreement (LSAA) from CDFW, all proposed impacts should remain outside of the top of active banks and the canopy/dripline of any associated riparian vegetation, whichever is greater. CDFW does not have jurisdiction over waters that occur on federal owned lands or tribal lands.

Section 3 Methodology

The analysis presented in this report is supported by a field reconnaissance and verification of site conditions conducted on January 19, 2022 by Michael Baker regulatory specialists Tom Millington and Chelita Borbón. A field delineation was conducted to determine the jurisdictional limits of WoUS and waters of the State (including potential wetlands), located within the boundaries of the project site and an adjacent offsite streambed. While in the field, jurisdictional features were recorded on an aerial base map at a scale of approximately 1" = 100' using topographic contours and visible landmarks as guidelines. Data points were obtained with a Garmin Map62 Global Positioning System to record the current jurisdictional limits of hydrological features within the survey area. These data were then transferred as a .shp file and added to the report's jurisdictional exhibits. The jurisdictional exhibits were prepared using ESRI ArcMap Version 10 software and in accordance with the *Special Public Notice: Minimum Standards for Acceptance of Aquatic Resource Delineations* (USACE 2016).

3.1 WATERS OF THE U.S. AND WATERS OF THE STATE

3.1.1 NON-WETLAND WATERS OF THE U.S.

The limits of the Corps' jurisdiction in non-tidal waters extend to the ordinary high water mark (OHWM), which is defined as "...that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas."⁴ An OHWM can be determined by the observation of a natural line impressed on the bank; shelving; changes in the character of the soil; destruction of terrestrial vegetation; presence of litter and debris; wracking; vegetation matted down, bent, or absent; sediment sorting; leaf litter disturbed or washed away; scour; deposition; multiple observed flow events; bed and banks; water staining; and/or change in plant community.

3.1.2 WETLAND WATERS OF THE U.S.

For this project location, jurisdictional wetlands were delineated using the methods outlined in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region, Version 2.0* (Regional Supplement; USACE 2008). This document is part of a series of regional supplements to the *1987 Corps Wetland Delineation Manual* (Wetland Manual; Environmental Laboratory 1987). According to the Wetland Manual, identification of wetlands is based on a three-parameter approach involving indicators of hydrophytic vegetation, hydric soil, and wetland hydrology. In order to be considered a wetland, an area must exhibit at least minimal characteristics within these three (3) parameters. The Regional Supplement presents wetland indicators, delineation guidance, and other information that is specific to the Arid West

⁴ CWA regulations 33CFR §328.3(e).

Region. In the field, vegetation, soils, and evidence of hydrology are examined using the wetland determination data forms and methodology described below.

The State Procedures adopted by the SWRCB on April 2, 2019, contain a wetland definition and wetland delineation procedures. The State Procedures are largely consistent with the three-parameter approach involving indicators of hydrophytic vegetation, hydric soil, and wetland hydrology implemented by the USACE and outlined in the Regional Supplement (USACE 2008). However, one exception is that an area can lack vegetation and still qualify as a wetland water of the State if it satisfies both the hydric soil and wetland hydrology parameters.

Vegetation

Nearly 5,000 plant types in the U.S. may occur in wetlands. These plants, often referred to as hydrophytic vegetation, are listed in regional publications by the U.S. Fish and Wildlife Service (USFWS). In general, hydrophytic vegetation is present when the plant community is dominated by species that can tolerate prolonged inundation or soil saturation during growing season. Hydrophytic vegetation decisions are based on the assemblage of plant species growing on a site, rather than the presence or absence of particular indicator species. Vegetation strata are sampled separately when evaluating indicators of hydrophytic vegetation. A stratum for sampling purposes is defined as having 5 percent or more total plant cover. The following vegetation strata are recommended for use across the Arid West Region:

- Tree Stratum: Consists of woody plants 3 inches or more in diameter at breast height (DBH)
- Sapling/shrub Stratum: Consists of woody plants less than 3 inches in DBH, regardless of height
- Herb Stratum: Consists of all herbaceous (non-woody) plants, including herbaceous vines, regardless of size
- Woody Vines: Consists of all woody vines, regardless of size

The following indicator is applied per the test method below.⁵ Hydrophytic vegetation is present if any of the indicators are satisfied.

Indicator 1 – Dominance Test

Cover of vegetation is estimated and is ranked according to their dominance. Species that contribute to a cumulative total of 50 percent of the total dominant coverage, plus any species that comprise at least 20 percent (also known as the “50/20 rule”) of the total dominant coverage, are recorded on a wetland determination data form. Wetland indicator status is assigned to each species using *The National Wetland Plant List, Regional Plant List, Version 3.4* (USACE 2018). If greater than 50 percent of the dominant species

⁵ Although the Dominance Test is utilized in most wetland delineations, other indicator tests may be employed. If one indicator of hydric soil and one primary or two secondary indicators of wetland hydrology are present, then the Prevalence Test (Indicator 2) may be performed. If the plant community satisfies the Prevalence Test, then the vegetation is hydrophytic. If the Prevalence Test fails, then the Morphological Adaptation Test may be performed, where the delineator analyzes the vegetation for potential morphological features.

from all strata were Obligate Wetland, Facultative Wetland, or Facultative species, the criteria for wetland vegetation is considered to be met. Plant indicator status categories are described below:

- Obligate Wetland (OBL): Plants that occur almost always in wetlands under natural conditions, but which may also occur rarely in non-wetlands
- Facultative Wetland (FACW): Plants that occur usually in wetlands, but also occur in non-wetlands
- Facultative (FAC): Plants with similar likelihood of occurring in both wetlands and non-wetland
- Facultative Upland (FACU): Plants that occur sometimes in wetlands, but occur more often in non-wetland
- Obligate Upland (UPL): Plants that occur rarely in wetlands but occur almost always in non-wetlands under natural conditions

Hydrology

Wetland hydrology indicators are presented in the following four (4) groups:

- Group A – Observation of Surface Water or Saturated Soils: Group A is based on the direct observation of surface water or groundwater during the site visit.
- Group B – Evidence of Recent Inundation: Group B consists of evidence that the site is subject to flooding or ponding, although it may not be inundated currently. These indicators include water marks, drift deposits, sediment deposits, and similar features.
- Group C – Evidence of Recent Soil Saturation: Group C consists of indirect evidence that the soil was saturated recently. Some of these indicators, such as oxidized rhizospheres surrounding living roots and the presence of reduced iron or sulfur in the soil profile, indicate that the soil has been saturated for an extended period.
- Group D – Evidence from Other Site Conditions or Data: Group D consists of vegetation and soil features that indicate contemporary rather than historical wet conditions and include shallow aquitard and the FAC-neutral test.

If wetland vegetation criteria are met, the presence of wetland hydrology is evaluated at each transect by recording the extent of observed surface flows, depth of inundation, depth to saturated soils, and depth to free water in the soil test pits. The lateral extent of the hydrology indicators is used as a guide for locating soil pits for evaluation of hydric soils and jurisdictional areas. In portions of the stream where the flow is divided by multiple channels with intermediate sand bars, the entire area between the channels is considered within the OHWM and the wetland hydrology indicator is considered met for the entire area.

Soils

A hydric soil is a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper 16-20 inches.⁶ The concept of hydric soils includes soils developed under sufficiently wet conditions to support the growth and regeneration of hydrophytic vegetation. Soils that are sufficiently wet because of artificial measures are included in the concept of hydric soils. It should also be noted that the limits of wetland hydrology indicators are used as a guide for locating soil pits. If any hydric soil features are located, progressive pits are dug moving laterally away from the active channel until hydric features are no longer present within the top 20 inches of the soil profile.

Once in the field, soil characteristics are verified by digging soil pits along each transect to an excavation depth of 20 inches; in areas of high sediment deposition, soil pit depth may be increased. Soil pit locations are usually placed within the drainage invert or within adjoining vegetation. At each soil pit, the soil texture and color are recorded by comparison with standard plates within a *Munsell Soil Chart* (2012). Munsell Soil Charts aid in designating color labels to soils, based by degrees of three simple variables – hue, value, and chroma. Any indicators of hydric soils, such as organic accumulation, iron reduction, translocation, and accumulation, and sulfate reduction, are also recorded. Hydric soil indicators are present in the following three groups:

- All Soils: refers to soils with any U.S. Department of Agriculture (USDA) soil texture. Hydric soil indicators within this group include histosol, histic epipedon, black histic, hydrogen sulfide, stratified layers, 1-centimeter muck, depleted below dark surface, and thick dark surface.
- Sandy Soils: refers to soil materials with a USDA soil texture of loamy fine sand and coarser. Hydric soil indicators within this group include sandy mucky mineral, sandy gleyed matrix, sandy redox, and stripped matrix.
- Loamy and Clayey Soils: refers to soil materials with a USDA soil texture of loamy very fine sand and finer. Hydric soil indicators within this group include loamy mucky mineral, loamy gleyed matrix, depleted matrix, redox dark surface, depleted dark surface, redox depressions, and vernal pools.

3.2 WATERS OF THE STATE

3.2.1 REGIONAL WATER QUALITY CONTROL BOARD

Hydrological features lacking a nexus to (i.e., isolated from) adjacent or downstream WoUS are potentially considered waters of the State. Currently for this region, the RWQCB jurisdiction coincides with USACE jurisdiction identified by the OHWM.

⁶ According to the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region, Version 2.0* (USACE 2008), growing season dates are determined through on-site observations of the following indicators of biological activity in a given year: (1) above-ground growth and development of vascular plants, and/or (2) soil temperature.

3.2.2 CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

CDFW regulates all perennial, intermittent, and ephemeral rivers, streams, and lakes in the State of California. CDFW regulatory authority extends to include riparian habitat (including adjacent wetlands) supported by a river, stream, or lake regardless of the presence or absence of hydric soils or saturated soil conditions. Generally, CDFW jurisdiction is mapped to the top of the active bank of the stream or to the outer drip line of the associated riparian vegetation, whichever is greater. For LSAA notification purposes, vegetated and non-vegetated streambeds are distinguished when riparian vegetation is present. CDFW jurisdiction typically does not include aquatic resources influenced by marine systems.

Section 4 Literature Review

A thorough review of relevant literature and materials was conducted to preliminarily identify areas that may fall under the jurisdiction of the USACE, RWQCB, and CDFW. A summary of materials utilized during the literature review is provided below. In addition, refer to Section 7 of this report for a complete list of references used throughout the course of this delineation.

4.1 SURROUNDING LAND USES

Land uses surrounding the project site mainly consist of commercial and industrial land uses, as well as the MARB. An active runway used for both military and commercial flights is located as close as 300 feet to the east of the northern perimeter of the project site. Parallel to the westerly and southerly boundary of the project, near the southeast corner of APN 294-180-038, is the proposed VIP-215 Project. I-215 occurs 0.5 mile west of the project site.

4.2 TOPOGRAPHY AND SOILS

Surface elevations within the project site range from approximately 1,472 to 1,508 feet above mean sea level and generally sloping to the southeast. Soil surveys furnish soil maps and interpretations originally needed in providing technical assistance to farmers and ranchers; in guiding other decisions about soil selection, use, and management; and in planning, research, and disseminating the results of the research. In addition, soil surveys are now heavily utilized in order to obtain soil information with respect to potential wetland environments and jurisdictional areas (i.e., soil characteristics, drainage, and color). Based on Michael Baker's review of the *Custom Soil Resource Report for Western Riverside County, California* (USDA 2022), the project site is underlain by the following soil units: Exeter sandy loam, deep, 0 to 2% slopes (EpA); Greenfield sandy loam, 0 to 2% slopes (GyA); Hanford fine sandy loam, 0 to 2% slopes (HgA); Monserate sandy loam, 0 to 5% slopes (MmB); Pachappa fine sandy loam, 0 to 2% slopes (PaA); and Ramona sandy loam, 0 to 2% slopes, MLRA 19 (RaA). Refer to Exhibit 4, *USDA Soils*, for a depiction of soil units within the project site.

4.3 HYDRIC SOILS LIST OF CALIFORNIA

The presence of hydric soils is initially investigated by comparing the mapped soil series for a site to the State and/or County Hydric Soils List provided by the USDA. Michael Baker conducted a query of the California Hydric Soils List (USDA 2022) in an effort to verify whether any soil units occurring within the project site are considered to be hydric. It should be noted that lists of hydric soils along with soil survey maps provide off-site ancillary tools to assist in wetland determinations, but they are not a substitute for field investigations. Based on the latest version of the California Hydric Soils List, none of the soil units occurring within the project site are listed as hydric (USDA 2022).



PERRIS VALLEY CHANNEL LATERAL B, STAGE 4 PROJECT
 DELINEATION OF STATE AND FEDERAL JURISDICTIONAL WATERS

4.4 NATIONAL WETLANDS INVENTORY

The National Wetlands Inventory was established by the USFWS to conduct a nationwide inventory of U.S. wetlands to provide biologists and others with information on the distribution and type of wetlands to aid in conservation efforts. Based on Michael Baker’s review of the National Wetlands Inventory, portions of the PVC within the project site are identified as Riverine Habitat (Classification Code: R4SBA; USFWS 2022). Refer to Appendix A, *USFWS National Wetlands Inventory Map*.

4.5 FLOOD ZONE

Michael Baker utilized the Federal Emergency Management Agency’s (FEMA) National Flood Insurance Program to review existing flood zone data for the project site. As shown on Flood Insurance Rate Map (FIRM) No. 06065C1410G (FEMA 2008) and FIRM No. 06065C1430H (FEMA 2014), a majority of the project site is located within Zone D (Area of Undetermined Flood Hazard). Remaining portions of the project site, specifically along the northern and eastern boundary, are located within Zone X (Area of Minimal Flood Hazard) or areas outside the 1% and 0.2% annual-chance flood event. Refer to Appendix B, *FEMA Flood Insurance Rate Maps*.

4.6 NATIONAL HYDROGRAPHY DATASET

Michael Baker reviewed the National Hydrography Dataset for available hydrography data within the project site using the USGS The National Map Advanced Viewer. According to the National Hydrography Dataset (USGS 2022), the PVC is identified as an artificial canal ditch generally flows northwest to south through the project site. Further, an additional artificial canal ditch is located adjacent (west) to Heacock Street and flows north to south before discharging into the PVC in the southeast corner of the project site. Refer to Appendix C, *USGS National Hydrography Dataset Map*.

Section 5 Results

Michael Baker certified wetland delineators Tom Millington and Chelita Borbón conducted a field delineation on January 19, 2022 to identify and map the jurisdictional limits of waters of the U.S. (WoUS), including potential wetlands, and waters of the State within the boundaries of the project site. Field staff did not encounter any access limitations during the field delineation.

The project site is located in the southwestern corner of MARB and generally comprises undeveloped, but highly disturbed land that is mostly dominated by non-native vegetation. The surrounding vicinity is mostly composed of commercial and industrial uses, with residential developments farther to both the east and west. Apart from pockets of remaining open space, most of which is fragmented by roads, the general vicinity and region that the project site is located in is highly developed, with very little natural, undisturbed habitat remaining. Refer to Appendix D, *Site Photographs*, taken throughout the project site.

5.1 U.S. ARMY CORPS OF ENGINEERS JURISDICTION

5.1.1 NON-WETLAND WATERS OF THE U.S.

The PVC occurs within the project site and is tributary to Canyon Lake (TNW). Therefore, the PVC would qualify as WoUS and fall under the regulatory authority of the USACE. Based on the results of the field delineation, approximately 1.02 acres (1,393 linear feet) of USACE non-wetland WoUS is located within the boundaries of the project site. Additionally, an offsite unvegetated streambed occurs between the PVC and the March ARB runway that qualifies as WoUS, totally 4.71 acres (4,530 linear feet). Refer to Exhibit 5, *USACE/RWQCB Jurisdiction*, and Table 2, *State and Federal Jurisdictional Resources and Proposed Impacts*, below.

5.1.2 WETLAND WATERS OF THE U.S.

As previously noted, an area must exhibit all three wetland parameters described in the Regional Supplement to be considered a jurisdictional wetland. One soil pit (SP1) was dug within an unimproved section of the PVC in the northern portion of the project site. Dominant hydrophytic vegetation was not present. Sediment and drift deposits were observed. SP1 consisted of two layers which extended to a depth of 20 inches and exhibited a texture of loamy sand and silty clay with matrix colors of 10 YR 3/4 and 10 YR 3/2 when moist. No redoximorphic features were observed within the matrix. As such, it was determined that no indicators for hydric soils were present. Therefore, based on the results of the field delineation, it was determined that SP1 did not meet all three of the required parameters and thus does not qualify as a wetland. Refer to Appendix E, *Wetland Determination Data Forms*.



PERRIS VALLEY CHANNEL LATERAL B, STAGE 4 PROJECT
 DELINEATION OF STATE AND FEDERAL JURISDICTIONAL WATERS

USACE/RWQCB Jurisdiction

Table 2: Federal Jurisdictional Resources and Proposed Impacts

Hydrologic Feature	Latitude / Longitude	Cowardin Class	Class of Aquatic Feature	Acreage		
				USACE/RWQCB Non-Wetland WoUS		
				Total Acreage	Impacts	
Permanent	Temporary					
PVC (North Segment)	33.859205° / -117.244730°	Riverine	Non-Wetland	0.68 (827)	0.00 (0)	0
PVC (South Segment)	33.870352° / -117.254872°	Riverine	Non-Wetland	0.34 (566)	0.28 (511)	0
Offsite Channel	33.870354° / -117.244862°	Riverine	Non-Wetland	3.33 (4,530)	0	0
TOTAL*				4.35 (5,923)	0.28 (511)	0

5.2 REGIONAL WATER QUALITY CONTROL BOARD JURISDICTION

5.2.1 NON-WETLAND WATERS OF THE STATE

No isolated or Rapanos conditions were observed within the project site during the field delineation. Therefore, the RWQCB follows that of USACE jurisdiction and totals approximately 1.02 acres (1,393 linear feet) of non-wetland WoUS. Refer to Exhibit 5, *USACE/RWQCB Jurisdiction*, and Table 2, *State and Federal Jurisdictional Resources and Proposed Impacts*, above.

5.2.2 WETLAND WATERS OF THE STATE

As previously noted, an area must exhibit all three wetland parameters described in the Regional Supplement (USACE 2008) to the Wetland Manual (Environmental Laboratory 1987) to be considered a USACE jurisdictional wetland. In addition, the State Procedures are largely consistent with the three-parameter approach involving indicators of hydrophytic vegetation, hydric soil, and wetland hydrology implemented by the USACE and outlined in the Regional Supplement (USACE 2008). However, one exception is an area can lack vegetation and still satisfy the parameter for hydrophytic vegetation thus qualifying the area as a wetland water of the State if the hydric soil, and wetland hydrology parameters are also fulfilled. Although wetland hydrology was present at SP1 and the area lacked vegetation, hydric soils were not encountered. Therefore, no wetland WoUS or State are located within the boundaries of the project site. Refer to Appendix E, *Wetland Determination Data Forms*.

5.3 CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE JURISDICTION

The PVC exhibits characteristics consistent with CDFW's methodology and would be considered CDFW streambed. Approximately 2.40 acres (1,393 linear feet) of CDFW streambed is located within boundaries of the project. However, the project site is located on federal lands (March Air Reserve Base), therefore, CDFW does not have regulatory authority over the state waters within the project site.

Section 6 Conclusions and Recommendations

This report has been prepared for the District to delineate the USACE, RWQCB, and CDFW jurisdictional authority within the project site. Below is a summary of the various permits/authorizations that would be required prior to temporarily or permanently impacting on-site jurisdictional features.

6.1 U.S. ARMY CORPS OF ENGINEERS

The USACE regulates discharges of dredged or fill materials into WoUS and wetlands pursuant to Section 404 of the CWA. Issuance of a 404 authorization from the USACE for impacts to non-wetland WoUS would be required for temporary and permanent impacts to non-wetland WoUS. The project meets the requirements of Nationwide Permit 43 (Stormwater Management Facilities) and would require a preconstruction notification (PCN).

6.2 REGIONAL WATER QUALITY CONTROL BOARD

The RWQCB regulates discharges to surface waters under Section 401 of the CWA and Section 13263 of the Porter-Cologne Act. Issuance of a Water Quality Certification from the RWQCB, Santa Ana Region or EPA (due to the location of the waters on federal lands (March Air Reserve Base) for temporary and permanent impacts to non-wetland WoUS is required as a condition of the 404 Nationwide Permit process.

6.3 CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

The CDFW regulates alterations to streambed under Section 1602 of the CFGC. However, the project site is located on federal lands (March Air Reserve Base), therefore, CDFW does not have regulatory authority over the state waters within the project site. No 1602 Streambed Alteration Agreement is required.

6.4 RECOMMENDATIONS

As part of the regulatory permitting process, this delineation will be forwarded to each of the regulatory agencies for their concurrence. The concurrence/receipt would be valid up to five years and would solidify findings noted within this report.

Section 7 References

- Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual*. Technical Report Y-87-1. Vicksburg, MS: U.S. Army Engineer Waterways Experiment Station.
- Federal Register. 2020. *The Navigable Waters Protection Rule: Definition of “Waters of the United States”*, 85 F.R. 22250 (April 21, 2020) (to be codified at 33 C.F.R. 328 and 40 C.F.R. pts. 110, 112, 116, 117, 120, 122, 230, 232, 300, 302, & 401).
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- USACE. 2016. *Special Public Notice: Updated Map and Drawing Standards for the South Pacific Regulatory Division Regulatory Program*. Issued on February 10, 2016.
- USACE. 2017. *Special Public Notice: Minimum Standards for Acceptance of Aquatic Resources Delineation Reports*. Issued on March 16, 2017.

-
- USACE. 2022. *National Wetland Plant List, Version 3.5*. U.S. Army Corps of Engineers, Engineer Research and Development Center Cold Regions Research and Engineering Laboratory. Accessed online at: <http://wetland-plants.usace.army.mil/>.
- USDA. 2022. *Custom Soil Resources Report for Western Riverside Area, California*. Accessed online at: <https://websoilsurvey.sc.egov.usda.gov/>.
- USDA. 2022. *Hydric Soils List of California*. Accessed online at: <http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/use/hydric/>.
- USFWS. 2022. *National Wetlands Inventory*. Accessed online at: <http://www.fws.gov/wetlands/Data/Mapper.html>.
- USGS. 2022. *National Hydrography Dataset*. Accessed online at: <https://viewer.nationalmap.gov/advanced-viewer/>.

Appendix A USFWS National Wetlands Inventory Map



March 24, 2022

Wetlands









- | | | | | | |
|--|--------------------------------|---|-----------------------------------|---|----------|
|  | Estuarine and Marine Deepwater |  | Freshwater Emergent Wetland |  | Lake |
|  | Estuarine and Marine Wetland |  | Freshwater Forested/Shrub Wetland |  | Other |
| | |  | Freshwater Pond |  | Riverine |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



March 24, 2022

Wetlands

- | | | | | | |
|--|--------------------------------|---|-----------------------------------|---|----------|
|  | Estuarine and Marine Deepwater |  | Freshwater Emergent Wetland |  | Lake |
|  | Estuarine and Marine Wetland |  | Freshwater Forested/Shrub Wetland |  | Other |
| | |  | Freshwater Pond |  | Riverine |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Appendix B FEMA Flood Insurance Rate Maps

National Flood Hazard Layer FIRMMette



117°15'32"W 33°52'24"N



Feet 1:6,000
 Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, AB99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
GENERAL STRUCTURES		Area of Undetermined Flood Hazard Zone D
		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		Cross Sections with 1% Annual Chance Water Surface Elevation
		Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
OTHER FEATURES		Jurisdiction Boundary
		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 3/24/2022 at 7:38 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Appendix C USGS National Hydrography Dataset Map

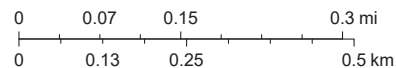
The National Map Advanced Viewer



3/24/2022, 5:03:29 AM

- | | | | | |
|-------------------------|---------------------|--------------------------|------------------|----------------------|
| Waterbody - Large Scale | Intermittent | Area - Large Scale | Foreshore | StreamRiver |
| Estuary | Ephemeral | Area of Complex Channels | Hazard Zone | Submerged Stream |
| Ice Mass | Artificial Path | Area to be Submerged | Inundation Area | Wash |
| Lake Pond | Canal Ditch | BayInlet | Lock Chamber | Water Intake/Outflow |
| Playa | Coastline | Bridge | Rapids | Flow Direction |
| Reservoir | Connector | CanalDitch | Sea/Ocean | Connector |
| Swamp Marsh | Pipeline | Dam/Weir | Special Use Zone | CanalDitch |
| Flowline - Large Scale | Underground Conduit | Flume | Spillway | Underground Conduit |
| Perennial | | | | |

1:9,028



USGS The National Map: Orthoimagery, Data refreshed December, 2021., USGS TNM - National Hydrography Dataset. Data Refreshed January, 2022.

Appendix D Site Photographs



Photograph 1: View of the PVC (North Segment) at the northern end of the project site, facing southeast (downstream).



Photograph 2: View of concrete-lined portion of the PVC (North Segment) in the northern portion of the project site, facing northwest (upstream).



Photograph 3: View of concrete-lined portion of the PVC (North Segment) in the northern portion of the project site, facing southeast (downstream).



Photograph 4: View of the PVC (North Segment) in the northeast portion of the project site, facing southeast (downstream).



Photograph 5: View of the PVC (North Segment) at the northeast end of the project site, facing northeast (upstream).



Photograph 6: View of concrete-lined portion of the PVC (South Segment) in the southern portion of the project site, facing northwest (upstream) towards the MARB.



Photograph 7: View of concrete-lined portion of the PVC (South Segment) in the southern portion of the project site, facing east (downstream).



Photograph 8: View of concrete-lined portion of the PVC (South Segment) in the southern portion of the project site, facing west (upstream).



Photograph 9: View of Heacock Street crossing over the PVC (South Segment) in the southeast corner of the project site, facing southeast (downstream).



Photograph 10: View of roadside ditch adjacent/parallel to Heacock Street in the southeast corner of the project site, facing northeast (upstream).

Appendix E Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: FERRIS VALLEY CHANNEL LATERAL B, STAGE 4 City/County: PERRIS/RIVERSIDE Sampling Date: 1/19/22
 Applicant/Owner: RIVERSIDE COUNTY FLOOD CONTROL & WATER CONSERVATION DISTRICT State: CA Sampling Point: SPI
 Investigator(s): C. BOBBON, T. MILLINGTON Section, Township, Range: SECTION 36, TOWNSHIP 3 SOUTH, RANGE 4 WEST
 Landform (hillslope, terrace, etc.): CHANNEL INVERT Local relief (concave, convex, none): NONE Slope (%): 0-1%
 Subregion (LRR): C-MEDITERRANEAN CA Lat: 33.870257° Long: -117.254604° Datum: NAD83
 Soil Map Unit Name: HANFORD FINE SANDY LOAM, 0-2% SLOPES (HgA) NWI classification: RIVERINE (R4SBA)
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks:	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 FT</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____				Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____				Total Number of Dominant Species Across All Strata: <u>2</u> (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
4. _____				
Sapling/Shrub Stratum (Plot size: <u>5 FT</u>)				Prevalence Index worksheet:
1. <u>SALIX GOODINGII</u>	<u>5%</u>	<u>YES</u>	<u>FACW</u>	Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>5</u> x 2 = <u>10</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>25</u> x 4 = <u>100</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>30</u> (A) <u>110</u> (B)
2. _____				Prevalence Index = B/A = <u>3.67</u>
3. _____				
4. _____				
5. _____				
6. _____				
Herb Stratum (Plot size: <u>5 FT</u>)				Hydrophytic Vegetation Indicators:
1. <u>BROMUS sp.</u>	<u>25%</u>	<u>YES</u>	<u>FACU</u>	___ Dominance Test is >50% ___ Prevalence Index is ≤3.0' ___ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)
2. _____				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3. _____				
4. _____				
Woody Vine Stratum (Plot size: <u>30 FT</u>)				Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
1. _____				
2. _____				
% Bare Ground in Herb Stratum <u>75%</u> % Cover of Biotic Crust <u>0%</u>				

Remarks:

1. *Tree stratum* – Consists of woody plants ≥ 3 inches in DBH, regardless of height.
 2. *Sapling/shrub stratum* – Consists of woody plants < 3 in. DBH, regardless of height.
 3. *Herb stratum* – Consists of all herbaceous (non-woody) plants, including herbaceous vines, regardless of size.

Appendix B-3 Burrowing Owl Focused Survey

PERRIS VALLEY CHANNEL LATERAL B, STAGE 4 PROJECT



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Focused Burrowing Owl Survey	15
Conclusion and Recommendations	19
References.....	21

Athene cunicularia

Project Vicinity

Project Components





Perris Valley Channel Lateral B, Stage 4 Project
 Burrowing Owl Focused Survey Report

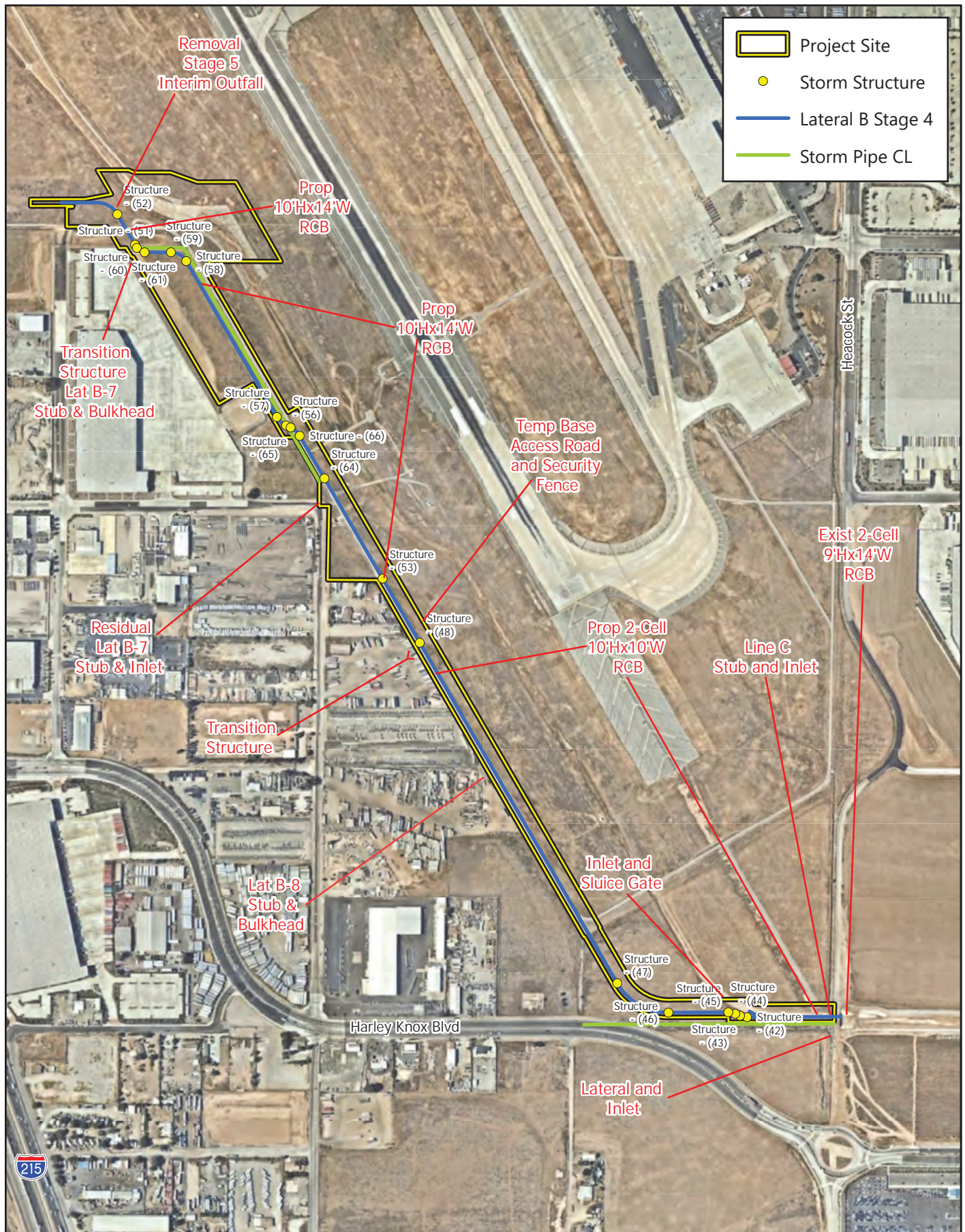
Regional Vicinity

Figure 1



Source: ESRI





Source: ESRI, Riverside County

Perris Valley Lateral B, Stage 4 Project
 Burrowing Owl Focused Protocol Survey Report

Site Plan

Figure 2



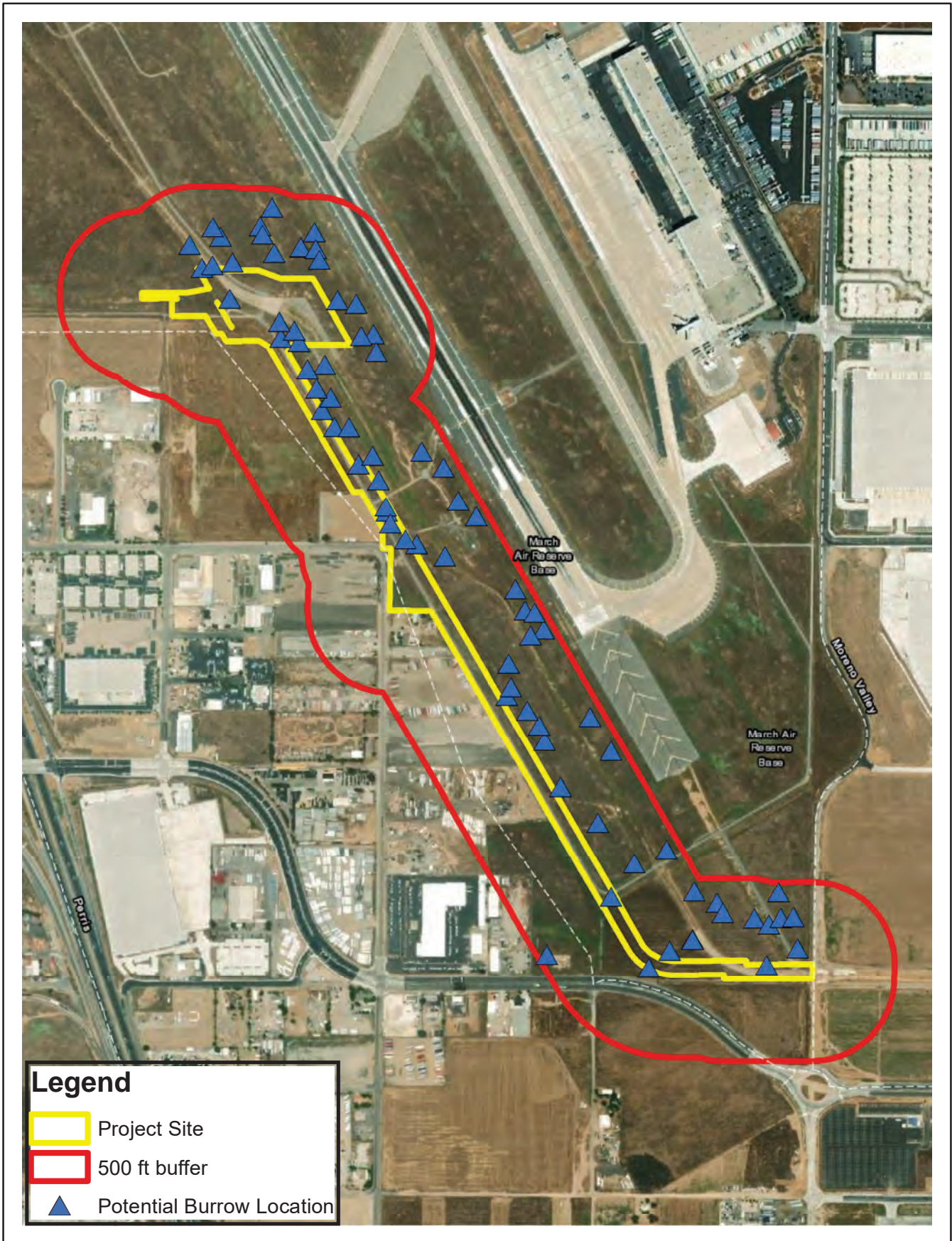




native and non-native grassland, interstitial grassland
s with low density shrub cover, golf-courses, drainage ditches, earthen

		✓					
			✓	✓			
				✓			
				✓			
				✓			





Source: Esri

Perris Valley Channel Lateral B, Stage 4 Project
Burrowing Owl Focused Survey Report

Survey Results

Figure 3

















<i>Buteo jamaicensis</i>	
<i>Canis latrans</i>	
<i>Charadrius vociferus</i>	
<i>Colias eurytheme</i>	
<i>Corvus brachyrhynchos</i>	
<i>Corvus corax</i>	
<i>Falco sparverius</i>	
<i>Haemorrhous mexicanus</i>	
<i>Icaricia acmon</i>	
<i>Lepus californicus</i>	
<i>Mimus polyglottos</i>	
<i>Pieris rapae</i>	
<i>Sayornis nigricans</i>	
<i>Stelgidopteryx serripennis</i>	
<i>Sturnella neglecta</i>	
<i>Tyrannus verticalis</i>	
<i>Zenaida macroura</i>	



Wildlife Biologist

(951)955-1245

•

•

•

•

•

Chaenactis glabriuscula var *orcuttiana*

udleya cymosa *crebrifolia*



Wildlife Biologist

(951) 955-1471

ma scoparia

Astragalus jaegerianus

Cymopterus deserticola



Tamarix

Arundo donax

—

Appendix C

Cultural Resources Assessment

PERRIS VALLEY CHANNEL LATERAL B, STAGE 4 PROJECT

PHASE I CULTURAL RESOURCES ASSESSMENT PERRIS VALLEY CHANNEL LATERAL B, STAGE 4

CITY OF PERRIS, RIVERSIDE COUNTY, CALIFORNIA

Prepared For:

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

1995 Market Street

Riverside, California 92501

Contact: *Jerry Aguirre*

951.955.1245

Prepared By:

MICHAEL BAKER INTERNATIONAL

3536 Concourse St. #100

Ontario, California 91764

Contact: *Nicholas Hearth*

909.974.4924

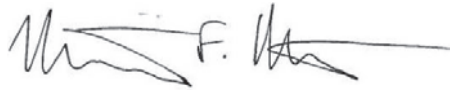
May 2022

JN 187014

PHASE I CULTURAL RESOURCES ASSESSMENT PERRIS VALLEY CHANNEL LATERAL B, STAGE 4

CITY OF PERRIS, RIVERSIDE COUNTY, CALIFORNIA

CERTIFICATION: I HEREBY CERTIFY THAT THE STATEMENTS FURNISHED HEREIN AND IN THE ATTACHED EXHIBITS PRESENT THE DATA AND INFORMATION REQUIRED FOR THIS ARCHAEOLOGICAL REPORT, AND THAT THE FACTS, STATEMENTS, AND INFORMATION PRESENTED ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



Nicholas F. Hearsh, MA, RPA

5/25/22

Senior Archaeologist/Principal Investigator

May 2022

JN 187014

USGS Riverside East and Steele Peak 7.5' Quadrangles; Township 3S, Range 4W, Section 36, San Bernardino Baseline & Meridian. Pedestrian survey 1/19/22.

Keywords: approximately 25 acres surveyed; Riverside County; Four historic-period built environment resources; P-33-024852, P-33-024867, P-33-024868, Building #1300; Assessor's Parcel Numbers 294-220-003, 294-200-002, 294-180-007, 294-180-006, 294-180-017, 294-180-037, and 294-180-055

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Section 1 Management Summary

The Riverside County Flood Control and Water Conservation District (District), in partnership with the March Joint Powers Authority (MJPA) and March Air Reserve Base (MARB), is proposing to construct the Perris Valley Channel (PVC) Lateral B, Stage 4 Project (project). The purpose is to provide flood protection to MARB and adjacent areas.

The project is subject to compliance with the California Environmental Quality Act (CEQA), with the District acting as the lead agency under CEQA. The project is located partly within the limits of MARB, and the project meets the definition of a federal undertaking (36 Code of Federal Regulations [CFR] Section 800.16[y]). Therefore, compliance with Section 106 of the National Historic Preservation Act (NHPA) and the National Environmental Policy Act (NEPA) is required. Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties (36 CFR Section 800.1). The MJPA serves as the lead agency for the purposes of Section 106. Because the project will affect waters of the United States, the MJPA must also meet the requirements of Section 401 and 404 of the Clean Water Act.

In support of the project, Michael Baker International conducted a Phase I cultural resources assessment of the project area of potential effects (APE) in accordance with CEQA and Section 106 of the NHPA. This report summarizes the methods and results of a records search with the Eastern Information Center (EIC), literature and map review, Sacred Lands File search with the Native American Heritage Commission (NAHC), historical society consultation, buried site sensitivity summary, archaeological and built environment survey, the evaluation of three historic-period built environment resources and resource records updates, and preparation of one resource record update; see below.

Table 1: Cultural Resources within the APE

Resource #	Name	OHP Status Code	Michael Baker Evaluated	Historical Resource	Historic Property
P-33-024852	Segment of Flood Control Channel	6Z	Yes	No	No
P-33-024867	Lateral B – Oleander Channel	6Y, 6Z	Yes	No	No
P-33-024868	Segment of Webster Avenue	6Y, 6Z	No	No	No
-	Utility Building #1300	6Z	Yes	No	No

This study identified no significant prehistoric or historic-period cultural resources as defined by CEQA Section 15064.5(a) or Public Resources Code (PRC) 21083.2(g) within the APE. The potential to discover significant subsurface cultural deposits within the APE is low. The project will have a less than significant impact with mitigation incorporated under CEQA and a finding of no historic properties affected under Section 106 of the NHPA. Standard mitigation measures for cultural resources identification during project-related activities are in Section 6.

If the proposed project changes, additional efforts may be necessary.

Section 2 Introduction

The District, in partnership with the MJPA and MARB, proposes to construct the PVC Lateral B, Stage 4, between the existing PVC Lateral B, Stage 2 facility at Heacock Street and the downstream terminus of the PVC Lateral B, Stage 5 facility, which is currently under construction as part of the VIP-215 project. Michael Baker International was retained by the District to conduct a cultural resource assessment of the project for compliance with CEQA and Section 106 of the NHPA. The District is the lead agency for the purposes of CEQA and MJPA is the lead agency for Section 106.

2.1 PROJECT LOCATION AND DESCRIPTION

The project is within the limits of MARB and the City of Perris (City) in western Riverside County. The APE is within Assessor's Parcel Numbers (APNs) 294-220-003, 294-200-002, 294-180-007, 294-180-006, 294-180-017, 294-180-037, and 294-180-055. The APE is east of the Interstate 215 freeway (I-215) within Section 36 in Township 3 South, Range 4 West, as shown on the Riverside East US Geological Survey (USGS) 7.5-minute quadrangle map San Bernardino Baseline Meridian, and is approximately 25 acres in size (**Appendix A: Figures 1-2**).

The project would construct PVC Lateral B, Stage 4, which consists of approximately 6,000 feet of reinforced concrete box culvert starting at Heacock Street (at the upstream end of PVC Lateral B, Stage 2) to the downstream terminus of the PVC Lateral B, Stage 5 facility, which is currently under construction as part of the VIP-215 project. The project's general alignment begins at the downstream terminus of PVC Lateral B, Stage 5 and heads south and east adjacent to the MARB west perimeter security fence before tying into the PVC Lateral B, Stage 2 facility at Heacock Street. The project would include three transition structures, four junction structures, twelve bolted-down manholes for security, and two inlets along the southernmost end of the alignment to collect on-site flows from MARB. The project would also include two lateral stubs and bulkheads for the future construction of Lateral B-7 and Lateral B-8 in the City of Perris.

The project would be located mostly within the MARB right-of-way. This alignment will go through APN 294-180-055, where a 45-foot permanent easement has been dedicated for the construction and maintenance of Stage 4.

2.2 AREA OF POTENTIAL EFFECT

The APE is delineated to encompass the maximum extent of ground disturbance required by the project design, and equipment staging (see **Appendix A: Figure 3**). The vertical APE for the project—defined as the maximum depth of project activities—measures approximately 12 to 16 feet.

2.3 PERSONNEL

Michael Baker International Principal Archaeologist, Nicholas Hearth, MA, RPA, served as principal investigator. Fieldwork was conducted by Senior Archaeologist Kholood Abdo, MA, RPA, and Archaeologist Marcel Young, BA. Architectural Historian Susan Zamudio-Gurrola, MHP, evaluated the built environment cultural resources. The efforts were overseen by Department Manager Margo Nayyar, MA.

Nicholas Hearth, MA, RPA – Principal Investigator. Mr. Hearth has worked as an archaeologist in cultural resource management since 2002. He meets the Secretary of the Interior's Professional Qualifications Standards for prehistoric archaeology. He received his BA in anthropology in 2003 from the University of Massachusetts, Amherst, and his MA in anthropology in 2006 from the University of California, Riverside. Mr. Hearth has worked in California, Utah, Nevada, Arizona, New Mexico, and multiple states in the Midwest and New England. Mr. Hearth is well versed in applying Section 106 of the NHPA, CEQA, and NEPA on various projects across many market sectors. He has completed projects in all phases of archaeology: Phase I pedestrian and shovel test surveys, extended Phase I survey, buried site testing, archaeological sensitivity assessments, Phase II testing and evaluations, Phase III data recovery, and Phase IV monitoring. His project responsibilities include overseeing archaeological, historical, and paleontological studies, directing all phases of archaeological field and laboratory work, and ensuring that the quality of analysis and reporting meets or exceeds appropriate local, state, and federal standards.

Kholood Abdo, MA, RPA – Senior Archaeologist. Ms. Abdo has worked as an archaeologist in cultural resource management since 1999. She meets the Secretary of the Interior's Professional Qualification Standards for historical archaeology. She has completed projects in all phases of archaeology: Phase I pedestrian and shovel test surveys, extended Phase I survey, buried site testing, archaeological sensitivity assessments, Phase II testing and evaluations, Phase III data recovery, and Phase IV monitoring in California. Ms. Abdo has written and contributed to scores of technical reports, including NEPA, NHPA, and CEQA compliance documents. In her current capacity as senior archaeologist and archaeological laboratory director, Ms. Abdo oversees the processing, analysis, and curation of artifact collections from both prehistoric and historical sites. Her cultural material analysis experience includes flaked and ground stone lithics, shell and glass bead analysis, and historical artifact analysis. Her project responsibilities include the oversight of archaeological historical studies and phases of archaeological fieldwork, oversight of field laboratory work, laboratory processing, artifact database, and collection management. Ms. Abdo works to ensure that the quality of analysis and reporting meets or exceeds appropriate local, state, and federal standards.

Susan Zamudio-Gurrola, MHP – Senior Architectural Historian. Ms. Zamudio-Gurrola is an architectural historian with over eight years of experience in cultural resources management. Her experience includes conducting built environment surveys, archival research, evaluations for the National Register of Historic Places (National Register), California Register of Historical Resources (California Register), and local designations, assessing the integrity of historic resources, developing community-wide historic context statements, assessing project impacts, reviewing projects for conformance with the Secretary of the Interior's Standards, and preparing cultural resources studies in compliance with CEQA, Section 106 of the NHPA, NEPA, and local ordinances. She also prepares cultural resources sections for CEQA environmental documents such as initial studies and environmental impact reports. She has demonstrated experience preparing Caltrans-format cultural resources studies, finding of effect documents, and Historic American Buildings Survey documentation for buildings and structures. Ms. Zamudio-Gurrola has provided extension-of-staff historic preservation services for the County of Ventura Planning Division and Cultural Heritage Board. She has also conducted oral history interviews as part of project mitigation measures and the Bracero History Archive. Ms. Zamudio-Gurrola meets the Secretary of the Interior's Professional Qualification Standards for history and architectural history.

Marcel Young, BA – Archaeologist. Mr. Young has worked in various capacities in cultural resource management since 2013. He is experienced in surveying and conducting recordings and evaluations of historic and prehistoric archaeological sites in California. Mr. Young is versed in conducting fieldwork within frameworks of Section 106 of the

NHPA, NEPA, and CEQA. He has participated in projects in several phases of archaeology: Phase I pedestrian, extended Phase I testing, shovel test surveys, buried site testing, Phase III data recovery, and Phase IV monitoring.

Margo Nayyar, MA – Cultural Resources Department Manager. Ms. Nayyar is a senior architectural historian with 12 years of cultural management experience in California, Nevada, Idaho, Arizona, Texas, and Mississippi. Her experience includes built environment surveys, evaluation of historic-era resources using guidelines outlined in the National and California Registers, and preparation of cultural resources technical studies pursuant to CEQA and Section 106 of the NHPA, including identification studies, finding of effect documents, memorandum of agreements, programmatic agreements, and Historic American Building Survey/Historic American Engineering Record/Historic American Landscape Survey mitigation documentation. She prepares cultural resources environmental document sections for CEQA environmental documents including infill checklists, initial studies, and environmental impact reports, as well as NEPA environmental documents including environmental impact statements and environmental assessments. She also specializes in municipal preservation planning, historic preservation ordinance updates, Native American consultation, and provision of Certified Local Government training. She develops Survey 123 and Esri Collector applications for large-scale historic resources surveys, and authors National Register nomination packets. Ms. Nayyar meets the Secretary of the Interior's Professional Qualification Standards for history and architectural history and manages a team of archaeologists, architectural historians, and paleontologists.

Section 3 Regulatory Context

The project is subject to both state and federal regulations concerning cultural resources.

3.1 NATIONAL HISTORIC PRESERVATION ACT (NHPA)

The project requires federal permitting, license, or approval, and will be carried out on federal land; therefore, the project meets the definition of an undertaking in 36 CFR Section 800.16(y). Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties, and afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on such undertakings (36 CFR Section 800.1). A historic property is defined as any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register. Properties of traditional religious and cultural importance to Native Americans are considered under Section 106 (36 CFR Sections 800.3-800.10) and Section 101 (d)(6) of the NHPA. Additional federal laws include the Archaeological Data Preservation Act of 1974, the American Indian Religious Freedom Act of 1978, the Archaeological Resources Protection Act of 1979, and the Native American Graves Protection and Repatriation Act of 1989.

3.1.1 NATIONAL REGISTER OF HISTORIC PLACES

The National Register was established by the NHPA of 1966 as an authoritative guide to be used by federal, state, and local governments, private groups, and citizens to identify the nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment (CFR 36, CFR 60.2). The National Register recognizes historic properties significant at the national, state, and local levels. To be eligible for listing in the National Register, a resource must have significance in American history, architecture, archaeology, engineering, or culture. Resources may include districts, sites, buildings, structures, and objects. Resources are eligible for the National Register if they meet any of the following criteria:

- Criterion A: Are associated with events that have made a significant contribution to the broad patterns of our history.
- Criterion B: Are associated with the lives of persons significant in our past.
- Criterion C: Embody the distinctive characteristics of a type, period, or method of installation, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction.
- Criterion D: Have yielded, or may be likely to yield, information important in prehistory or history.

INTEGRITY

National Park Service (NPS) standards require that a property that is significant under National Register criteria must also retain integrity, the ability to convey its significance. The NPS identifies seven aspects or qualities that, in various combinations, define integrity. A historic property must possess several, and usually most, of these aspects to retain integrity (NPS 1997:44):

Location:	The place where the historic property was constructed or the place where the historic event occurred
Design:	The combination of elements that create the form, plan, space, structure, and style of a property
Setting:	The physical environment of a historic property
Materials:	The physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property
Workmanship:	The physical evidence of the crafts of a particular culture or people during any given period in history or prehistory
Feeling:	A property's expression of the aesthetic or historic sense of a particular period of time
Association:	The direct link between an important historic event or person and a historic property

AGE

Ordinarily, properties that have achieved significance within the past 50 years shall not be considered eligible for the National Register. A property less than 50 years old and meeting significance criteria may be considered eligible if it is of “exceptional importance” (NPS 1997:2).

3.2 CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

CEQA applies to all discretionary projects undertaken or subject to approval by the state’s public agencies (California Code of Regulations [CCR] Title 14[3] Section 15002[i]). CEQA states that it is the policy of the state of California to “take all action necessary to provide the people of this state with historic environmental qualities and preserve for future generations examples of the major periods of California history” (PRC Section 21001[b], [c]). Under the provisions of CEQA, “a project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment” (CCR Title 14[3] Section 15064.5[b]).

CEQA Guidelines Section 15064.5(a) defines a “historical resource” as a resource which meets one or more of the following criteria:

- Listed in, or eligible for listing in, the California Register.
- Listed in a local register of historical resources (as defined at PRC Section 5020.1[k]).
- Identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g).
- Determined to be a historical resource by a project’s lead agency (CCR Title 14[3] Section 15064.5[a]).

A historical resource consists of “any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. Generally, a resource shall be considered by the lead agency to be ‘historically significant’ if the resource meets the criteria for listing in the California Register of Historical Resources” (CCR Title 14[3] Section 15064.5[a][3]).

CEQA requires that historical resources and unique archaeological resources be taken into consideration during the CEQA planning process (CCR Title 14[3] Section 15064.5; PRC Section 21083.2). If feasible, adverse effects to the significance of historical resources must be avoided or mitigated (CCR Title 14[3] Section 15064.5[b][4]). The

significance of a historical resource is impaired when a project demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for the California Register. If there is a substantial adverse change in the significance of a historical resource, the preparation of an environmental impact report may be required (CCR Title 14[3] Section 15065[a]).

If the cultural resource in question is an archaeological site, CEQA (CCR Title 14[3] Section 15064.5[c][1]) requires that the lead agency first determine if the site is a historical resource as defined in CCR Title 14(3) Section 15064.5(a). If the site qualifies as a historical resource, potential adverse impacts must be considered in the same manner as a historical resource (OHP 2001a). If the archaeological site does not qualify as a historical resource but does qualify as a unique archaeological site, then the archaeological site is treated in accordance with PRC Section 21083.2 (CCR Title 14[3] Section 15069.5[c][3]). In practice, most archaeological sites that meet the definition of a unique archaeological resource will also meet the definition of a historical resource. CEQA defines a “unique archaeological resource” as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets one or more of the following criteria:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with a scientifically recognized important prehistoric or historic event or person (PRC Section 21083.2[g]).

If an impact to a historical or archaeological resource is significant, CEQA requires feasible mitigation measures to minimize the impact (CCR Title 14[3] Section 15126.4[a][1]). Mitigation must lessen or eliminate the physical impact that the project will have on the resource. Generally, the use of drawings, photographs, and/or displays does not mitigate the physical impact on the environment caused by demolition or destruction of a historical resource. However, CEQA (PRC Section 21002.1[b]) requires that all feasible mitigation be undertaken even if it does not mitigate impacts to a less than significant level (OHP 2001a:9).

3.2.1 CALIFORNIA REGISTER OF HISTORICAL RESOURCES

The California Register is a guide to cultural resources that must be considered when a government agency undertakes a discretionary action subject to CEQA. The California Register helps government agencies identify and evaluate California’s historical resources (OHP 2001b:1) and indicates which properties are to be protected, to the extent prudent and feasible, from substantial adverse change (PRC Section 5024.1[a]). Any resource listed in, or eligible for listing in, the California Register is to be considered during the CEQA process (OHP 2001a:7).

A cultural resource is evaluated under four California Register criteria to determine its historical significance. A resource must be significant in accordance with one or more of the following criteria:

- Criterion 1: Is associated with events that have made a significant contribution to the broad pattern of California’s history and cultural heritage.
- Criterion 2: Is associated with the lives of persons important in our past.

Criterion 3: Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.

Criterion 4: Has yielded, or may be likely to yield, information important in prehistory or history.

AGE

In addition to meeting one or more of the above criteria, the California Register requires that sufficient time must have passed to allow a “scholarly perspective on the events or individuals associated with the resource.” Fifty years is used as a general estimate of the time needed to understand the historical importance of a resource (OHP 2006:3). The OHP recommends documenting, and taking into consideration in the planning process, any cultural resource that is 45 years or older (OHP 1995:2).

INTEGRITY

The California Register also requires a resource to possess integrity, which is defined as “the authenticity of a historical resource’s physical identity evidenced by the survival of characteristics that existed during the resource’s period of significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association” (OHP 2006:2).

Archaeologists use the term “integrity” to describe the level of preservation or quality of information contained within a district, site, or excavated assemblage. Integrity is relative to the specific significance which the resource conveys. Although it is possible to correlate the seven aspects of integrity with standard archaeological site characteristics, those aspects are often unclear for evaluating the ability of an archaeological resource to convey significance under Criterion 4. The integrity of archaeological resources is judged according to the site’s ability to yield scientific and cultural information that can be used to address important research questions (NPS 1997:44–49).

3.2.2 CALIFORNIA HEALTH AND SAFETY CODE SECTION 7050.5

California Health and Safety Code Section 7050.5 states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site, or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the remains are discovered has determined whether or not the remains are subject to the coroner’s authority. If the human remains are of Native American origin, the coroner must notify the NAHC within 24 hours of this identification. The NAHC will identify a Native American most likely descendant to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods.

Section 4 Setting

This section describes the environmental, prehistoric, ethnographic, and historical cultural setting of the general project region to provide a context for understanding the types, nature, and significance of the archaeological resources that could be identified within the APE. The nature and distribution of prehistoric and historic human activities in the region have been affected by such factors as topography, climate, geology, and the availability of water and biological resources. Therefore, the environmental setting of the general project area is summarized below followed by a discussion of the research design.

4.1 ENVIRONMENTAL SETTING

The APE is in the north-central portion of the Peninsular Ranges geomorphic province of southern California. The Peninsular Ranges province is distinguished by northwest-trending mountain ranges and valleys following faults branching from the San Andreas Fault. The Peninsular Ranges are bound to the east by the Colorado Desert and extend north to the San Bernardino–Riverside County line (Norris and Webb 1976), west into the submarine continental shelf, and south to the California state line.

Locally, the APE is within the central part of the Perris Block, which is bound by the Elsinore and San Jacinto fault zones to the west and east, respectively. Basement rock of the Perris Block is divided into discrete plutons, or masses of intrusive-igneous rock of similar composition. Nearby plutons include the Lakeview Mountains, Bernasconi Hills, and the Val Verde Pluton. Geographic features bordering the project include the Bernasconi Hills, which is the location of Lake Perris, and a series of low hills associated with the Val Verde Pluton to the east; the Box Spring Mountains to the north; and the San Jacinto River, 7.1 miles to the south-southeast. Moreno Valley extends to the north and east while the Perris Valley is to the south.

Geological units underlying the project include Holocene young alluvial fan deposits (11,700 years ago to the present), Pleistocene epoch old alluvium fan deposits (2.5 million years ago to 11,700 years ago), and Cretaceous-age and older igneous rocks from the Peninsular Ranges batholith (Morton et al. 2002, 2003).

Six soils series are mapped in the APE: Exeter, Hanford, Monserate, Greenfield, Pachappa, and Ramona (NRCS 2022). The Ramona series consists of brown sandy loam, red-brown to yellow-red sandy clay loam, and strong brown sandy loam, which formed in alluvium derived from igneous source rocks (Soil Survey Staff 2003a). The Exeter series consists of brown loam, reddish-brown to yellowish-red clay loam, and light yellowish-brown sand, which formed in alluvium from granitic sources (Soil Survey Staff 2006). The Monserate series consists of brown and yellow-red sandy loam, reddish-brown sandy clay, and yellow-brown sand, which formed in alluvium derived from granitic rocks (Soil Survey Staff 2003b). The Pachappa soil series dates approximately 13,000 to 7,000 years before present (BP) (late Pleistocene to early Holocene) based on McFadden's (1982) chrono sequence. These grayish-brown sandy loam soils formed in semiarid to dry, wind-blown conditions (Soil Survey Staff 2003c). The Greenfield and Hanford series correspond to the Holocene alluvium found in geologic maps (Qa of Dibblee and Minch 2003a, 2003b). These soils consist of brown to yellowish-brown sandy loams that formed in deep alluvium from igneous and quartz-bearing rocks (Soil Survey Staff 1999, 2019).

The APE is within the Inland Valleys and Inland Hills ecoregion of California (Griffith et al. 2016). Ecoregions denote general similarity in ecosystems and environmental resources. Though the lowlands of the Inland Valleys tend to be heavily urbanized, the Inland Hills have moderately steep to steep slopes with elevations between 1,000 and 3,000 feet. Historically, typical vegetation of these ecoregions included Riversidean sage scrub, grasslands, and riparian woodlands or chaparral habitats. Soil temperature regimes are thermic and soil moisture regimes are xeric in these regions, with mean annual precipitation between 10 and 14 inches (Griffith et al. 2016).

The APE is characterized as developed and undeveloped-disturbed land. The surrounding areas consist of MARB to the east and scattered industrial development to the north, south, and west. An existing drainage course is located within MARB property approximately 350 feet west of the existing runway and 300 feet east of the western perimeter fence boundary of MARB. Runoff in this area drains from the north to south via this natural drainage course towards a soft bottom open channel at Heacock Street (Heacock Channel) and eventually draining east towards the PVC. The elevation of the APE is between 1,475 and 1,500 feet above mean sea level.

4.2 PREHISTORIC SETTING

Two primary regional schemas are commonly cited in the archaeological literature for western Riverside County. These schemas or syntheses generalize the presence or absence of certain artifact types into explanatory frameworks of temporal chronologies and/or subsistence practices. Schemas are necessary because many archaeological sites lack absolute datable material (ex. Carbon for radiometric ^{14}C dating) and so researchers need to cross-date sites by comparison to either coastal or desert chronologies with established chronological sequences backed by absolute dates. In western Riverside County, it is thought to be the meeting ground of both coastal and inland desert schemas and neither exclusively explains prehistoric finds.

The first schema, advanced by Wallace (1955), defines four cultural horizons for the southern California coastal province, each with characteristic local variations:

- I. Early Man (~9000–8500 BP) is a hunting culture based on almost exclusive evidence of chipped-stone hunting materials: dart points, scrapers, choppers, and bifaces.
- II. Milling Stone (8500–4000 BP) reflects a change to a more sedentary, plant-collecting lifestyle as evidenced by the introduction and dominance of milling stone artifacts and a decrease in well-made projectile points.
- III. Intermediate (4000–1500 BP) is characterized by a larger dependency on hunting, use of the dart and atlatl, and the shift from using the mano/metate to mortar/pestle. However, knowledge of this horizon suffers from lack of knowledge about what occurred during this time, not a lack of inhabitants along the southern California coast.
- IV. Late Prehistoric (1500~200 BP) contains a more nuanced artifact assemblage indicative of a more complex lifestyle and an increase of population. This horizon is characterized by an increase in bow and arrow use, steatite containers, pottery, circular fishhooks, perforated stones, asphaltum, diversified bone tools, ample shell ornaments, and elaborate mortuary customs.

Warren and Crabtree (1986) employ a more ecological approach to the deserts of southern California, defining five traditions in prehistory:

- I. Lake Mojave (12000–7000 BP)
- II. Pinto (7000–4000 BP)
- III. Gypsum (4000–1500 BP)
- IV. Saratoga Springs (1500–800 BP)
- V. Shoshonean (800–200 BP)

Warren and Crabtree (1986) viewed cultural continuity and change in terms of various significant environmental shifts, defining the cultural ecological approach for archaeological research of the California deserts. The authors viewed changes in settlement pattern and subsistence as cultural adaptations to a changing environment, beginning with the gradual environmental warming in the late Pleistocene, the desiccation of the desert lakes during the early Holocene, the short return to pluvial conditions during the middle Holocene, and the general warming and drying trend, with periodic reversals, that continues to this day. The work by Warren and Crabtree (1986) is built upon, in part, by Warren (1980) and his argument for a chronology based on projectile points as period markers backed by radiocarbon assays providing absolute dates.

The two schemas contrast in important ways. The units employed by Warren are “traditions,” which may be spatially restricted but display temporal continuity. In contrast, for Wallace (1955), “horizons” or “periods” are extensive through space but restricted in time. More recent schema have been attempted to reconcile these differences. More recently, Koerper and Drover (1983) synthesized chronologies for coastal southern California and employed Wallace’s (1955) horizon terminology but used radiometric data to sequence stylistic changes observed in the artifact assemblages, which they interpreted as material indication of cultural change through time. Regardless of the overall schema to best explain the prehistory of western Riverside County, the region can be understood within broad chronological frameworks and as the meeting ground of the coastal and desert subsistence patterns.

4.2.1 EARLY HOLOCENE (11,600–7,600 BP)

Traditional models of the prehistory of California hypothesize that its first inhabitants were the big game hunting Paleoindians who lived at the close of the last Ice Age (~11,000 years BP). As the environment warmed and dried, large Ice Age fauna died out, requiring adaption by groups to survive. The western Great Basin and deserts of southern California were characterized by large pluvial (rainfall-fed) lakes, streams, marshes, and grasslands. The human response to this environment is known as the Western Pluvial Lakes Tradition (WPLT) (Moratto 1984). The WPLT is generally identified by an advanced flaked-stone industry of foliate knives/points, Silver Lake and Lake Mojave points, lanceolate bifaces, and long-stemmed points. Other flaked-stone tools include crescents, scrapers, choppers, scraper-planes, hammer stones, cores, drills, and graters. People of this period hunted diverse populations of smaller animals and collected a wide number of plants from diverse eco-zones. Importantly, this period lacks widespread evidence of milling stones, and, therefore, hard seed processing was likely not widely practiced. Sites are generally found along the shores of former pluvial lakes, marshes, and streams (Moratto 1984). The desert manifestation of the WPLT is the Lake Mojave Complex, while along the coast the WPLT is seen in the San Dieguito Complex. Along the coast, rising sea levels created bays and estuaries. Following initial settlement along the coast, groups adopted marine subsistence including fish and shellfish. These shell middens contain flaked cobble tools, metates, manos, discoids, and flexed burials and allowed for a semi-sedentary lifestyle (Byrd and Raab 2007). Eventually, shellfish became the primary source of food, while plant gathering, hunting, and fishing were less important.

The Paleocoastal Tradition (PCT) has many similarities to the WPLT, but reflects a coastal adaptation (Davis, Brott, and Weide 1969). PCT sites are located along bays and estuaries. Subsistence patterns indicate the eating of mollusks, sea mammals, sea birds, and fish in addition to land plants and animals. The argument for a PCT has gained momentum. This is based on a vast amount of recent research that has been conducted along the California coast and the Channel Islands (Byrd and Raab 2007). A recent study dates habitation on San Miguel Island back to ~11,300 BP (Daisy Cave), while a site on San Clemente (Eel Point) shows that a PCT was entrenched at Eel Point in the early Holocene, with the hunting of seals, sea lions, and dolphins, as well as the gathering of shellfish.

4.2.2 MIDDLE HOLOCENE (7,600–3,650 BP)

The middle Holocene is a time of change and transition. As conditions continued to warm and dry, lakes and streams in the desert disappeared. This resulted in a shift in subsistence strategies, namely a shift to the gathering of plant seeds, grasses, and shellfish along the coast as the primary dietary staple. Fishing and the hunting of smaller animals played a less important role in day-to-day activity. This shift in subsistence is what Wallace named the Milling Stone Horizon (Wallace 1955) and this name has continued among archaeologists working on the coastal province of southern California. Large habitations are seen in the inland areas and considerable variability is seen along coastal occupation of southern California. Occupation revolved around seasonal and semi-sedentary movements in coastal Orange and San Diego Counties. Trade networks are postulated by researchers that have dated Olivella grooved rectangle shell beads as far north as central Oregon dating to 4900–3500 BP (Byrd and Raab 2007). Characteristics of the middle Holocene sites include ground stone artifacts (manos and metates) used for processing plant material and shellfish, flexed burial beneath rock or milling stone cairns, flaked core or cobble tools, dart points, cogstones, discoidals, and crescentics.

4.2.3 LATE HOLOCENE (3,650–233 BP)

During the late Holocene there was a migration of Takic speakers from the San Joaquin Valley into southern California (Sutton 2009, 2010). Characteristics of the late Holocene include the introduction of the bow and arrow, mortar and pestle, use of ceramics, and a change in mortuary behavior from inhumations to cremations in southern California. This was also a period of climatic fluctuation. Paleoenvironmental data show that periods of drought alternated with cooler and moister periods (Vellanoweth and Grenda 2002; Byrd and Raab 2007; Jones et al. 2004). This resulted in dynamic regional cultural patterns with considerable local variation. Byrd and Raab (2007) suggest that foragers in southern California over-exploited high-ranked food, such as shellfish, fish, marine and land mammals, and plant remains. This led to resource depression, causing people to forage more costly resources that were more abundant.

4.3 ETHNOGRAPHY

The APE is located within the ethnographic territory of the Cahuilla (Heizer 1978:Key to Tribal Territories); the Gabrielino, Luiseno, including the Juaneno, and Serrano each have affiliations with the lands of western Riverside County. The Cahuilla are Takic speakers and are descended from Late Prehistoric populations of the region. Takic is part of the larger Uto-Aztecan language stock which migrated west from the Great Basin (Bean and Smith 1978; Shipley 1978). A more recent publication regarding the timing of the spread of the Takic languages and if the diffusion of this

language represents the replacement of groups of people or if local groups are adapting Takic-based languages has indicated the necessity of continuing this research (Sutton 2009).

In the Cahuilla dialect, *ivia*, they called themselves the *Iviatim*. The word *Cahuilla* is likely derived from the *ivia* word for master, *kawi'a*. Their territory included the Coachella Valley as well as the San Jacinto and Santa Rosa Mountain ranges. Bean and Shipek (1978) estimated that the Cahuilla numbered between 6,000 and 10,000 people at the time of Spanish contact. Ethnographers have divided this population by habitation locale (Mountain, Pass, and Desert) whereas the Cahuilla divided themselves by patrilineal descent clans and one of two moieties (Wildcat and Coyote). Further distinctions were made within clans of politically important and independent subsidiary lineages. These lineages occupied their own villages as documented by Cahuilla ethnographic consultants in the early twentieth century and from Franciscan mission records (Earle 2004).

Politically and ceremonially Cahuilla clans were led by a chief or Net. The Net had charge of the sacred dance house and the sacred bundle, *masut*, which consisted of matting that was wrapped around items sacred to the clan, such as ritual paraphernalia. Importantly, the *masut* was the sacred expression of each clan. A *Paha*, ritual assistant, is also found among other Takic speaking groups. The office of *Paha* varied, however, as it was not always present within some of the southern-most Desert Cahuilla clans (Bean and Saubel 1972; Hooper 1920). As other Takic speaking groups did, the Cahuilla would publicly gather for the naming of children, marriage, female and male initiation ceremonies, ascendancy of a Net, Eagle-Killing Ceremony, and mourning ceremony. The mourning ceremony took place as a way to collectively mourn all those that had died since the previous mourning ceremony. Each person was cremated along with his or her individual possessions in a ceremony separate from the mourning ceremony. Mourning ceremonies were one of the most important ceremonies for clan in that sacred songs were sung, sacred dances were danced, and moieties exchanged food and valued goods.

The three ethnographically documented zones of Cahuilla habitation (Pass, Mountain, and Desert) serve as general guidelines for understanding their subsistence practices. In general, Mountain and Pass Cahuilla diet emphasized acorn (*salvia islay*), yucca, agave, and pinyon gathering in the mountain and foothill regions. In contrast, Desert Cahuilla focused on the gathering of mesquite, cactus, and hard seeds such as screwbean, juniper, and mesquite (Bean and Saubel 1972). These generalizations can only be broadly applied as the Cahuilla inhabiting different zones were not mutually exclusive to each other. Desert Cahuilla in the Coachella Valley retained gathering areas in the Santa Rosa Mountains or other upland regions. Desert Cahuilla also utilized the resources in the foothills. The eastern foothills of the Coachella Valley produced agave and hard seeds. Also, the foothills on the western side of the Coachella Valley produced cactus, agave, and hard seeds and, higher upslope, pinyon, for the Desert Cahuilla. Further divisions can be made for the biotic subregions of the Coachella Valley. Kelly (1977) distinguished the “agave desert” located in the Coachella Valley, the west side of the Salton Sea, and in Imperial Valley, and the “severe desert” located east and south of these regions. In his estimation, the Cahuilla and others adapted to the agave desert but not the severe desert. This adaptation involved the seasonal movement from desert floors up into the mountain foothills.

The Cahuilla were also observed to cultivate small quantities of corn, beans, squashes, pumpkins, melons, and wheat as early as 1824 by the Romero expedition. These crops and the cultivation of them potentially made their way from the Colorado River area to the Coachella Valley. The inhabitants of the Coachella did not practice flood recessional agriculture of the Colorado River groups (Bean and Lawton 1993). Based upon ethnographic interviews, Strong (1929:38) noted that he had been told by Francisco Nombre that his grandfather told him that the cultivation of corn

and other crops by the Cahuilla was a recent practice and that the Cahuilla used to obtain corn from the “Yumas.” Corn would likely have been available to the Cahuilla via exchange systems between foraging groups who had access to resources outside of the Colorado River and horticulturalists along the river. Regardless of the timing of cultivation of these crops, by the 1850s, oasis gardens and, to a lesser extent, canyon gardens were important sources of foodstuffs (Bean, Schaefer, and Vane 1995).

4.4 HISTORY

Historic-era California is generally divided into three periods: the Spanish or Mission Period (1769–1821), the Mexican or Rancho Period (1821–1848), and the American Period (1848–present).

The Spanish Period (1769–1821) is represented by European exploration of the region; establishment of the presidios (military forts) and chain of 21 missions throughout Alta (upper) California; and the introduction of livestock, agricultural goods, and European architecture and construction techniques. Early exploration of the Riverside County area began in 1772 when Lieutenant Pedro Fages (then Military Governor of San Diego) crossed through the San Jacinto Valley. Permanent European settlement began about the turn of the eighteenth century through the issuance of land grants and grazing permits, and Spanish influence continued to some extent after 1821 due to the continued implementation of the mission system.

The Mexican Period (1821–1848) began with Mexican independence from Spain and continued until the end of the Mexican-American War. The Secularization Act resulted in the transfer through land grants (called ranchos) of large mission tracts to politically prominent individuals. Approximately 14 ranchos were granted in Riverside County, the first to Juan Bandini in 1838. In the mid-1840s, cattle ranching was a more substantial business than agricultural activities, and trade in hides and tallow increased during the early portion of this period. Until the Gold Rush of 1849, livestock and horticulture dominated California's economy.

The American Period (1848–present) began with the signing of the Treaty of Guadalupe Hidalgo in 1848, which officially ended the Mexican-American War; in 1850, California was accepted into the Union of the United States primarily due to the population increase created by the Gold Rush of 1849. The cattle industry reached its greatest prosperity during the first years of the American Period. Mexican Period land grants had created large pastoral estates in California, and demand for beef during the Gold Rush led to a cattle boom that lasted from 1849–1855. However, beginning about 1855, the demand for beef began to decline due to imports of sheep from New Mexico and cattle from the Mississippi and Missouri Valleys. When the beef market collapsed, many California ranchers lost their ranchos through foreclosure. A series of disastrous floods in 1861–1862, followed by two years of extreme drought, which continued to some extent until 1876, altered ranching forever in the southern California area.

4.4.1 LOCAL HISTORY

During the early ninetieth century, Southern California was promoted as an ideal agricultural area with fertile soil and a mild climate. Books on California painted beautiful pictures that appealed to both Americans and Europeans. Railroad construction resulted in three land booms: (1) the initial easing after the completion of the transcontinental railroad in California; (2) in the late 1870s, after the construction of the Southern Pacific; and (3) in 1886–1888 when work ceased

on the Santa Fe transcontinental line. Competition between the lines incited stiff fare competition, and both tourists and potential settlers took advantage of the low fares to come to California (Lech 2004:222).

In 1882, construction was underway of a competing rail line into Southern California, known as the California Southern Railway. It was financed by the Atchison, Topeka, and Santa Fe (AT&SF) Railway Company. California Southern Railway's chief engineer, Frederick Thomas Perris, oversaw the building of the rail line from National City, near the Mexican border in San Diego County, north to Oceanside and across Temecula Canyon, then on to San Bernardino. Fred Perris drove the first passenger train into San Bernardino on September 13, 1883 (Gunther 1984:385).

Once the railway had made its way through the Perris Valley in 1882, homesteaders began to stake their claim to land in the vicinity. The town of Pinacate had been established along the rail line on May 12, 1885, about 2 miles south of Perris, but settlers in the northern part of the valley desired a more centrally located townsite. Local settlers convinced the California Southern Railway officials to establish the route through the region by offering a suitable location, donating land for a railroad siding and town, and building a depot and well. The siding was named Perris in honor of Fred Perris. The townsite plat was filed February 16, 1886, and Perris was officially named a station along the Santa Fe line (Gunther 1984:385). The buildings and businesses at Pinacate were moved to Perris, and a hotel and saloon were among the first buildings constructed. The town was incorporated as a city on May 26, 1911 (City of Perris n.d.).

Throughout much of the twentieth century, agriculture continued to be a major industry in the Perris Valley. Primary crops in the region focused on hay and grains irrigated by winter rains. Agriculture as a major industry persists to the present day, although urban growth and expansion have slowly replaced former agricultural lands. The post-World War II era ushered in a boom in commercial, industrial, and residential development in and near the region's urban centers, followed by the construction of several freeways linking urban areas to one another. US Highway 395 was once a two-lane road through Perris, but was expanded during the 1960s and became I-15 east by 1972. Now signed as I-215 through the Perris Valley, this route has expanded to a four-lane divided highway to accommodate the continued economic growth, housing, and industrial developments in the city.

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

During the late nineteenth and early twentieth centuries, a series of storms caused widespread floods in Southern California. As a result, many municipalities began to form flood control districts. In 1908, the San Jacinto Levee District was formed in the San Jacinto Valley; in 1915, the Coachella Valley Storm Water District was formed in the Coachella Valley; and the Valle Vista Levee District was formed in 1932 to control flooding along Bautista Creek east of Hemet (District 2022).

Riverside County was formed in 1893, but a water control district did not exist until after a series of devastating floods in 1938. While storms of the past had been limited in their areas of impact and losses had been primarily to agricultural lands, roads, and bridges, the 1938 floods resulted in the loss of nearly all bridges across the Santa Ana River. Many homes and businesses were lost due to flooding. As a result of these impacts to the region, San Bernardino County created its flood control district in 1939 (District 2022).

Despite the destruction caused by the flood and the outcry of public support for a more adequate program of flood protection, the Riverside County Board of Supervisors did not begin the formation of a flood control district until 1944. They created the "Committee of 15" comprising three representatives appointed by each of the five members of the

County Board of Supervisors. The committee used the creation of the San Bernardino County Flood District as a guideline on how the Riverside District would be organized. On July 7, 1945, barely a year after the formation of the Committee of 15, Assembly Bill (AB) 892 was approved by the California legislature and signed into law by Governor Earl Warren. The Riverside County Flood Control and Water Conservation District was born (District 2022).

The early years of the District, under the directorship of Chief Engineer Max Bookman, were characterized by data-gathering efforts on groundwater, rainfall, and streamflow. The District also instituted groundwater recharge and bank erosion control using apricot tree cuttings placed between wire fences along the San Jacinto River. In 1953, John W. Bryant became the new chief engineer and began the process of constructing a series of six earth-fill dams in the hills south of the City of Riverside to control hazardous floodwaters. Harrison and Woodcrest Dams were completed in 1953, Pigeon Pass Dam was completed in 1957, and the final three were in place by 1960 (District 2022).

“In 1955, Ordinance 460 made the District responsible for ruling on the level of flood protection to be provided on new subdivisions. Riverside County became the first in the state to require 100-year flood protection on new land divisions. Since then, 100-year protection has become standard throughout the state and the nation and was also adopted in the National Flood Insurance Act of 1968” (District 2022).

“The Santa Ana River levees through the City of Riverside became the first federally funded District project in 1956. The levees were designed to protect the city from severe flood damage similar to that experienced in the flood of 1938.” (District 2002) Completed in 1962, the San Jacinto River levee project was designed and constructed with US Army Corps of Engineers funds and consisted of 5 miles of levees along Bautista Creek and the San Jacinto River. In the spring of 1978, Bryant retired after serving 25 years as chief engineer. During his tenure, the staff grew from 14 to 110, and design and construction were completed on nine dams and countless miles of channels, levees, and underground storm drains. The mid-twentieth century saw a period of expansion for the District due to increased demands of residential, industrial, and commercial construction. By 1995, the District inventory of constructed projects included 191 miles of channels, 42 miles of levees, 185 miles of underground storm drains, 16 flood control dams, 24 flood retention basins, 5 debris basins, 289 miles of access roads, and 207 miles of chain link fencing, all on more than 5,000 acres of project right-of-way (District 2022).

MARCH AIR RESERVE BASE

March Air Reserve Base was first established as the United States rushed to build up its military air forces in anticipation of entry into World War I. It originated at the location of a public airstrip known as Alessandro Aviation Field, which, along with surrounding 640 acres, the US War Department leased on March 1, 1918. Its location adjacent to a branch of the AT&SF Railway made it ideal for military use due to ease of access to national transportation networks. Within a few weeks, Alessandro Field was renamed March Field, in honor of First Lieutenant Peyton C. March, who had been killed in an aviation accident at Fort Worth, Texas. The base property was transformed from grain fields to an Army Airfield in a record 60 days. Due to the need to create unobstructed runways, grading and construction likely involved extensive soil disturbance. Construction included 12 hangars, six barracks to house 150 men each, mess halls, a machine shop, post exchange, a hospital, a supply depot, an aero repair building, bachelor officer's quarters, and a residence for the commanding officer. March Field served as a primary flight training facility until March 1919. It then was redesignated as a primary flying school and was purchased by the federal government in 1920. It closed one year later and was placed in caretaker status on April 4, 1923 (March AFB 1994).

The base was reactivated in 1927, and the base facilities were extensively reconstructed and renovated with new permanent buildings between 1928 and 1934. New construction included over 200 buildings and a hard-surface northwest-southeast flight line. The base headquarters were constructed to the northeast of the flight line, including the base commander's residence, eight new hangars, shops and support service buildings, base family housing, barracks, hospital, and other non-technical buildings.

In 1940, in preparation for World War II, the Army purchased approximately 920 additional acres of land to the north, east, and south. A 7,000-foot runway was developed adjacent to the original 1928 runway. Barracks, warehouses, and other facilities were added. New and upgraded utilities were added to support the increased development. In addition, the US Army established Camp Haan on 8,058 discontinuous acres to the west of March Field in November 1940 (March AFB 2022). Camp Haan served as an Army depot, disciplinary barracks, and Italian prisoner-of-war camp.

Congress created the US Air Force as an independent military branch in 1947, and March Field was designated March Air Force Base (AFB) the following year. After World War II, "March reverted to its operational role and became a Tactical Air Command base. The main unit, the famed 1st Fighter Wing, brought the first jet aircraft, the F-80, to the base. This deviation from the traditional bombardment training and operations functions did not long endure. In 1949, March became a part of the relatively new Strategic Air Command (SAC). Headquarters Fifteenth Air Force along with the 33d Communications Squadron moved to March from Colorado Springs in the same year. Also in 1949, the 22d Bombardment Wing moved from Smoky Hill Air Force Base, Kansas to March. Thereafter, these three units remained as dominant features of base activities" (March Airforce Reserve Base 2022). Tactical, maintenance, and support squadrons arrived at March AFB in the early 1960s along with heavy bombers and tanker aircraft, which doubled by the late 1960s.

Additional facilities were constructed during the 1950s and 1960s to accommodate the further expansion of base operations. The base's expansion included both modernization and infill in the existing operation core, as well as expansion to the base's new periphery. Standardized, nationwide designs for SAC bases were utilized for the new construction at March AFB. These were known as "Definitive Designs," intended to create a uniform design across SAC bases. They generally were utilitarian, and pragmatic in design and sensibility. As a result, the infrastructural needs of a SAC base were relatively modest, and primarily related to physical support for aircraft and readiness personnel. In simple terms, the base required hangars for bomber jets, areas to store advanced weapons associated with the bombers, and an array of general operational facilities for personnel support including administration, housing, readiness facilities, and other basic service requirements (Smallwood, George, and Mirro 2016).

With the escalation of the Vietnam War, development at March AFB slowed. The base was largely in caretaker status during 1967 to 1972 when most units at the base were sent to Southeast Asia. But the base became an important air refueling facility during this time. Most units had returned to the base by 1973. The number of personnel on the base decreased by 20 percent during the early 1970s. Also, during the 1970s, outdated buildings throughout the base were either renovated or demolished.

A number of military bases faced realignment and closure due to the 1988 and 1990 Commission recommendations. Upon the closure of Norton AFB in San Bernardino, a number of units were transferred to March AFB, and new facilities were constructed in 1992 and 1993 to accommodate them. March AFB was selected for realignment in 1993, and several units at March AFB were deactivated in 1994. By April 1, 1996, the base property had been downsized and became known as March Air Reserve Base (ARB). Since then, much of the former landholdings have been acquired

by the March Joint Powers Authority, a commission that represents the former base's adjoining jurisdictions in the redevelopment of the base property (Smallwood, George, and Mirro 2016).

PERRIS VALLEY FLOOD CONTROL CHANNEL

March AFB went through a period of expansion during the 1950s, which resulted in several drainage issues. To address those issues, the District constructed the Perris Valley Flood Control Channel (Edwards 1989). In 1989, the channel was described as able to only handle flows associated with minor storm events. The only portions of the channel that were bridged were at the Ramona Expressway and Nuevo Road crossings; all other crossings were dip crossings. The 1989 Master Drainage Plan for the Perris Valley Channel, Zone 4 recommended that the existing bridges at the Ramona Expressway and Nuevo Road be replaced and that additional bridge crossings be installed at all crossings. The channel was also recommended to be fully incised and modified to become an unlined graded earth channel with side slopes and a flat bottom. The District owns the right-of-way and maintains the channel along its entire reach from the San Jacinto River to Mariposa Avenue in the City of Moreno Valley. The PVC's design capacity is planned for 16,000 cubic feet per second north of the Ramona Expressway and 17,300 cubic feet per second south of the Ramona Expressway (Edwards 1989).

4.5 RESEARCH DESIGN

The primary purpose of this report is to identify potential cultural resources that may be impacted by the proposed project. Therefore, the research design and resulting methodology is to research various archives, contact Native American groups, and survey the project to find and document cultural resources.

At the theoretical level, archaeological investigations are based on partial and fragmented remnants of material items from past cultures. Because these cultural items are material, the basic model of study is Cultural Materialism. The premise of Cultural Materialism links materials, as represented by those items in the archaeological record, to the patterned action of human behavior within specific environments (culture) (Harris 1968). Cultural Materialism is a basic premise encompassing all other assumptions.

Basic research questions include:

1. Are cultural resources located in the APE?
 - a. Are the conditions conducive to cultural resources within the APE?
 - b. What is the sensitivity of the APE for cultural resources?
 - c. What is the level of prior disturbance to the APE?
 - d. Are there cultural resources that may be impacted by the project?
 - e. What is the potential for buried cultural resources?
2. Should any cultural resources be considered potential historical resources/historic properties for the purposes of CEQA/NHPA? Are they potentially significant and do they possess integrity?
3. What impacts will the project have on any potential historical resources/historic properties?

Section 5 Cultural Resources Identification

Methods and Results

Methods and results of the EIC records search, map and aerial photograph review, buried site sensitivity analysis, NAHC coordination, historical group consultation, and field surveys are presented below.

5.1 EIC RECORDS SEARCH

On January 18, 2022, EIC staff conducted a records search at the request of Michael Baker International. The EIC, as part of the California Historical Resources Information System, University of California, Riverside, an affiliate of the California Office of Historic Preservation (OHP), is the official state repository of cultural resource records and reports for Riverside County. The records search was conducted for the APE and within 1 mile of the APE. Due to COVID-19 pandemic issues, no maps or GIS data, and only partial report files, were provided by the EIC. As part of the records search, the following federal and California inventories were reviewed:

- California Register
- California Points of Historical Interest
- California Historical Landmarks
- Archaeological Determinations of Eligibility
- National Register
- National Historic Landmarks

Seventy-five cultural resource investigations have been conducted previously within 1 mile of the APE. Five of these studies involved portions of the APE (see Table 2), resulting in approximately 100 percent of the APE having been previously studied in reports RI-03510, RI-08272, RI-10015, RI-10093, RI-10404.

Table 2: Previous Cultural Resource Studies within One Mile of the APE

Report No.	Author(s)	Date	Report Title
RI-02084	Hammond, S. R.	1987	Negative Archaeological Survey Report: Route 215, P.M. 27.4/33.7
RI-02171	McCarthy, Daniel F.	1987	Cultural Resources Inventory for the City of Moreno Valley, Riverside County, California
RI-02450	Parr, Robert E.	1989	An Archaeological Assessment of Assessor's Parcel 314-100-001 Located Near Val Verde in Western Riverside County, California

Report No.	Author(s)	Date	Report Title
RI-024053	Parr, Robert E.	1989	An Archaeological Assessment of Assessor's Parcel 314-040-006 Located Near Val Verde in Western Riverside County, California
RI-02454	Parr, Robert E.	1989	An Archaeological Assessment of Assessor's Parcel 314-040-020-023 Located Near Val Verde in Western Riverside County, California
RI-02455	Parr, Robert E.	1989	An Archaeological Assessment of Assessor's Parcel 314-110-001 Located Near Val Verde in Western Riverside County, California
RI-02456	Parr, Robert E.	1989	An Archaeological Assessment of Assessor's Parcel 314-120-009 Located Near Val Verde in Western Riverside County, California
RI-02457	Parr, Robert E.	1989	An Archaeological Assessment of Assessor's Parcel 314-100-002 Located Near Val Verde in Western Riverside County, California
RI-03189	Peak and Associates and Brian F. Mooney Associates	1990	Cultural Resources Assessment of AT&T's Proposed San Bernardino to San Diego Fiber Optic Cable, San Bernardino, Riverside, and San Diego Counties, California
RI-03243	Tetra Tech, Inc	1990	Cultural Resources Investigations for a Proposed Realignment of Facilities From Los Angeles Air Force Base to March Air Force Base, Riverside County, California
RI-03262	Macko, Michael E.	1991	An Archaeological Assessment of the Proposed Oak Park Commerce Center, Parcel Map 25101, ASA #18, with Related Plot Plants 12468 and 12470, Riverside County, California
RI-03510*	McDonald, Meg and Bard Giacomini	1996	An Intensive Survey of Approximately 2,500 Acres of March Air Force Base, Riverside County, California
RI-03511	Pritchard Parker, et al.	1997	Archaeological Testing at Six Sites on March Air Force Base, Riverside County, California

Report No.	Author(s)	Date	Report Title
RI-03583	Drover, Christopher	1992	An Archaeological Assessment of “A” Street North and South Improvement and Proposed EMWD Pump Station Site, Riverside County Transportation Department, North of Perris, California
RI-03692	Bupp, Susan L.	1993	Letter Report: Cultural Resources Survey for the Environmental Assessment for the Construction of a Water Pipeline at March Air Force Base, California, Department of Veterans Affairs
RI-03797	Keller, Jean	1994	A Phase 1 Cultural Resources Assessment of Riverside Grand Prix, 245.57 Acres of Land Near Perris, Riverside County, California
RI-04154	Mason, Roger, Phillipe Lapin, and Wayne H. Bonner	1998	Cultural Resources Records Search and Survey for a Pacific Bell Mobile Telecommunications Facility: CM 126-11 Near Perris, Riverside County, California
RI-04211	Love, Bruce and Bai “Tom” Tang	1999	Identification and Evaluation of Historic Properties Perris Valley Industrial Corridor Infrastructure Project near the City of Perris, Riverside County, California
RI-04299	Cotterman, Cary D	1999	Historic Structure Evaluation of Building 3002, March Air Reserve Base, Riverside County, California
RI-04766	Hogan, Michael, Bai Tang, and Josh Smallwood	2004	Historical/Archaeological Resources Survey Report, Specific Plan No. 341/EIR 466, near the City of Perris, Riverside County, California
RI-04767	Hogan, Michael, Bai Tang, Josh Smallwood, and Dicken Everson	2004	Archaeological Testing and Site Evaluations, Specific Plan No. 341/466, near the City of Perris, Riverside County, California
RI-04963	Hoover, Anna M., Kristie R. Blevins, and Hugh Wagner	2005	A Phase I Archaeological and Paleontological Survey Report on the Oleander Property, APNs 295-310-011, -048 & -052, 69.41-Acres, County of Riverside, California
RI-05408	Love, Bruce, Bai Tom Tang, and Melissa Hernandez	2005	Identification and Evaluation of Historic Properties, March AFB Wastewater Treatment Plant Expansion and Recycled Water Pipeline, near March Air Force Base, Riverside County

Report No.	Author(s)	Date	Report Title
RI-05548	Cotterman, Cary D., Evelyn N. Chandler, and Roger D. Mason	2005	Cultural Resources Survey of a 1-Acre Parcel in Perris, Riverside County, CA (APN 314-110-030)
RI-05550	Earth Tech	1995	Phase I Archaeological Survey of the Gregory Site, March Air Force Base, Riverside County, CA
RI-05713	Billat, Lorna	2005	Letter Report: Historic Consultation for Nextel of California (Nextel) Wireless Telecommunications Service (WTS) Facility Project Chelsea/ CA-5398A, in Perris, Riverside County, California
RI-05800	Love, Bruce, Bai "Tom" Tang, Daniel Ballester, and Mary Hillis Shockley	2001	Historical/Archaeological Resources Survey Report, March ARB Wastewater Treatment Plant Expansion, near March Air Reserve Base, Riverside County, California
RI-05926	Love, Bruce, Bai Tang, Daniel Ballester, and Mariam Dahdul	2002	Historical/Archaeological Resources Survey Report, Cajalco Sub-Area Sewer Facilities Improvement Project, near the Cities of Riverside and Perris, Riverside County, CA
RI-06579	Clarence Bodmer, Robert Porter, and Laura H. Shaker	2006	Historical/Archaeological Resources Survey Report, All-American Asphalt Plant, Assessor's Parcel No. 30-020-026, in the City of Perris, Riverside County, California
RI-06660	Tang, Bai "Tom", Michael Hogan, Clarence Bodmer, Thomas Meltzer, and Laura H. Shaker	2006	Historical/Archaeological Resources Survey Report, Nandina Distribution 1 and 2, City of Moreno Valley, Riverside County, California
RI-06914	Harrison, Jim	2003	Letter Report: Biological and Cultural Resource Due Diligence Regarding the 500-Acre Watson Land Company-Perris Property in Riverside County, California
RI-07007	White, Robert S. and Laura S. White	2006	A Cultural Resources Assessment of a 5.06-acre Parcel Located at 24365 Nandina Avenue, City of Moreno Valley, Riverside County

Report No.	Author(s)	Date	Report Title
RI-07087	Moreno, Adrian Sanchez	2007	Archaeological Survey Report for Southern California Edison Company, Pulliam Commercial Building Project, on the Tava 12kV Circuit, Riverside County, California
RI-07396	Sanka, Jennifer M.	2007	Phase I Cultural Resources Assessment and Paleontological Records Review: Perris Boulevard Project in Moreno Valley, Riverside County, California
RI-07537	Sanka, Jennifer M. and Marnie Aislin-Kay	2007	Phase I Cultural Assessment and Paleontological Records Review, Oleander Avenue Project, Perris, Riverside County, California
RI-07538	Tang, Bai "Tom", Michael Hogan, Clarence Bodmer, Josh Smallwood, and Melissa Hernandez	2007	Cultural Resources Technical Report, North Perris Industrial Specific Plan, City of Perris, Riverside County, California
RI-07568	McGinnis, Patrick	2007	Archaeological Survey Report of the I215/Van Buren Boulevard Interchange Project, Riverside County, CA
RI-07613	Patterson, J. and Tsunoda, K.	2008	Archaeological Survey Report for Southern California Edison Company O&M – 2008 B1355 Annual Capacitator Project for Pole #2037338E on the Chaney 12kV Circuit Riverside County, California (WO#6077-5597, AI#7-5504)
RI-07620	Clifford, J. and Smith. B	2005	A Cultural Resources Survey for the IDI Perris Project, County of Riverside: APNs 302-080-011 through 302-080-017, 302-090-016, 302-090-017
RI-07828	Encarnacion, Dierdre and Daniel Ballester	2008	Phase I Archaeological Assessment: Assessor's Parcel Nos. 295-310-012 to -015, Sares-Regis Project, Mead Valley Area, Riverside County, California
RI-08031	Allred, Carla	2009	Letter Report: Proposed Cellular Tower Project(s) in Riverside County, Site Number(s)/Name(s): LA-3411A/EMWD Rancho Drive TCNS# 49589
RI-08166	Hogan, Michael and Bai Tang	2008	Archaeological Testing and Evaluation Program Tentative Parcel Map No. 36034

Report No.	Author(s)	Date	Report Title
RI-08231	Schultze, Carol A. and John R. Cook	1996	A Cultural Resource Survey of Landfill Remediation Area IRP-24Y Riverside County, California
RI-08272*	William Manley Consulting and Earth Tech	1995	Historic Building Inventory and Evaluation, March Air Force Base, Riverside County, California
RI-08433	Pollack, Katherine H.	2007	Archaeological Assessment of Southern Half of Hammock 33kV Overhead DSP Project, March Air Reserve Base, Riverside County, California.
RI-08771	Tang, Bai "Tom"	2010	Preliminary Historical/Archaeological Resource Study Southern California Regional Rail Authority (SCRRA) Perris Valley Line Positive Train Control (PTC) Project In and near the Cities of Riverside, Perris, and Menifee Riverside County, California CRM TECH Contract No. 2444
RI-08791	Tang, Bai "Tom", Michael Hogan, Deirdre Encarnacion, Daniel Ballester, and Nina Gallardo	2012	Historical/Archaeological Resources Survey Report; Assessor's Parcel Nos. 302-030-003, -006, and -011
RI-08792	Orfila, Rebecca S.	2012	Letter Report: Cultural Resource Records Search Results for the SCE Co. Perris Rule 20-B Underground Project
RI-08860	Tang, Bai "Tom" and Daniel Ballester	2012	Addendum to Historical/Archaeological/Paleontological Resources Survey JMM Trailer Storage Facility Project, City of Perris, Riverside County, California
RI-08986	George, Joan and Vanessa Mirro	2013	Cultural Resources Construction Monitoring: Knox Logistics Center Project, Riverside County
RI-09054	Keller, Jean A.	2013	A Phase I Cultural Resources Assessment of Tentative Parcel Map 36512, APN 314-170-005, 013 thru 016; 314-140-056; 314-180-001, 007, 009,010, 011,013,014
RI-09277	Ballester, Daniel	2015	Archaeological/Paleontological Monitoring Program ORE Industrial; Perris Valley Logistics; Tentative Parcel Map No. 36010 Project in the City of Perris, Riverside County, California CRM TECH Contract No. 2783

Report No.	Author(s)	Date	Report Title
RI-09422	Smith, Brian F.	2015	Phase I Cultural Resources Survey for the Moval Burger Assemblage Project
RI-09464	McKenna, Jeanette A.	2016	A Phase I Cultural Resources Survey for the Proposed Commercial Development (Approximately 20 Acres) in the City of Moreno Valley, Riverside County, California
RI-09528	Lenich, Mary M. and Brian F. Smith	2015	Phase I Cultural Resources Survey for the Moreno Valley Logistics Center Project City of Moreno Valley, County of Riverside
RI-09546	Sanka, Jennifer M., William R. Gillean, and Leslie Nay Irish	2016	Phase I Cultural Resources Assessment for the March Plaza Project +- 8.40 Acres in the City of Perris, Riverside County, California
RI-09643	Roland, Jennifer, and Susan M. Hector	2015	Phase I Investigation for the Verizon Wireless Harker Tower Installation Project, Moreno Valley, Riverside County, California
RI-09708	Jensen, Margaret B.	2016	Letter Report: Section 106 Consultation for the Riverside Columbarium 5,000 Niches Project at the Riverside National Cemetery, Riverside, California
RI-09781	Smith, Brian F., Tracy A. Stropes, and Jennifer R. Kraft	2016	An Updated Phase I Cultural Resource Assessment for the Nandina Business Center Project
RI-09848	Smith, Brian F.	2016	Phase I Cultural Resources Survey of APNs 316-210-014 Through -018, City of Moreno Valley, County of Riverside
RI-09903	Corcoran, Sabrina R. and Brian F. Smith	2016	Phase I Cultural Resources survey of the San Michele Business Center Project, City of Moreno Valley, County of Riverside
RI-09963	Gilbert, Rebecca H.	2017	Confidential--Archaeological Survey Report for the Proposed Expansion of the Riverside National Cemetery Project, Located in Riverside County, California

Report No.	Author(s)	Date	Report Title
RI-10015*	Smallwood, Josh, Tiffany Clark, and Roberta Thomas	2016	Cultural Resource Assessment of the Lateral B-5 to Oleander Channel Project, City of Perris, Riverside County, California.
RI-10016	Jew, Nicholas P. and Dennis McDougall	2017	Phase I Cultural Resource Assessment for the Perris Distribution Center Project, City of Perris, Riverside County, California
RI-10093*	Unknown	1996	Environmental Impact Report for the March Air Force Base Redevelopment Project
RI-10199	Fulton, Phil	2014	Discovery and Monitoring Plan for the Mid County Parkway
RI-10277	Smith, Brian F.	2017	Cultural Resources Monitoring Report for the First Nandina Logistics Center Project, City of Moreno Valley, Riverside County, California
RI-10339	Smallwood, Josh, Joan George, and Michael Mirro	2016	Cultural Resources Assessment of March Inland Airport Parcel D1 Project, Riverside County, California
RI-10345	Castells, Justin and Joan George	2018	Cultural Resource Assessment for the Markham/Patterson Projection, City of Perris, Riverside County, California
RI-10378	Smith, Brian F.	2018	Cultural Resources Monitoring Report for the Nandina Business Center Project, Unincorporated Riverside County, California
RI-10393	Sturdwick, Ivan	2018	Results of Archaeological Monitoring for the 68.48 Acre Optimus Logistics Center Project at I-215 and Romona Expressway in Perris, Riverside County, California (Tentative Parcel Map 35682)
RI-10404*	Smallwood, Josh, Joan George, and Michael Mirro	2016	Cultural Resource Assessment of March Inland Airport Parcel D2 Project, Riverside County, California
RI-10759	Miller, Andrew D.	2019	Phase I Cultural Resource Assessment for the Duke Perry & Barret Project, City of Perris, Riverside County, California

Report No.	Author(s)	Date	Report Title
RI-10764	Smith, Brian F.	2019	Cultural Resources Monitoring Report for the Duke Warehouse Project, PM No. 37187, City of Perris, Riverside County, California
RI-10775	Smith, Brian F., Jennifer R. Kraft, and Mary M. Lenich	2015	A Phase I and II Cultural Resources Assessment for the Decker Parcels I Project Planning Case No 36950, Riverside County, California

*Includes portions of the APE

As a result of these studies, 49 cultural resources have been identified within 1 mile of the APE: 26 prehistoric and 23 historic-period sites (see Table 3). Three of the 49 previously recorded cultural resources are recorded within the APE. These are 33-024867 (a segment of the historic Lateral B – Oleander Channel), 33-024852 (a historic flood control channel), and 33-024868 (a segment of Webster Avenue). These resources are discussed further below.

Table 3: Previously Recorded Cultural Resources within One Mile of the APE

Primary	Trinomial	Description
Prehistoric Archaeological Sites		
P-33-003501	CA-RIV-3501	Two outcrops with two prehistoric milling slicks
P-33-005368	CA-RIV-5368	One outcrop with four prehistoric milling slicks
P-33-005369	CA-RIV-5369	One outcrop with three prehistoric milling slicks
P-33-005370	CA-RIV-5370	One outcrop with one prehistoric milling slick.
P-33-005371	CA-RIV-5371	One outcrop with one prehistoric bedrock mortar and one prehistoric milling slick
P-33-005372	CA-RIV-5372	One outcrop with one prehistoric milling slick
P-33-005386	CA-RIV-5386	Twelve outcrops with numerous prehistoric milling slicks
P-33-005389	CA-RIV-5389	One outcrop with one prehistoric milling slick
P-33-005390	CA-RIV-5390	Six outcrops with numerous prehistoric milling slicks
P-33-005391	CA-RIV-5391	One outcrop with one prehistoric milling slick

Primary	Trinomial	Description
P-33-005392	CA-RIV-5392	Two outcrops with two prehistoric milling slicks
P-33-005393	CA-RIV-5393	Two outcrops with three prehistoric milling slicks
P-33-005394	CA-RIV-5394	One outcrop with one prehistoric milling slick
P-33-007828	CA-RIV-5824	Two outcrops with 10 prehistoric milling slicks
P-33-007829	CA-RIV-5825	One outcrop with one prehistoric milling slick
P-33-011075	CA-RIV-6663	One outcrop with two prehistoric milling slicks
P-33-011076	CA-RIV-6664	One outcrop with one prehistoric milling slick
P-33-013446	CA-RIV-7465	One outcrop with one prehistoric milling slick
P-33-013447	CA-RIV-7466	Two outcrops with five prehistoric milling slicks
P-33-013449	CA-RIV-7468	Two outcrops with five prehistoric milling slicks
P-33-013450	CA-RIV-7469	Two outcrops with five prehistoric milling slicks
P-33-017075	CA-RIV-8884	One outcrop with seven prehistoric milling slicks
P-33-017076	CA-RIV-8885	One outcrop with one prehistoric milling slick
P-33-017077	CA-RIV-8886	One outcrop with one prehistoric milling slick
P-33-013788	CA-RIV-7549	Four outcrops with four prehistoric milling slicks; two slicks destroyed, and one slick moved during construction
P-33-028891	CA-RIV-12941	Four outcrops with eight prehistoric milling slicks
Isolated Historic Artifacts		
P-33-005562	-	Two amethyst glass shards
Historic Archaeological Sites		
P-33-007830	CA-RIV-5826H	Refuse scatter
P-33-008700	-	Historic water conveyance system
P-33-008701	-	Historic water conveyance system

Primary	Trinomial	Description
P-33-008702	-	Historic structure pad
P-33-015853	CA-RIV-8222	Ten historic structures, including structure pads and remains of an agricultural irrigation system
P-33-015854	-	Concrete standpipe and remains of a well
P-33-016239	CA-RIV-8390	Concrete slab foundation with a wooden frame pumphouse
P-33-020334	CA-RIV-10260	Irrigation features
P-33-021503	CA-RIV-11291	Grain mill facility
P-33-024092	-	Irrigation system components
P-33-024851	CA-RIV-12871	Two concrete slab building foundations and two asphalt parking areas
P-33-024868*		Segment of Webster Avenue
P-33-028172		1930s refuse burn pit deposit
P-33-028588	CA-RIV-12877	Two historic wooden utility poles
P-33-028589	CA-RIV-12878	Two historic vertical steel pipes
Built Environment Resources		
P-33-024850	CA-RIV-12870	Electrical conduit outlets, concrete pads, concrete vaults, and concrete anchor piers
P-33-024852*		Historic flood control channel
P-33-024853		Historic flood control channel
P-33-024854		Historic flood control channel
P-33-024867*		Historic Lateral B-Oleander Channel segment
P-33-007649	-	Camp Haan Barracks
P-33-007674	-	Val Verde Elementary School

*Resources within the APE

P-33-024852 (Segment of Flood Control Channel) – This resource is a segment of a flood control channel. The recorded segment measures approximately 4,270 feet in length. It is 50 feet wide across the top, 20 feet wide across the flat bottom, and is approximately 10 feet deep. This segment features hard-earth, sloped embankments along most of its length. Boulder rip-rap and concrete lining are found at the northwest end and at two locations where natural drainages converge with the flood control channel. This flood control structure appears in a 1966 aerial photograph. The channel continues in a southeasterly direction and drains into the Perris Valley Storm Drain Lateral B at the intersection of Oleander Avenue (Harley Knox Boulevard) and Heacock Street. This resource was evaluated and recommended ineligible for listing in the National Register or California Register. On the California Department of Parks and Recreation (DPR) 523 on file at the EIC, the resource is assigned the status code 6Z (Smallwood et al. 2016a). It is not listed in the Built Environment Resource Directory (BERD). It is not a historical resource or historic property as defined by CEQA or Section 106 of the NHPA.

P-33-024867 (Lateral B-Oleander Channel) – This resource is a segment of a flood control channel known as the Lateral B – Oleander Channel. It was constructed in the 1950s as part of the Perris Valley Storm Drain to alleviate flooding across the relatively flat landscape (Smallwood et al. 2016). The Lateral B – Oleander Channel drains southeast towards the San Jacinto River. This segment is bisected by Webster Avenue (P-33-024868), which is carried over the channel by a concrete culvert (Smallwood et al. 2016a). The segment of the channel features a combination of hard-earth sloped embankments, stone rip-rap, and concrete-lined slopes. This segment of the Lateral B – Oleander Channel measures 290 feet long, between 40 and 90 feet wide at the top, between 24 and 40 feet wide across the flat bottom, and 10 feet deep. This resource has been formally evaluated and recommended ineligible for listing in the National Register and California Register. On the DPR 523 on file at the EIC, the resource is assigned the status code 6Z (Smallwood et al. 2016b). It is listed in the BERD with a 6Y status code – determined not eligible for the National Register. It is not a historical resource or historic property as defined by CEQA or Section 106 of the NHPA.

P-33-024868 (Segment of Webster Avenue) – This resource is a segment of road comprising multiple construction types including an unpaved, graded dirt road south of Harley Knox Boulevard, and a dirt and partially gravel road north of Harley Knox Boulevard (Smallwood et al. 2016c). This segment of Webster Avenue measures approximately 30 feet wide. It has existed since the 1890s and appears never to have been paved. Despite its age, evaluation of the resource concluded it lacks significance. This resource has been formally evaluated and recommended ineligible for listing in the National Register and California Register. On the DPR 523 on file at the EIC, the resource is assigned the status code 6Z (Smallwood et al. 2016c). It is listed in the BERD with a 6Y status code – determined not eligible for the National Register. It is not a historical resource or historic property as defined by CEQA or Section 106 of the NHPA.

5.2 HISTORIC MAP AND PHOTO ANALYSIS

Maps of the APE (1901 through present) were examined for details that would aid in reconstructing the history of the APE. Maps were obtained from the United States Geologic Survey (USGS) Topo View website and a review of a report detailing aerial photos (EDR 2021).

The 1901 USGS maps demonstrate no development within the APE, but Webster Avenue is depicted as a local dirt road bounded by undeveloped land (USGS 1901a, 1901b). Utility Building #1300 was constructed in approximately the late 1950s on the west side of the enlarged air force base runway. Aerial photographs dating from the late 1930s and a topographic map for the 1940s demonstrate the APE and surrounding area had previously consisted of various

rectangular and square agricultural fields, dotted with farmhouses (USGS 1942a, 1942b; UCSB 1938). Expansion of the runway to the southeast led to the redevelopment of some of this agricultural land by the early 1950s (UCSB 1953; USGS 1953a, 1953b). Clearing and grading for the runway resulted in the creation of the triangular property on which Utility Building #1300 is located. By the mid-1970s, additional agricultural land had been lost to development to the south and southwest of Utility Building #1300, a trend which continued during the 1980s and 1990s to the west and northwest (EDR 2021).

PVC first appears on USGS maps in 1953 (USGS 1953a, 1953b) and demonstrates no apparent changes to the alignment in subsequent editions. While the channel appears to follow the original alignment from its construction, the channel also appears to have undergone changes over time. A review of historic aerials depicts periods of alterations to the channel between 1962 and 2012, including improved crossings, adjustments to the width of the channel, the construction of additional drainages, and modifications over time due to regular maintenance (NETR 2022; UCSB 1962).

5.3 SACRED LANDS FILE SEARCH

On January 13, 2022, Michael Baker International sent a letter describing the project to the NAHC in Sacramento and asking the commission to review its Sacred Lands File for any Native American cultural resources that might be affected by the project. Also requested were the names of Native Americans who might have information or concerns about the APE. The NAHC responded on March 3, 2022, informing Michael Baker International that a search of the Sacred Lands File provided positive results and to contact the Pechanga Band of Indians for more information. The NAHC also provided a list of Native American contacts.

No Native American consultation was completed by Michael Baker International. The Riverside County Flood Control and Water Conservation District is conducting consultation. The NAHC contact list and Sacred Lands File search results are in Appendix B.

5.4 LOCAL HISTORICAL GROUP CONSULTATION

On February 24, 2022, Michael Baker International sent a letter describing the project, with maps depicting the APE, to the Riverside County Heritage Association requesting any information or concerns regarding historic properties or cultural resources in the APE (Appendix C). On March 9, 2022, a follow-up message was sent to the organization via the “Contact us” form on its website. No response has been received to date.

5.5 BURIED SITE SENSITIVITY SUMMARY

Archaeological site sensitivity is considered low based upon a lack of previously recorded archaeological sites within the APE, and the previous disturbance in the APE. Previously recorded prehistoric sites within 1 mile of the APE seem largely dependent upon the presence of bedrock exposures, which were a critical resource for food processing. The APE has no exposures of bedrock.

The project is located within a highly developed military air base. Previous ground disturbances include the construction of the existing runways and AFB facilities. The APE was likely entirely flattened during the construction of the facility

for plane approach and departure safety. This inference is supported by the gradual flattening and normalization of the topography after the construction of the base according to the historic map analysis. The earthmoving during construction would likely have removed the contextual relationships for considerations of the integrity of any finds. Therefore, the APE has low sensitivity for significant or potentially significant prehistoric or historic-period archaeological sites because of historic and modern development.

5.6 SURVEY METHODS AND RESULTS

5.6.1 SURVEY METHODS

Michael Baker International archaeologists Kholood Abdo, MA, RPA, and Marcel Young, BA conducted an intensive pedestrian survey of the APE on January 19, 2022. Transect spacing was 10-15 meters apart throughout.

The APE is artificially level, with a gradual slope to the southeast APE (see Photos 1 and 2) which appears to represent a graded landscape for the construction of the runways on MARB. Segments of drainage channels cross the area in a southeasterly direction, and in some cases provided cut embankments with exposed soil stratigraphy. These cuts were inspected for evidence of cultural horizons, while the ground surface across the APE was inspected for prehistoric and historic-period archaeological remains and built environment features. At the time of the survey, the majority of the APE was covered with dense vegetation including non-native annual grasses, which resulted in an average of 5 percent surface visibility. Disturbances within the APE include historic and modern developments of the area for use as a runway, construction of access roads, and flood control structures. Natural disturbances include rodent burrows.



Photo 1 Overview of the APE (facing northwest)



Photo 2 Overview of the APE (facing southeast)

As part of the pedestrian survey, built environment resources in the APE were visually inspected, and their construction, features, alterations, overall condition, and integrity were documented with field notes and digital photographs. The resources were recorded on DPR 523 series forms.

5.6.2 SURVEY RESULTS

As a result of the records search and field survey, four built environment resources were identified within the APE. Two of the built environment resources are segments of previously recorded flood control structures associated with the PVC (P-33-024852 and P-33-024867), one is a previously recorded road segment (P-33-024868), and one is a new built environment resource identified during the survey as a MARB utility building (Utility Building #1300). No additional prehistoric or historical archeological resources were encountered during the survey. These resources are described below and DPR 523 series forms for each of these resources are included in Appendix D.

P-33-024852 (SEGMENT OF FLOOD CONTROL CHANNEL)

Resource P-33-024852 consists of a segment of an unnamed flood control channel located on MARB (see Photo 3). Located slightly north of the PODS Moving and Storage property at 1330 Nandina Avenue, the channel segment recorded as part of this effort is approximately 825 feet long, and ranges from approximately 35 to 190 feet wide at the top, and approximately 10 to 25 feet wide at the bottom. Beyond the subject segment, the channel continues to the northwest toward the March Field Air Museum, and southeast toward Oleander Avenue. Construction materials are varied—the majority of the channel has an earthen bottom. Portions of the channel are lined with cut stone slab set in mortar or concrete, while other portions are lined with solid concrete in cracked, deteriorated condition. The subject segment has very low-sloped sides, which is perhaps a reason why the stone slab/concrete lining extends farther over

the embankments in this area. Additionally, a northwest-southeast trending road crosses over this segment of the channel.



Photo 3 Overview of P-33-024852 (facing east)

An approximately 4,270-foot-long segment of the flood control channel was previously recorded by Applied EarthWorks, Inc. in 2016 for the March Inland Port Authority Project. Located approximately 730 feet northwest of the subject segment, the previously recorded segment measures approximately 50 feet wide across the top, and approximately 20 feet wide across the flat bottom. Its construction includes concrete lining and boulder rip-rap, with hard-earth, sloped embankments along most of its length (George, Smallwood, and Mirro 2016).

The flood control channel was likely constructed about 1955 when the Lateral B channel was constructed. The channel drains into the Perris Valley Storm Drain Lateral B at the intersection of Oleander Avenue and Heacock Street. The Perris Valley Storm Drain was constructed in the 1950s to help alleviate flooding across the relatively level plain of the Perris Valley. The system drains toward the southeast and eventually empties into the San Jacinto River (George, Smallwood, and Mirro 2016).

The flood control channel was evaluated in 2016 as ineligible for listing in the National Register and California Register because it did not meet any of the criteria for historical significance. The approximately 825-foot-long segment of the flood control channel recorded as part of the current effort is similar to the previously recorded segment in that the majority of the channel has an earthen bottom with areas of concrete or stone slab lining; however, the stone slab/concrete lining in the subject segment covers more of the embankment areas. Since the channel was last evaluated, there is no new information to suggest it is eligible for listing in the National Register or California Register. Michael Baker International agrees with the previous ineligibility finding and recommends that the segment of the

channel that is being recorded as part of the current effort is also ineligible for the National Register and California Register.

P-33-024867 (LATERAL B – OLEANDER CHANNEL)

The resource consists of a segment of the Lateral B – Oleander Channel located on MARB (see Photo 4). Located west of the intersection of Webster Avenue/Heacock Street/East Oleander Avenue, the channel segment recorded as part of this effort is approximately 570 feet long, approximately 20 feet wide at the bottom, and approximately 35 feet wide at the top. Beyond the subject segment, the channel continues to the northwest near the edge of the MARB property, and east of Webster Avenue/Heacock Street, running between Oleander Avenue and Harley Knox Boulevard. Most of the subject segment of Lateral B – Oleander Channel is lined at the bottom and side slopes with cut stone slab set in mortar or concrete. The channel segment has earthen embankments. Adjacent to and west of Webster Avenue/Heacock Street, the channel's bottom and side slopes are lined with solid concrete. In this area, there is also an approximately 5-foot-high concrete gate valve structure and an approximately 7-foot-high metal gate, which are part of the flood control system. A small, square, wooden structure is located near the concrete gate valve structure on the north embankment. The shed-like structure rests on a concrete foundation, has vertical wood siding, and has a shed roof clad with rolled roofing material. A hinged swinging door with a metal handle is located on the north side of the structure, and a cylindrical metal pipe runs from the south side of the structure to the concrete gate valve within the channel.



Photo 4 Overview of P-33-024867 (facing southwest)

A segment of the Lateral B – Oleander Channel was previously evaluated by Applied EarthWorks in 2016 as part of the Lateral B-5 to Oleander Channel Project (Smallwood, Clark, and Thomas 2016). The approximately 290-foot-long segment evaluated in 2016 included portions of the channel to the east and west of Webster Avenue/Heacock Street.

At the time, the portion of the channel evaluated west of Webster Avenue/Heacock Street measured approximately 40 feet wide across at the top and 24 feet wide across the flat bottom. Construction materials (for the entire segment recorded) were noted as a combination of hard-earth sloped embankments, stone rip-rap, and concrete-lined slopes. Also noted was the concrete culvert carrying Webster Avenue/Heacock Street over the channel (Smallwood, Clark, and Thomas 2016).

The Lateral B – Oleander Channel was constructed in the 1950s as part of a larger, more extensive Perris Valley Storm Drain system to help alleviate flooding across the relatively level plain of Perris Valley. Draining to the southeast, the system eventually empties into the San Jacinto River. The Riverside County Flood Control and Water Conservation District constructed the subject segment of the channel in 1955 to meet the Heacock Street Channel to drain the southern and eastern portions of March AFB. The US Army Corps of Engineers constructed a triple box concrete culvert to carry Webster Avenue/Heacock Street over the channel. A gate structure was built within the channel on the west side of Webster Avenue/Heacock Street during the 1990s (Smallwood, Clark, and Thomas 2016). Based on this information, and aerial photos, it is likely the small structure on the north embankment was built around this time (UCSB 1980). In 2004, substantial improvements were made to the channel at this location, including reconstruction of the culvert, concrete work, rip-rap, slope adjustments, and improved access roads.

Lateral B – Oleander Channel was evaluated in 2016, assigned California Historical Resource Status Code 6Z, and recommended ineligible for listing in the National Register and California Register because it did not meet any of the criteria for historical significance. The approximately 570-foot-long segment of Lateral B – Oleander Channel evaluated as part of the current effort overlaps by approximately 70 feet with the segment recorded in 2016. Michael Baker International finds the previously recorded channel segment appears largely as described in 2016. The additional approximately 500 feet of channel to the west is similar in construction and appearance, as described above. Since the channel was last evaluated, there is no new information to suggest it is eligible for listing in the National Register of California Register. Michael Baker International agrees with the previous ineligibility finding and recommends that the segment of the channel being recorded as part of the current effort is also ineligible for the National Register and California Register.

P-33-024868 (SEGMENT OF WEBSTER AVENUE)

This previously evaluated segment of Webster Avenue is located immediately adjacent to the south end of the APE (see Photo 5). It is an unpaved, north-south trending road that begins at the Lateral B – Oleander Channel and spans south, crossing Harley Knox Boulevard. The road is paved and named Heacock Street on the north side of the channel. The segment of Webster Avenue was observed from MARB property fence at Heacock Street and appears to be in the same condition as it was originally evaluated in 2016 (Smallwood 2016c).

An approximately 745-foot-long segment of Webster Avenue was previously evaluated in 2016 by Applied EarthWorks for the Lateral B-5 to Oleander Channel Project (Smallwood, Clark, and Thomas 2016). At the time, the road was described as consisting of various types of construction, including an approximately 30-foot-wide unimproved, graded dirt road south of Harley Knox Boulevard, and an approximately 30-foot-wide, partial dirt and partial gravel road north of Harley Knox Boulevard. It was noted the road ended at Oleander Channel where the road alignment becomes the southern end of Heacock Street. No historic-period signage, guardrails, or other roadway features were observed.

Webster Avenue has existed as a local road since at least the 1890s and has remained unpaved. Smallwood, Clark and Thomas (2016) assigned the road the California Register Status Code 6Z, meaning, “Found ineligible for NR [National Register of Historic Places], CR [California Register of Historical Resources] or local designation through survey evaluation.”



Photo 5 Overview of P-33-024868 (facing southeast)

As part of the current effort, Michael Baker International finds the subject segment of Webster Avenue, which Applied EarthWorks previously evaluated, appears largely as described in 2016, and the previous evaluation finding remains.

UTILITY BUILDING #1300

Utility Building #1300 is located on the west side of the MARB runway, near the intersection of Nandina and Patterson Avenues. It is a small, one-story building with a rectangular plan and a moderately pitched gabled roof covered in barrel tile. It has overhanging eaves and exposed wooden rafter tails. The building is utilitarian and does not embody any particular architectural style. The exterior walls appear to be concrete painted with red and white squares, typical of the checked pattern used for obstacles near runways or flight paths. The north elevation contains one large and one small horizontally slatted vent, and a sign mounted on the wall identifying the building as number “1300.” A large and a small window on the west elevation have been enclosed with wooden boards. A single, solid door on the east elevation is accessed via one concrete step. Similar to the north elevation, the south elevation contains a large and a small horizontally slatted vent. The larger vent opening has been altered, and wooden boards surround the vent on the top, left, and right. Chain-link fencing encloses an area on the west side of the building containing mechanical equipment. A concrete slab supporting a fuel tank/reservoir is located slightly south of the building. The reservoir is labeled “Combustible, Diesel Fuel/DL-2,” “12,000 lbs.,” and “500 Gallon.” Two steps flanked by metal pole railings are located on the east side of the structure, and a row of bollards are located to the south (see Photo 6).

Utility Building #1300 was constructed in approximately the late 1950s on the west side of the enlarged runway. Aerial photographs demonstrate the area had previously consisted of various rectangular and square agricultural fields through the early 1950s. Expansion of the runway to the southeast led to redevelopment of some of this agricultural land. Clearing and grading for the runway resulted in the creation of the triangular property on which Building #1300 is located (UCSB 1962; EDR 2021; see Photo 7). Background research conducted by Michael Baker International did not identify the architect or contractor. However, the building was constructed during a period in which standardized, nationwide designs were implemented at SAC bases.



Photo 6 West and south elevations of Utility Building #1300 (facing north)

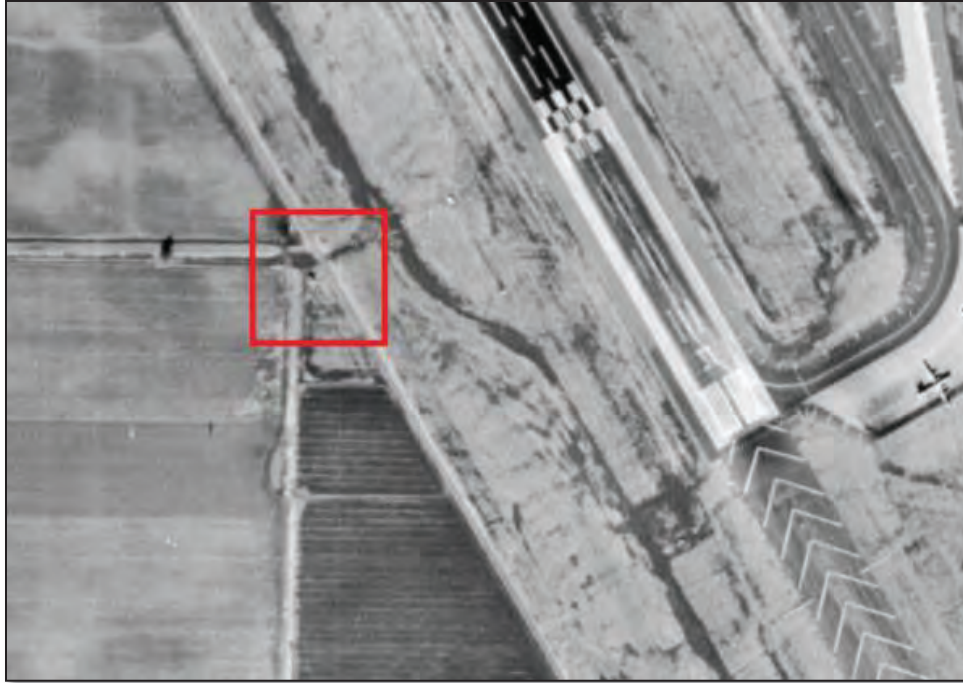


Photo 7 1962 aerial photograph depicting Utility Building #1300 (UCSB 1962)

While a considerable amount of new construction during the 1950s and 1960s occurred adjacent to the flight line and in the historic core of the base, a number of projects took place in the western area of the base, on the former lands of Camp Haan. The base's expansion included both modernization and infill in the existing operation core, as well as to the base's new periphery. Standardized, nationwide designs for SAC bases were utilized for the new construction at March AFB. These were known as "Definitive Designs," intended to create a uniform design across SAC bases. They generally were utilitarian, and pragmatic in design and sensibility. As a result, the infrastructural needs of a SAC base were relatively modest, and primarily related to physical support for aircraft and readiness personnel (Hollins, Roberts, and Morgan 2019).

The building has undergone alterations at unknown dates, including boarding up of window openings on the west elevation, alteration of the large vent opening on the south elevation, roof replacement, and exterior painting.

5.7 EVALUATION

Below is a summary of Utility Building #1300's evaluation for listing in the National Register and California Register, and for designation as a Riverside County Historical Landmark. A more detailed historical context and evaluation is provided in the DPR forms in Appendix D.

Various buildings and structures on MARB (formerly March AFB) have been recorded and evaluated by previous consultants, as noted in the *Historic Building Inventory and Evaluation for March Air Force Base* (William Manley Consulting and Earth Tech 1995), and *Integrated Cultural Resources Management Plan Update for March Air Reserve Base* (Jacobs Engineering Group, Inc. 2019). The methods of the *Historic Building Inventory and Evaluation for March Air Force Base*, in particular, state all buildings and structures at March AFB were initially considered for potential eligibility. They were surveyed, photographed, and recorded. Their historic and current functions were studied, potential

significance assessed, and properties that appeared to meet the initial significance criteria were subjected to more detailed historical and architectural documentation. The results of the report identified eligible and ineligible buildings and structures. However, Utility Building #1300 was not among those buildings and structures.

Mikesell (2000) provides guidance on evaluation of buildings and structures on California military bases. Constructed in approximately the late 1950s, Utility Building #1300 is most closely associated with Cold War era properties (1946-1989), for which nine themes for potential significance are identified in the aforementioned guidance document. These include: 1) Weapons Research and Development; 2) Weapons and Aircraft Testing and Evaluation; 3) Early Warning Systems and Electronic Warfare; 4) Strategic Nuclear Capabilities; 5) Intermediate Range Ballistic Missile and Anti-Ballistic Missile Installations; 6) Man in Space Sites; 7) Support for Troops Overseas; 8) Total Army and Navy/Coordination of Regular Forces, Reserve, National Guard; and 9) Military Architecture of the Cold War Era.

Utility Building #1300 does not qualify under themes 1 through 8, but can be evaluated under theme 9 – Military Architecture of the Cold War Era. As previously mentioned, Utility Building #1300 is a small, utilitarian building which functions as a mechanical or utility building in association with the adjacent fuel tank/reservoir. The building was constructed approximately the same time the March AFB runway was expanded to the southeast; thus, it was likely built as part of a construction campaign related to new aircraft being brought to the base, such as the B-47, which came in the early 1950s. Utility Building #1300 does not meet any of the property types and registration requirements under the aforementioned theme (which include Prefabricated or Pre-Engineered Shops, Permanent Industrial Facilities, and Permanent Administrative Buildings).

5.7.1 NATIONAL REGISTER AND CALIFORNIA REGISTER EVALUATION

Criteria A/1 – While Utility Building #1300 is part of the infrastructure constructed at March AFB during the Cold War era, the building is not important within the historical context of the Cold War at March AFB. Archival research does not indicate the building played an important role in events significant to national, state, local, or military history. It is not associated with the development or application of leading-edge technology, nor was the building critical to training and support purposes. Therefore, the building is recommended ineligible under Criteria A/1.

Criteria B/2 – Archival research did not indicate Utility Building #1300 has direct associations with important individuals in our history, or the history of March AFB. Therefore, the building is recommended ineligible under Criteria B/2.

Criteria C/3 – Built during a construction campaign that adhered to the US Air Force's standardized designs, Utility Building #1300 is a modest building with no stylistic features besides barrel roof tile. It does not exemplify any particular architectural style. Additionally, it is constructed with conventional materials and technology; it does not possess high artistic values, and does not represent the work of a master. Therefore, it is recommended ineligible under Criteria C/3.

Criteria D/4 – Lastly, as a mechanical/utility building constructed of commonplace materials, Utility Building #1300 is unlikely to yield important information in prehistory/history, or provide previously unknown answers to research questions. Therefore, it is recommended ineligible under Criteria D/4.

5.7.2 RIVERSIDE COUNTY HISTORICAL LANDMARKS EVALUATION

Riverside County Historical Landmarks criteria are consistent with those developed by the California Office of Historic Preservation but slightly modified for local application at the county level (Riverside County 2008).

Criterion 1 – Utility Building #1300 is a small utility/mechanical building on MARB and is not eligible for designation as a Riverside County Historical Landmark as it is not associated with events significant in county history and cultural heritage (criterion 1).

Criterion 2 – Archival research did not indicate Utility Building #1300 has direct associations with the lives of persons important to the history of Riverside County or its communities. Therefore, it is recommended ineligible under criterion 2.

Criterion 3 – As previously discussed, Utility Building #1300 is a utilitarian building constructed in approximately the late 1950s adhering to standardized US Air Force designs. It does not embody distinctive characteristics of a type, period, region, or method of construction, nor does it represent the work of an important creative individual or possess high artistic values. Therefore, it is recommended ineligible under criterion 3.

Criterion 4 – As a utility/mechanical building constructed of commonplace materials, Utility Building #1300 is unlikely to yield important information in national, state, or county history or prehistory, or provide previously unknown answers to research questions. Therefore, it is recommended ineligible under criterion 4.

In summary, Utility Building #1300 does not appear to meet any of the significance criteria required for listing in the National Register or California Register, or as a Riverside County Historical Landmark designation. It is not a historical resource as defined by CEQA Section 15064.5(a) or 36 CFR Part 800.

Section 6 Recommendations

The EIC records search, literature and historic map review, local historical group consultation, Sacred Lands File search, and field survey identified four cultural resources within the APE. The resources were evaluated and recommended ineligible for listing in the National Register and California Register, and as Riverside County Historic Landmarks. No historical resources or historic properties are located within the APE.

Table 4: Cultural Resources and Status within the APE

Resource #	Name	Historical Resource	Historic Property
P-33-024852	Segment of Flood Control Channel	No	No
P-33-024867	Lateral B – Oleander Channel	No	No
P-33-024868	Segment of Webster Avenue	No	No
-	Utility Building #1300	No	No

Additionally, buried archaeological sensitivity is low based on a high degree of previous disturbance, lack of archaeological resources in the APE, and a lack of bedrock exposures, which, based upon the record search results, are typically present at prehistoric sites.

Therefore, a finding of no historic properties affected is appropriate for this undertaking under Section 106 of the NHPA and a less than significant impact with mitigation incorporated with the implementation of the below standard mitigation measures and standard practices of the California Health and Safety Code.

6.1 ENCOUNTERING ARCHAEOLOGICAL DEPOSITS

If deposits of prehistoric or historical materials are encountered during project construction, it is recommended that all work within 50 feet be halted until an archaeologist can evaluate the findings and make recommendations. Prehistoric materials can include flaked-stone tools (e.g., projectile points, knives, choppers) or obsidian, chert, or quartzite toolmaking debris; culturally darkened soil (i.e., midden soil often containing heat-affected rock, ash, and charcoal, shellfish remains, and cultural materials); and stone milling equipment (e.g., mortars, pestles, handstones). Historical materials might include wood, stone, or concrete footings, walls, and other structural remains; debris-filled wells or privies; and deposits of wood, metal, glass, ceramics, and other refuse.

6.2 ENCOUNTERING HUMAN REMAINS

Section 7050.5 of the California Health and Safety Code states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined whether or not the remains are subject to the coroner's authority.

If human remains are encountered, work should halt within 50 feet of the find and the county coroner notified immediately. At the same time, an archaeologist should be contacted to evaluate the situation. If the human remains are of Native American origin, the coroner must notify the NAHC within 24 hours of this identification. The NAHC will identify a Native American most likely descendent to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods.

See Appendix E for the CEQA Level of Significance Checklist. If the proposed project changes, additional efforts may be necessary.

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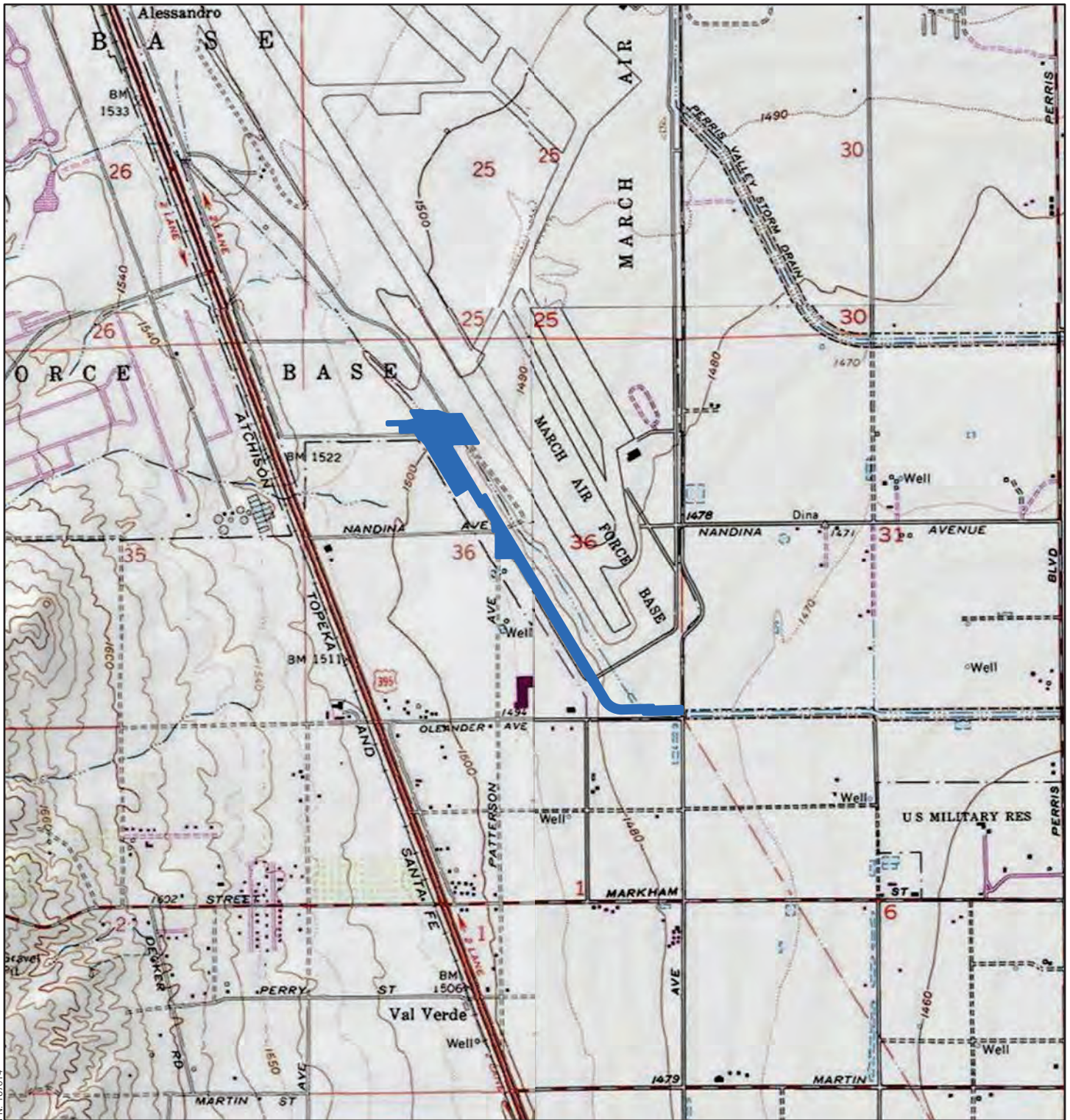
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Appendix A Figures

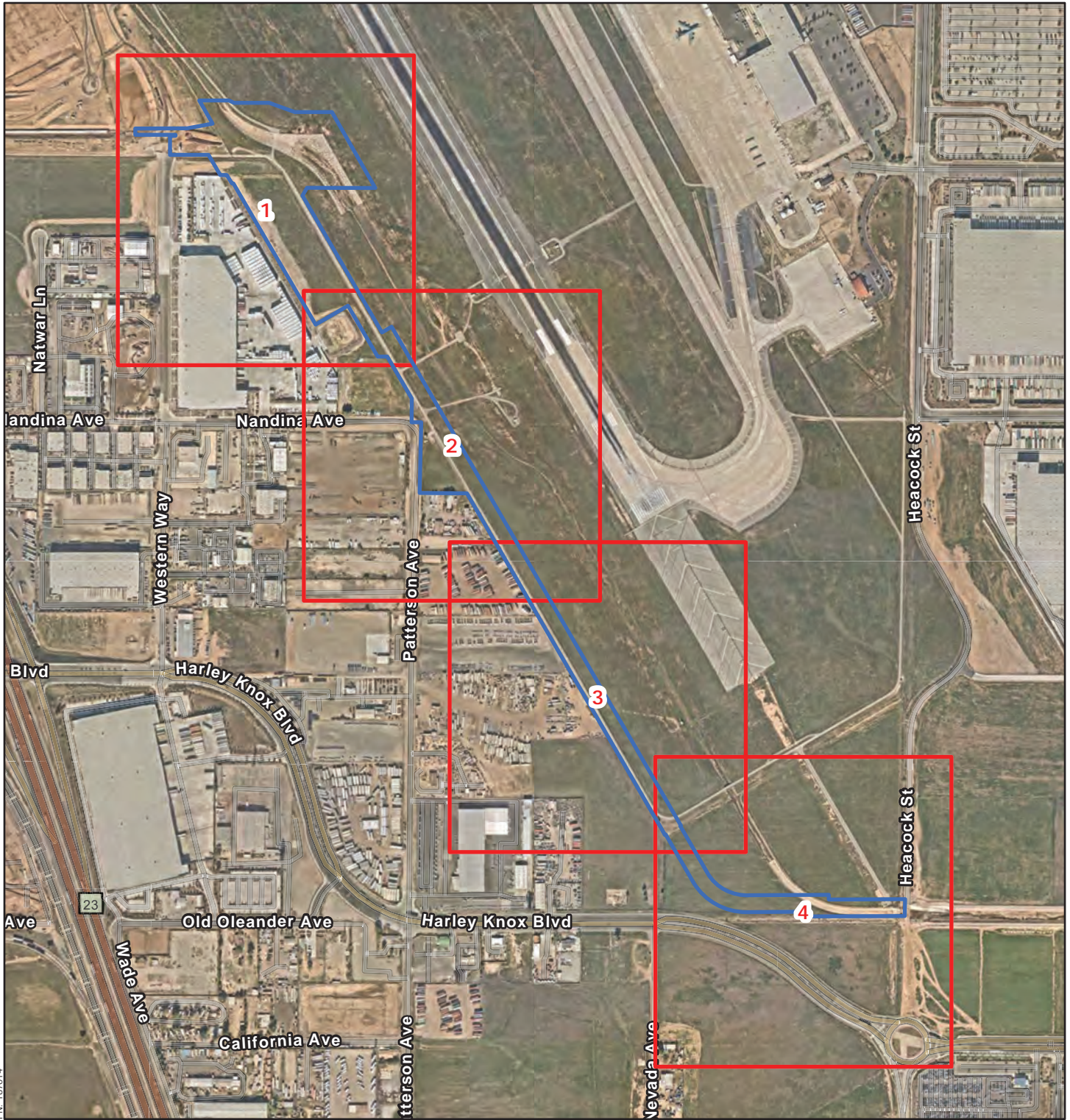


 Project Location



PN: 187014

 Area of Potential Effects



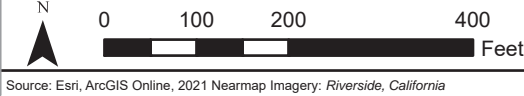
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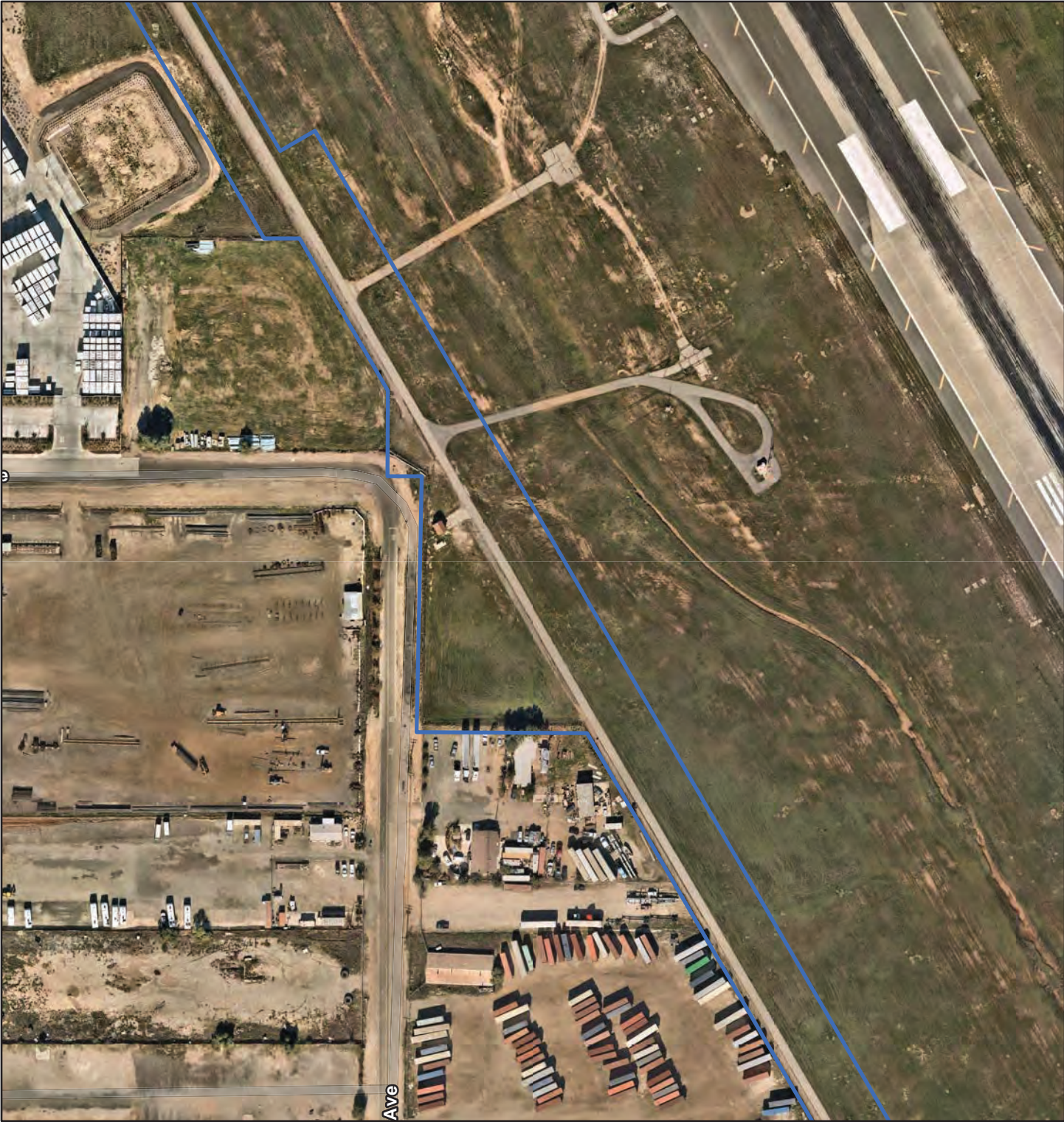


PN: 187014

PERRIS VALLEY CHANNEL PROJECT
LATERAL B STAGE 4
Area of Potential Effects



Source: Esri, ArcGIS Online, 2021 Nearmap Imagery: Riverside, California



PN: 187014

Ave



Area of Potential Effects



PN: 187014

 Area of Potential Effects

Michael Baker
INTERNATIONAL



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Source: Esri, ArcGIS Online, 2021 Nearmap Imagery: Riverside, California

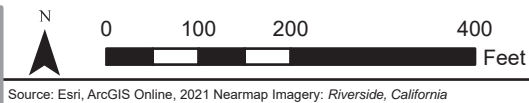
PERRIS VALLEY CHANNEL PROJECT
LATERAL B STAGE 4
Area of Potential Effects



PN: 187014

 Area of Potential Effects

PERRIS VALLEY CHANNEL PROJECT
 LATERAL B STAGE 4
Area of Potential Effects



Appendix B **CONFIDENTIAL** Native American Heritage
Commission Coordination

Removed for confidentiality purposes.

Appendix C Local Historical Group Consultation

ZamudioGurrola, Susan






From: ZamudioGurrola, Susan
Sent: Thursday, February 24, 2022 9:36 AM
To: rivcokid@gmail.com
Cc: Hearth, Nicholas
Subject: Perris Valley Channel Lateral B, Stage 4 Project
Attachments: Riverside County Heritage Association.pdf

Tracking:	Recipient	Delivery
	rivcokid@gmail.com	
	Hearth, Nicholas	Delivered: 2/24/2022 9:38 AM

Dear Mr. Lech,

Michael Baker International is conducting a cultural resources study for the proposed Perris Valley Channel Lateral B, Stage 4 Project located in Riverside County, California. We are conducting outreach to you, a local historical society, to ask if you have any information or concerns about historic properties/cultural resources within the project's Area of Potential Effects (depicted in the attached maps). This is not a request for research; it is solely a request for public input related to any concerns the Riverside County Heritage Association may have pertaining to historic properties/cultural resources.

Thank you,

Susan Zamudio-Gurrola, MHP | Senior Architectural Historian | she/her
2945 Townsgate Road, Suite 200 | Thousand Oaks, CA 91361 | [O] 805-384-4090 | [M] 310-592-0815
susan.zamudiogurrola@mbakerintl.com | www.mbakerial.com     



February 24, 2022

RIVERSIDE COUNTY HERITAGE ASSOCIATION

P.O. Box 21168

Riverside, CA 92516

Attn: Steve Lech

Via email: rivcokid@gmail.com

RE: LOCAL HISTORICAL GROUP CONSULTATION FOR THE PERRIS VALLEY CHANNEL LATERAL B, STAGE 4 PROJECT, MARCH AIR RESERVE BASE, RIVERSIDE COUNTY, CALIFORNIA

Dear Mr. Lech:

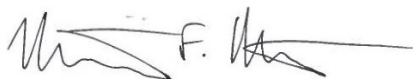
Michael Baker International is conducting a cultural resources investigation for the Perris Valley Channel Lateral B, Stage 4 Project (project). The project is in March Air Reserve Base, as depicted on the accompanying figures (see **Attachment 1**).

The proposed project consists of the construction of an approximately 6,000-lineal-foot, underground, reinforced concrete box storm drain partially located within the limits of the City of Perris, and lands owned by March Joint Powers Authority (MJPA) and March Air Reserve Base (MARB) in southwestern Riverside County. The proposed storm drain location would generally be located on the east side of Interstate 215, parallel to the westerly and southerly boundary of the proposed Veterans Industrial Park 215 warehouse project near the southeast corner of Assessor's Parcel Number 294-180-038, then along the MARB westerly fence line until reaching the existing channel at Heacock Street.

The proposed project aims to provide flood protection to MARB and the adjacent area by constructing the regional storm drain needed to convey 100-year runoff from the Stage 5 channel to the existing Stage 2 channel at Heacock Street, and provide an adequate outlet to proposed developments west of the project within the City of Perris. Two storm drain alignment alternatives (Alternative 1 and Alternative 2) have been offered for consideration.

The project is subject to the California Environmental Quality Act (CEQA) and Section 106 of the National Historic Preservation Act (NHPA). The Air Force is the lead agency. Meaningful consultation with local historical societies and organizations is required under Section 106 of the NHPA. This letter is intended as a request for public input. Please notify us if your organization has any information or concerns about historical resources on the project site, or if you have any questions. We can be reached at nicholas.hearth@mbakerintl.com or susan.zamudiogurrola@mbakerintl.com, or at (909) 974-4924 or (805) 384-4090.

Sincerely,



Nicholas F. Hearth, M.A., RPA
Principal Investigator



Susan Zamudio-Gurrola, MHP
Senior Architectural Historian

Attachment: Figures

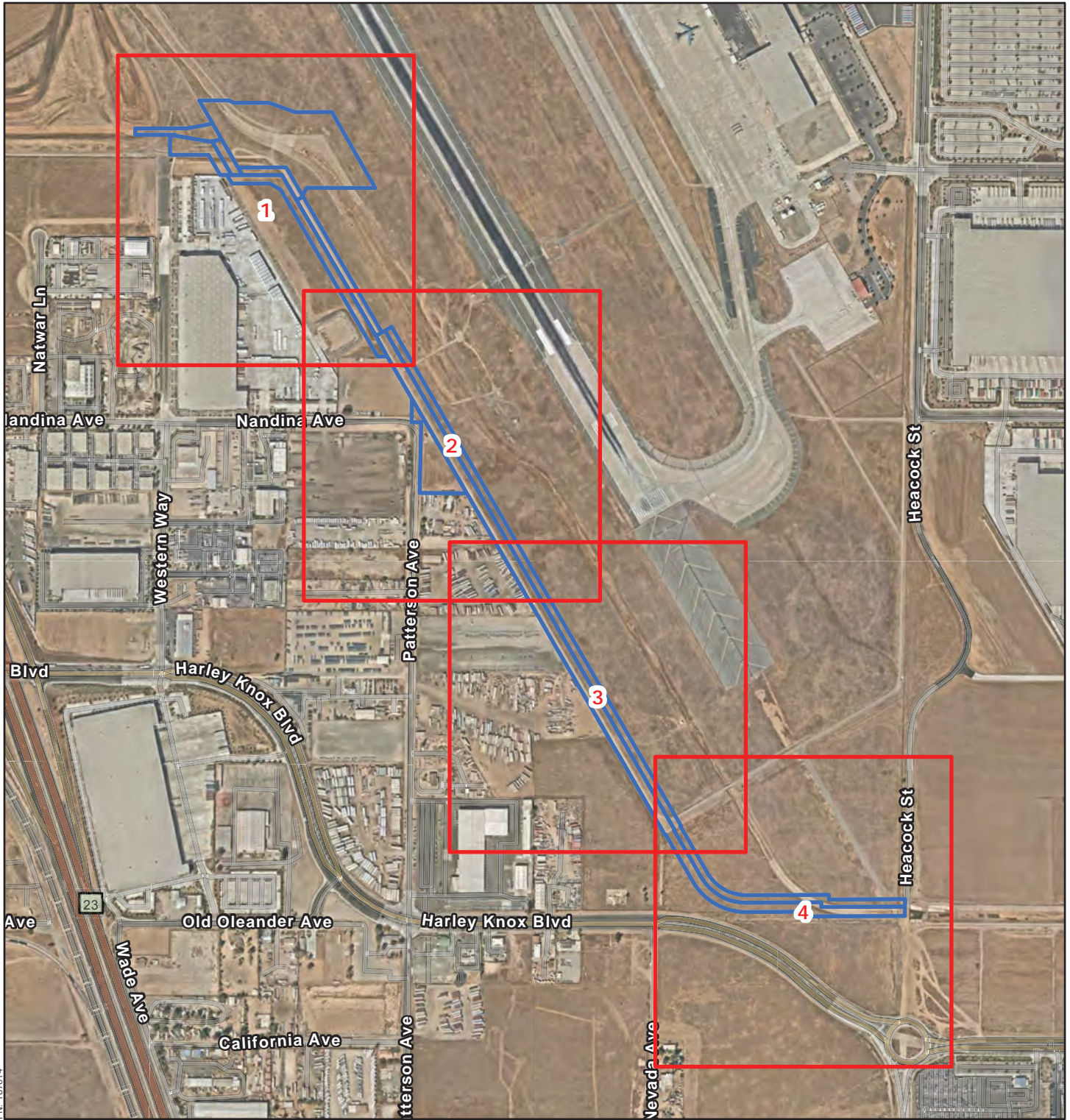


 Project Location



PN: 187014

 Area of Potential Effects



PN: 187014

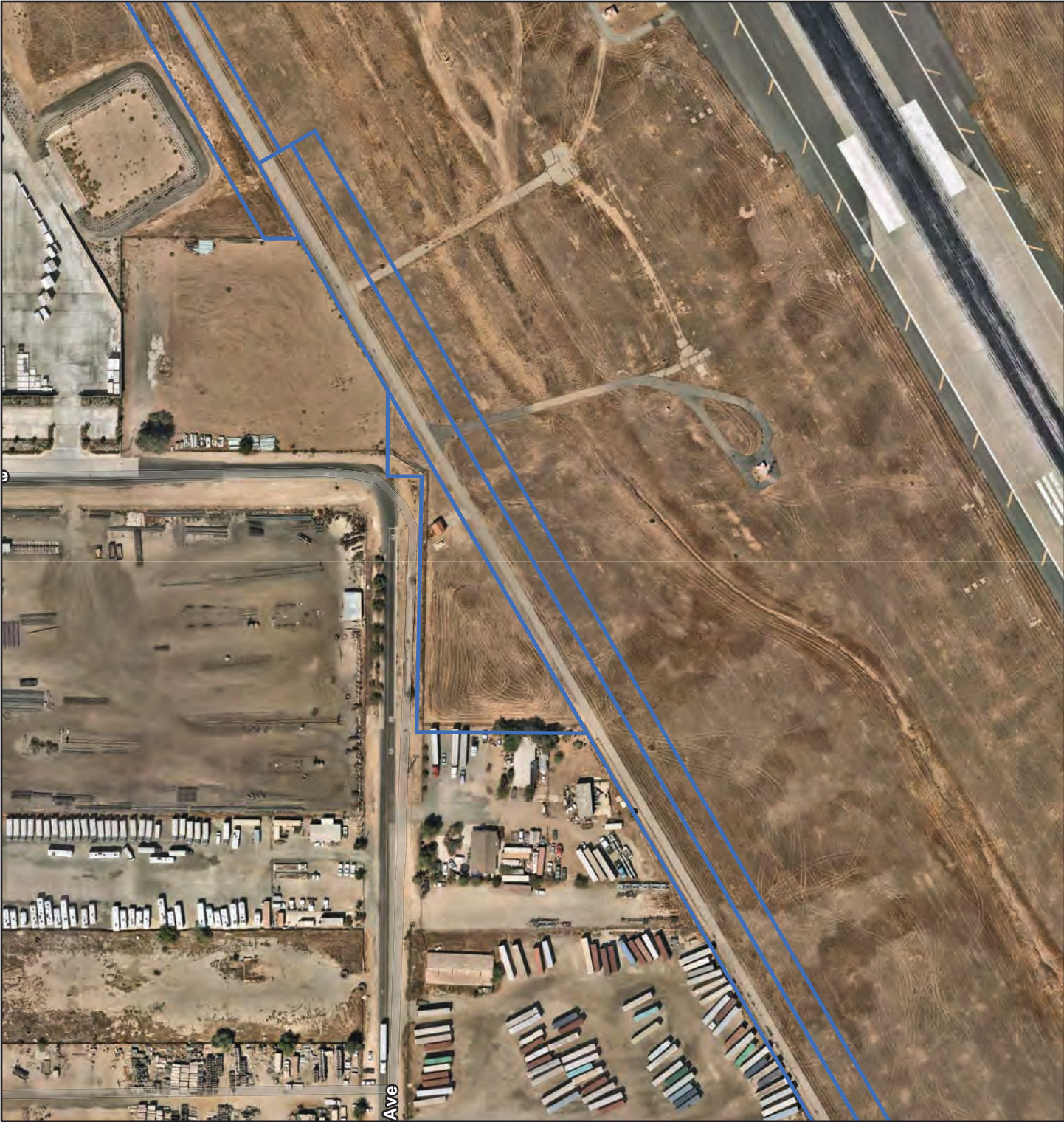
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 Area of Potential Effects

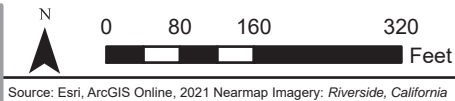


PN: 187014

AVE

 Area of Potential Effects

PERRIS VALLEY CHANNEL PROJECT
 LATERAL B STAGE 4
Area of Potential Effects

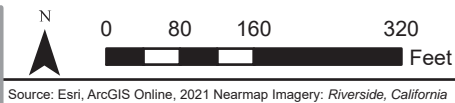


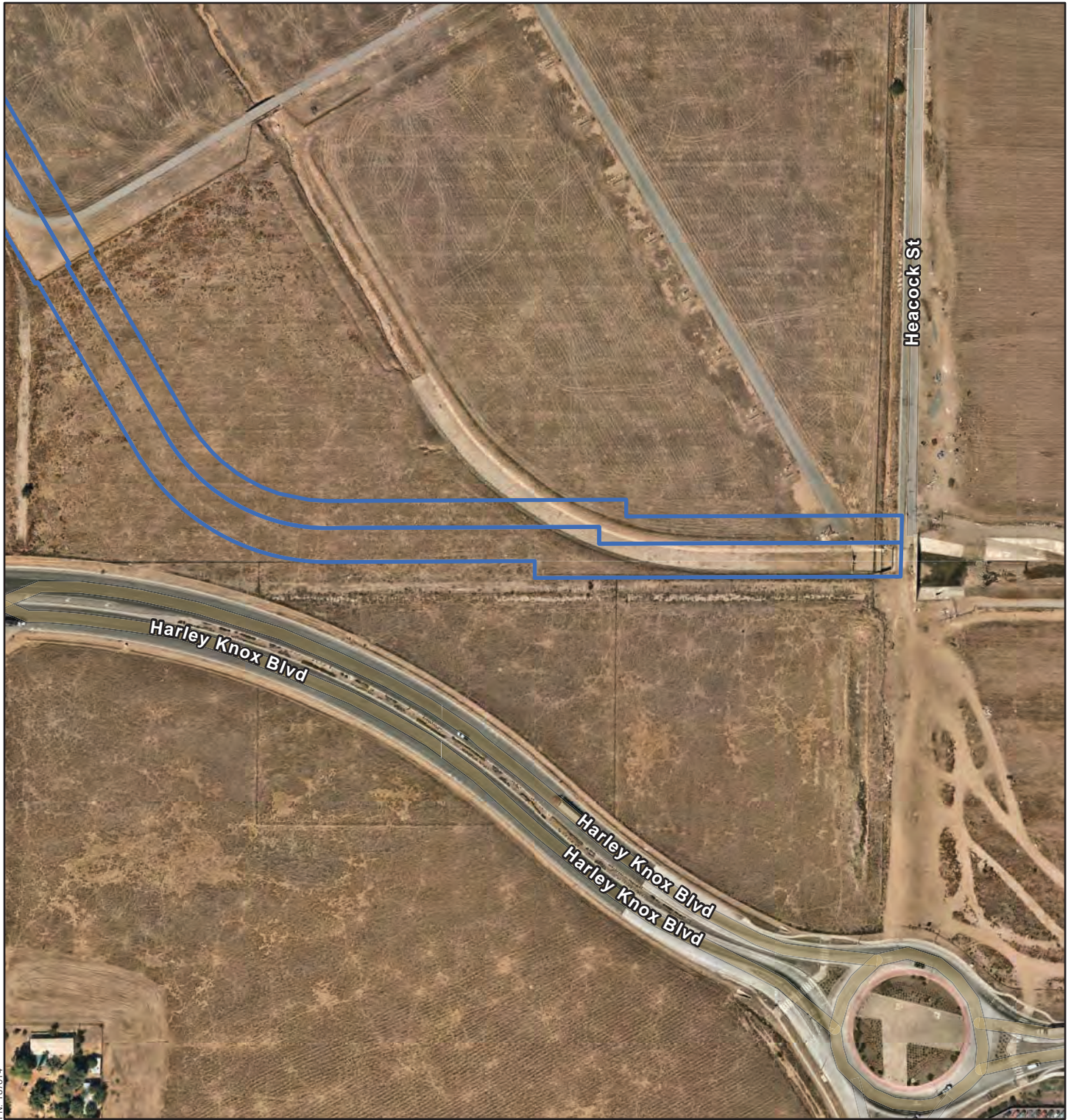


PN: 187014

 Area of Potential Effects

PERRIS VALLEY CHANNEL PROJECT
 LATERAL B STAGE 4
Area of Potential Effects





PN: 187014

 Area of Potential Effects

PERRIS VALLEY CHANNEL PROJECT
 LATERAL B STAGE 4
Area of Potential Effects

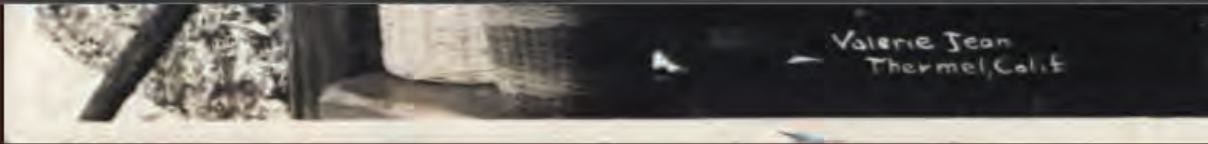
ZamudioGurrola, Susan

From: Microsoft Outlook
To: rivcokid@gmail.com
Sent: Thursday, February 24, 2022 9:36 AM
Subject: Relayed: Perris Valley Channel Lateral B, Stage 4 Project

Delivery to these recipients or groups is complete, but no delivery notification was sent by the destination server:

rivcokid@gmail.com (rivcokid@gmail.com)

Subject: Perris Valley Channel Lateral B, Stage 4 Project



Notice to Sellers

Downloads

Contact

Contact us:

* Indicates required field

Name *

Susan

First

Zamudio-Gurrola

Last

Email *

Susan.ZamudioGurrola@mbakerintl.com

Comment *

I am writing as a follow-up to a letter that I emailed your organization (rivcokid@gmail.com) on February 24, 2022 regarding the proposed Perris Valley Channel Lateral B Stage 4 Project. Michael Baker International is conducting a cultural resources study for the project and is reaching out to you, a local historical society, to ask if you have any information or concerns about historic properties/cultural resources within the project's Area of Potential Effects. This is not a

SUBMIT



Steve Lech
c/o Riverside County Heritage Association
P. O. Box 21168
Riverside, CA 92516-1168

Appendix D **CONFIDENTIAL** DPR 523 Forms

Removed for confidentiality purposes.

Appendix E CEQA Significance Checklist

LEVEL OF SIGNIFICANCE CHECKLIST For Archaeological Resources

(Must be attached to report)

APNs: 294-220-003, 294-200-002, 294-180-007, 294-180-006, 294-180-037, and 294-180-055		Project No: Michael Baker International Project # 187014	EA Number:
<input type="checkbox"/> Potentially Significant Impact	<input checked="" type="checkbox"/> Less than Significant With Mitigation Incorporated	<input type="checkbox"/> Less than Significant Impact	<input type="checkbox"/> No Impact

*(Check the level of significance that applies)***HISTORIC RESOURCES**

Would the project:

a) Alter or destroy a historic site?

Yes. There are four cultural resources (P-33-024852, P-33-024867, P-33-024868, and Utility Building #1300) located within the APE. None are eligible for the California Register or National Register.b) Cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations §15064.5? **No**

c) Is the resource listed in, or determined to be eligible by the State Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code §5024.1)

None of the above resources are considered eligible for the California Register or National Register.

Findings of Fact: **The Eastern Information Center (EIC) records search conducted on January 18, 2022 identified three historical resources located within the APE (33-024867, 33-024852, and 33-024868). The intensive pedestrian field survey conducted on January 19, 2022, identified one built environment resource (Utility Building # 1300) within the APE; it is recommended not eligible for the California Register or National Register.**

Proposed Mitigation: **No California Register or National Register-eligible resources are located within the APE. Monitoring is not recommended due to low sensitivity for archaeological resources. If additional historic resources/artifacts are discovered during construction, then work in the immediate vicinity of the find shall be halted and a qualified archaeologist shall assess the nature and significance of the find and make recommendations. If human remains are encountered, State Health and Safety Code Section 7050.5, Public Resources Code Section 5097.98, and Section 7052 shall be followed.**

Monitoring: **Archaeological monitoring is not recommended during project related ground disturbing activity due to low sensitivity.**

ARCHAEOLOGICAL RESOURCES

Would the project:

a) Alter or destroy an archaeological site? **No.**b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to California Code of Regulations §15064.5? **No.**

c) Disturb any human remains, including those interred outside of formal cemeteries?

No human remains and/or formal cemeteries are known to exist within the APE at this time.

d) Restrict existing religious or sacred uses within the potential impact area?

Potentially. A Sacred Lands File search request by Michael Baker International resulted on March 3, 2022 was positive with instructions to contact the Pechanga Band of Luiseno Indians. It is unknown if the project would impact the sacred or religious uses of the land because the nature of religious or sacred uses are unknown at this time.

Findings of Fact: **The EIC record search conducted on January 18, 2022 identified no prehistoric resources located within the project boundaries. The intensive pedestrian field survey conducted on January 19, 2022, did not identify any archaeological resources within the APE.**

Proposed Mitigation: **None. If archaeological resources/artifacts are discovered during construction (earth-moving), then work in the immediate vicinity of the find shall be halted and a qualified archaeologist shall**

assess the nature and significance of the find and make recommendations. If the discovery is prehistoric in nature local Native Americans shall be consulted.

Monitoring Proposed: Archaeological monitoring is not recommended during project related ground disturbing activity due to low sensitivity. If prehistoric resources or artifacts are discovered during construction, then work in the immediate vicinity of the find shall be halted and a qualified archaeologist shall assess the nature and significance of the find and make recommendations. If human remains are encountered, State Health and Safety Code Section 7050.5, Public Resources Code Section 5097.98, and Section 7052 shall be followed.

Prepared By: Nicholas F. Hearth, M.A., RPA Date: March 23, 2022

County Use Only

Received By: _____ Date: _____

PD-A# _____ Related Case# _____

Appendix D
Paleontological Resources
Identification Memo

PERRIS VALLEY CHANNEL LATERAL B, STAGE 4 PROJECT

PERRIS VALLEY CHANNEL LATERAL B, STAGE 4

CITY OF PERRIS, RIVERSIDE COUNTY, CALIFORNIA

Paleontological Resources Identification Memo

Prepared For:

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

1995 Market Street

Riverside, California 92501

Contact: *Jerry Aguirre*

951.955.1245

Prepared By:

MICHAEL BAKER INTERNATIONAL

40810 County Center Drive, Suite 200

Temecula, California 92591

Contact: *Peter Kloess, MS*

510.213.7912

May 2022

JN 187014

PERRIS VALLEY CHANNEL LATERAL B, STAGE 4

CITY OF PERRIS, RIVERSIDE COUNTY, CALIFORNIA

Paleontological Resources Identification Memo

The undersigned certify that the statements furnished in this report and exhibits present data and information required for this paleontological evaluation, and the facts, statements, and information presented is a complete and accurate account of the findings and conclusions to the best of our knowledge and beliefs.



Peter Kloess, MS
Principal Investigator - Paleontology

May 2022

JN 187014

Paleontological Resources Identification Memo

In support of the proposed Perris Valley Channel (PVC) Lateral B, Stage 4 Project (project), Michael Baker International staff conducted a pedestrian survey, background research of online and published databases, and completed a paleontological record search through the Western Science Center (WSC) in Hemet. These efforts identified the paleontological sensitivity of the project area and determined whether the project could result in significant impacts to paleontological resources in accordance with the California Environmental Quality Act (CEQA). Methods, results, and recommendations are summarized below; figures are provided in Attachment 1.

PROJECT LOCATION AND DESCRIPTION

The project proposes construction of approximately 6,000 feet of reinforced concrete box culvert starting at Heacock Street to the downstream terminus of the PVC Lateral B Stage 5 facility. The project would include three transition structures, four junction structures, twelve bolted-down manholes for security, and two inlets along the southernmost end of the alignment to collect on-site flows from March Air Reserve Base. The project would also include two lateral stubs and bulkheads for the future construction of Lateral B-7 and Lateral B-8 in the City of Perris. The project would be located mostly within the March Air Reserve Base right-of-way. The total maximum depth of ground disturbance is estimated to be approximately 12 to 16 feet. Ground disturbance is anticipated to include demolition, clearing, paving, and construction.

The project is mapped within the Riverside, USGS 7.5-minute topographic quadrangle map (Township 3 South, Range 4 West, San Bernardino Base and Meridian) (Attachment 1: Figures 1-3). The project area is east of Interstate 215, south of Cactus Avenue, west of Heacock Street, and north of Harley Knox Boulevard at March Air Reserve Base in Riverside County, California.

GEOLOGIC SETTING

California is divided into 11 geomorphic provinces, each defined by unique geologic and geomorphic characteristics. The project is in the northcentral portion of the Peninsular Ranges geomorphic province, which is marked by northwest-trending mountain ranges and valleys subparallel to the San Andreas Fault. This geomorphic province also includes physiogeographic features such as the Los Angeles Basin, the southern members of the Channel Islands, and the continental shelf (CGS 2002). The Peninsular Ranges province crosses several counties, as well as Baja California, and is bound by the Pacific Ocean to the west, the Transverse Ranges geomorphic province to the north, and the Colorado Desert geomorphic province to the east. The Peninsular Ranges are dominated by the Peninsular Ranges batholith (Prothero 2017).

The geology of the western Riverside County area was mapped by Thomas Rodgers (1965) at a scale of 1:250,000 and by Dibblee and Minch (2003a, 2003b) and Morton et al. (2002, 2003) at a scale of 1:24,000. The project area is located within the central part of the Perris Block, which is bound by the Elsinore and San Jacinto fault zones to the west and east, respectively. Geologic units underlying the project area are mapped as Quaternary alluvium (Qa) and Quaternary older alluvium (Qoa), representing the proximal portions of an alluvial fan complex (Morton, Alvarez, and Diep 2002). The younger alluvial sediments (Qa) consist of alluvial sand and clay deposits dating to the Holocene epoch (11,700 years ago to the present). Older alluvium (Qoa) in this region, consisting of gravels and sands, dates to the Pleistocene epoch (2.5 million years ago to 11,700 years ago). Stratigraphic studies show that the Quaternary alluvial sediments overlie much older igneous deposits in this area, including Cretaceous-age and older igneous rocks from the Peninsular Ranges batholith (Morton et al. 2002, 2003). To the west of the project area are exposures

of the plutonic Val Verde tonalite (Dibblee and Minch 2003a), dated to 106 million years old (Kistler, Wooden, and Morton 2003).

The project area is within the southern California/northern Baja coast continental scale ecoregion of California (Griffith et al. 2016). This region comprises coastal and alluvial plains, marine terraces, and low hills that stretch from Point Conception in Santa Barbara County southeast along the Pacific coast and extend into the western portions of San Bernardino and Riverside Counties. Soil mapping in the project area has identified several soil series, including the Ramona, Exeter, Monserate, Pachappa, Greenfield, and Hanford.

Corresponding with the Quaternary older alluvium identified in geologic maps (Qoa of Dibblee and Minch 2003a, 2003b), the Ramona, Exeter, and Monserate series can be dated from 700,000 to 13,000 years before present (BP) based on comparisons to the soil chronosequence of McFadden (1982). The Ramona series consists of brown sandy loam, red-brown to yellow-red sandy clay loam, and strong brown sandy loam, which formed in alluvium derived from igneous source rocks. The Exeter series consists of brown loam, reddish-brown to yellowish-red clay loam, and light yellowish-brown sand, which formed in alluvium from granitic sources. The Monserate series consists of brown and yellow-red sandy loam, reddish-brown sandy clay, and yellow-brown sand, which formed in alluvium derived from granitic rocks (NRCS 2022).

The Pachappa soil series dates approximately 13,000 to 7,000 years BP (late Pleistocene to early Holocene) based on McFadden's (1982) chronosequence. These grayish-brown sandy loam soils formed in semiarid to dry, wind-blown conditions (NRCS 2022).

The Greenfield and Hanford series correspond to the Holocene alluvium found in geologic maps (Qa of Dibblee and Minch 2003a, 2003b). These soils consist of brown to yellowish-brown sandy loams that formed in deep alluvium from igneous and quartz-bearing rocks (NRCS 2022).

The project area is within the Inland Valleys and Inland Hills state-level ecoregions. Ecoregions denote general similarity in ecosystems and environmental resources. The lowlands of the Inland Valleys tend to be heavily urbanized and the Inland Hills have moderately steep to steep slopes with elevations between 1,000 and 3,000 feet. Historically, typical vegetation of these ecoregions included Riversidean sage scrub, grasslands, and riparian woodlands or chaparral habitats. Soil temperature regimes are thermic and soil moisture regimes are xeric in these regions, with mean annual precipitation between 10 and 14 inches (Griffith et al. 2016).

PALEONTOLOGICAL PEDESTRIAN SURVEY

Michael Baker International archaeologists Kholood Abdo, MA, RPA, and Marcel Young, BA, conducted an intensive pedestrian survey of the area of potential effect (APE) on January 19, 2022. Transect spacing was 10–15 meters apart throughout. The APE is artificially level, with a gradual slope to the southeast APE, which appears to represent a graded landscape for the construction of the runways on March Air Reserve Base. Segments of drainage channels cross the area in a southeasterly direction, and in some cases provided cut embankments with exposed soil stratigraphy. These cuts were inspected for evidence of paleontological horizons, while the ground surface across the APE was inspected for intact and fragmentary fossils. At the time of the survey, the majority of the APE was covered with dense vegetation, including non-native annual grasses, which resulted in an average of 5 percent surface visibility. Disturbances within the APE include historical and modern developments of the area for use as a runway, construction of access roads, and flood control structures. Natural disturbances include rodent burrows. No fossils were found during the survey.

PALEONTOLOGICAL RECORDS SEARCH

Michael Baker International staff requested and received a fossil locality records search through the WSC in Hemet on February 17, 2022 (Attachment 2). The WSC records search did not find any previously known localities within the project area or within a 1-mile radius of the project area. Michael Baker International conducted investigations within a 5-mile radius of the project area through the Paleobiology Database (PBDB 2022). The records search was limited to data available online. The search showed no previously identified fossil localities within the project area. One locality (Dooley et al. 2019) was identified within an approximate 5-mile radius through the PBDB database; results are shown in the following table.

Collection #	Location	Formation	Intervals
200319	Approx. 5.5 miles SSE of the project site	Quaternary alluvium	Rancholabrean Land Mammal Age

Source: PBDB 2022

The depth of Pleistocene-age alluvium in the project area is unknown, but the sensitivity of Pleistocene alluvium formations is typically considered high in intact geologic contexts utilizing Society for Vertebrate Paleontology (2010) standards. Nearby regions, such as Domenigoni Valley and Diamond Valley, have yielded significant numbers of fossil localities (Springer et al. 2010). The Diamond Valley Lake local fauna (recovered from these nearby localities) is composed of significant and large fossils, including *Mammuthus columbi* (mammoth), *Equus* sp. (ancient horse), *Camelops hesternus* (camel), *Paramylodon* sp. (ground sloth), *Bison* sp. (bison), and *Smilodon fatalis* (sabretooth cat) (Springer et al. 2010).

SUMMARY OF FINDINGS AND RECOMMENDATIONS

The paleontological pedestrian survey, WSC records search, and PBDB fossil locality searches did not identify any paleontological resources within the project area. One paleontological locality was recorded within a general, 5-mile radius search. Significant fossil localities (e.g., Diamond Valley Lake) have been found outside this radius in similar geologic formations to those observed in the project area. The sensitivity of the Pleistocene-age alluvium formations, such as those in the project area, is typically high in intact geologic contexts. Therefore, the project area is highly sensitive for paleontological resources.

Due to the depth and nature of ground-disturbing activities, the project has high potential to disturb paleontological resources. Following the County of Riverside Draft General Plan Update EIR No. 521 (2015), when existing information indicates that a site proposed for development has high paleontological sensitivity, a paleontological resource impact mitigation program (PRIMP) is required for the Project. The following mitigation measure (MM) is recommended to be implemented such that in the event of any discovery of unknown paleontological resources during earthwork, impacts would be less than significant.

MM PALEO 1: Due to the potential to impact sensitive paleontological resources during construction activities, the District shall prepare or cause for a Paleontological Resource Impact Mitigation Program (PRIMP) to be prepared prior to commencement of ground disturbing activities. The PRIMP shall be based on the final construction grading plans prepared by the District and detail construction requirements for all work consisting of excavation at depths greater than 4 feet below the original ground surface in undisturbed geologic contexts.

PREPARER QUALIFICATIONS

Peter A. Kloess, Principal Investigator—Paleontology

Mr. Kloess is a principal investigator and paleontologist with over 20 years of experience in paleontology, with 7 years in paleontology mitigation. His experience includes private and public consultation, field monitoring, excavation, and laboratory research on projects across the western United States, predominantly in California. He has consulting experience with a range of projects, including construction, transportation, utility, transmission, monitoring, and surveys, as well as expertise recovering a diversity of fossils from project sites, such as marine invertebrates, microfossils, plants, small mammals, and birds, large marine and terrestrial mammals, and dinosaurs. He also has extensive experience in paleontological museum collections and lab settings. He has worked on and co-led scientific excavations of large mammals and dinosaurs in California, Utah, New Mexico, and Montana. Mr. Kloess has served as a lab preparator and assistant curator for paleontology museums in California and Montana, where his duties included manual preparation of specimens, casting, jacketing, public outreach, cataloging, and curation. He meets the Society of Vertebrate Paleontology's standards for paleontological Principal Investigator.

Kholood Abdo, MA, RPA – Senior Archaeologist.

Ms. Abdo has worked as an archaeologist in cultural resource management since 1999. She meets the Secretary of the Interior's Professional Qualification Standards for historical archaeology. She has completed projects in all phases of archaeology: Phase I pedestrian and shovel test surveys, extended Phase I survey, buried site testing, archaeological sensitivity assessments, Phase II testing and evaluations, Phase III data recovery, and Phase IV monitoring in California. Ms. Abdo has written and contributed to scores of technical reports, including NEPA, NHPA, and CEQA compliance documents. In her current capacity as senior archaeologist and archaeological laboratory director, Ms. Abdo oversees the processing, analysis, and curation of artifact collections from both prehistoric and historical sites. Her cultural material analysis experience includes flaked and ground stone lithics, shell and glass bead analysis, and historical artifact analysis. Her project responsibilities include the oversight of archaeological historical studies and phases of archaeological fieldwork, oversight of field laboratory work, laboratory processing, artifact database, and collection management. Ms. Abdo works to ensure that the quality of analysis and reporting meets or exceeds appropriate local, state, and federal standards.

Marcel Young, BA – Archaeologist.

Mr. Young has worked in various capacities in cultural resource management since 2013. He is experienced in surveying and conducting recordings and evaluations of historic and prehistoric archaeological sites in California. He is a cross-trained archaeology, paleontology and built environment surveyor and monitor. Mr. Young is versed in conducting fieldwork within frameworks of Section 106 of the NHPA, NEPA, and CEQA. He has participated in projects in several phases of archaeology: Phase I pedestrian, extended Phase I testing, shovel test surveys, buried site testing, Phase III data recovery, and Phase IV monitoring.

Attachments:

Attachment 1 – Figures

Attachment 2 – Records Search Results

REFERENCES

- CGS (California Geologic Survey). 2002. "California Geomorphic Provinces Note 36." California Department of Conservation. <https://www.conservation.ca.gov/cgs/Documents/Publications/CGS-Notes/CGS-Note-36.pdf>.
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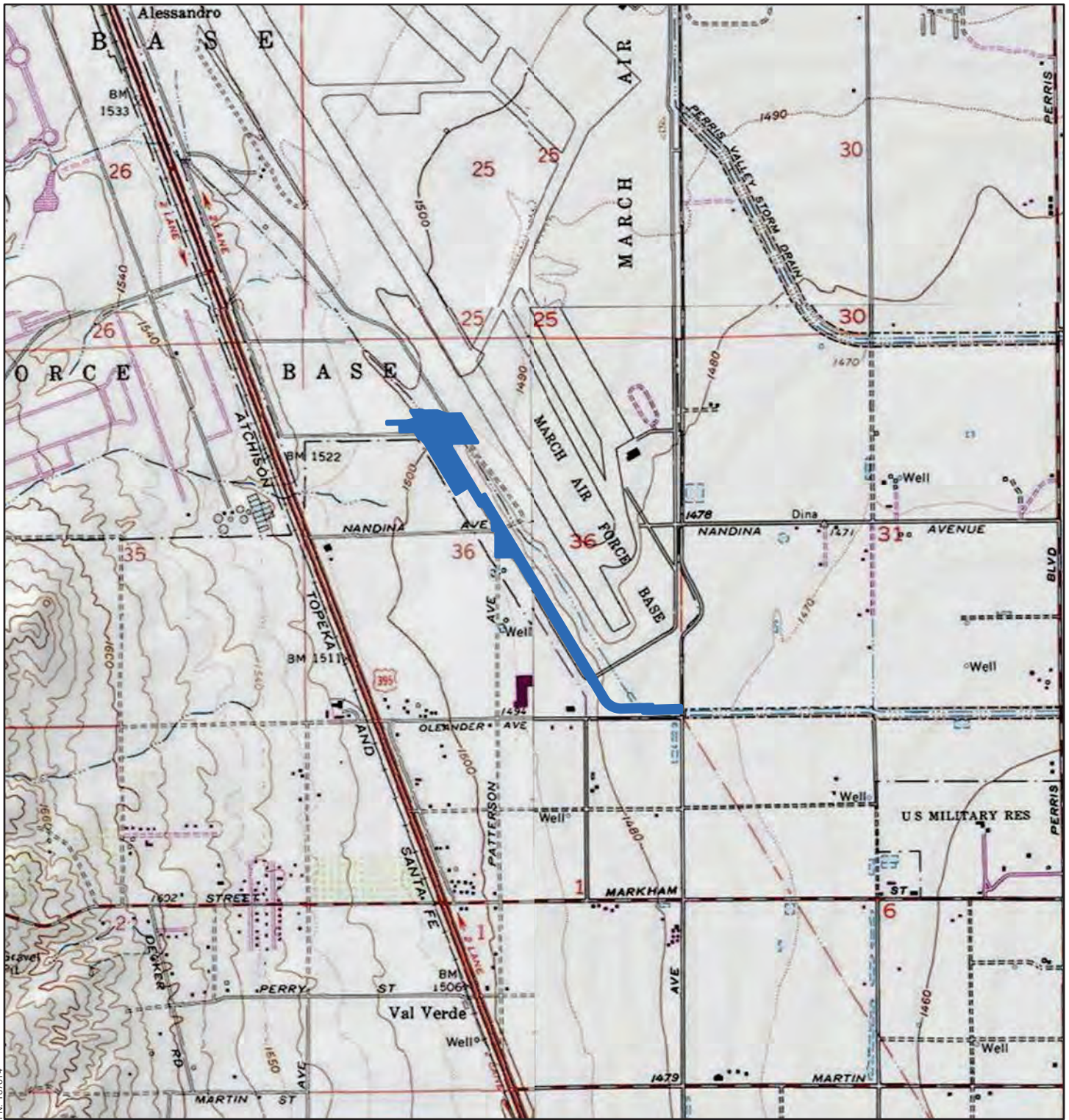
Springer, Kathleen, Eric Scott, J. Christopher Sagebiel, and Lyndon K. Murray. 2010. "Late Pleistocene Large Mammal Faunal Dynamics from Inland Southern California: the Diamond Valley Lake Local Fauna." *Quaternary International* 217: 256–265.

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Attachment 1 **Figures**

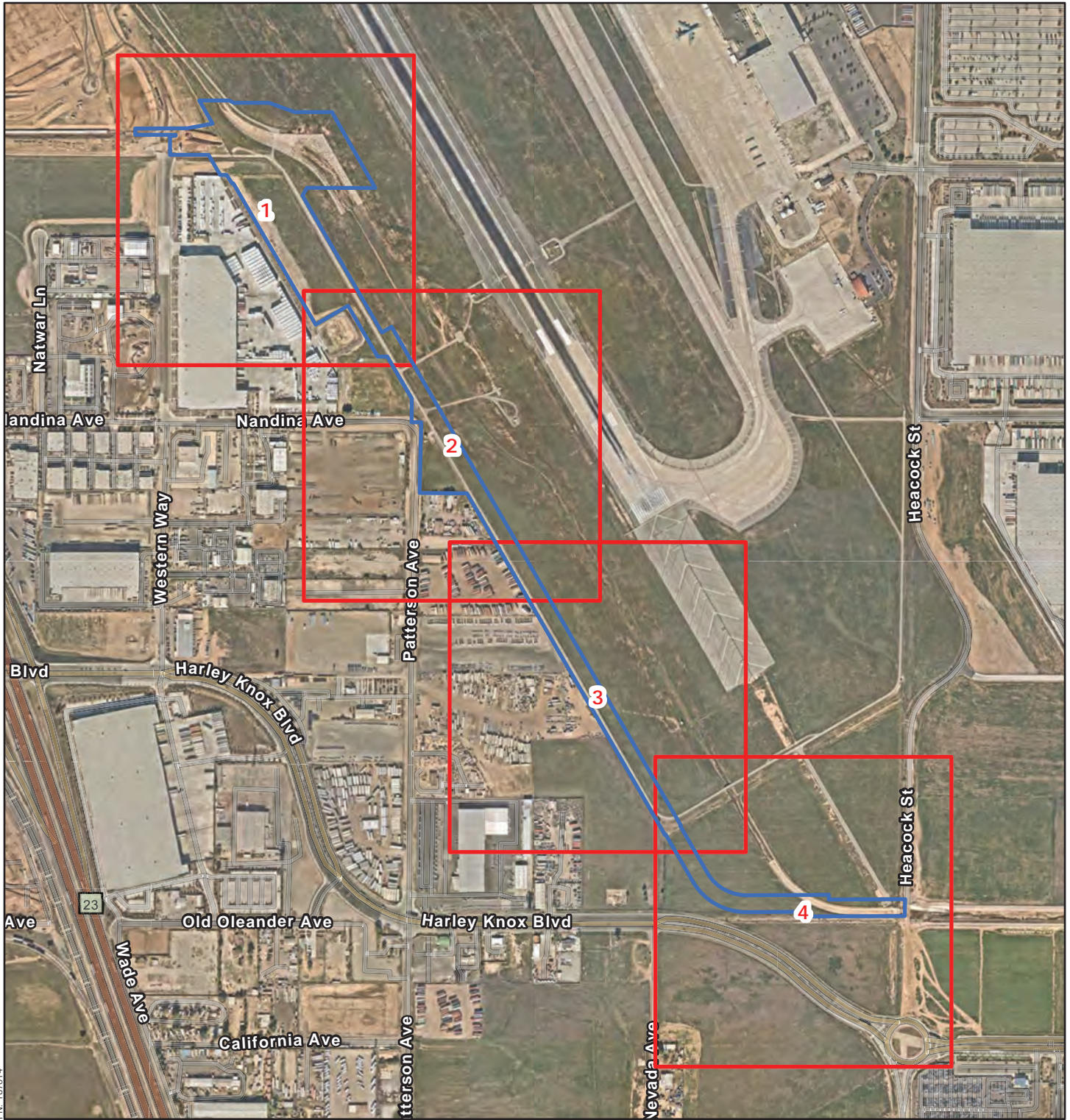


 Project Location



PN: 187014

 Area of Potential Effects



PN: 187014

- Project Area
- Map Page Number

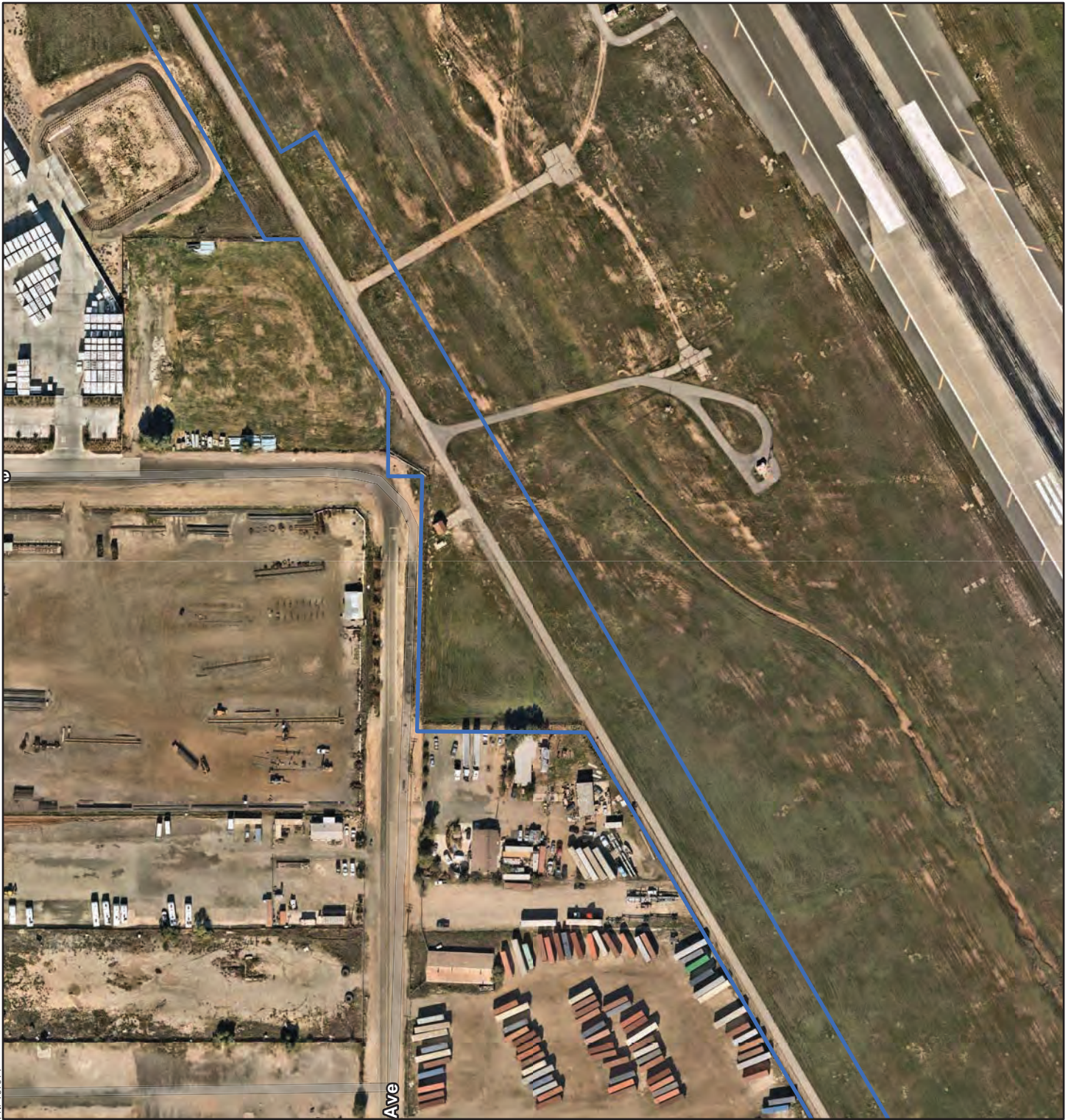


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Area of Potential Effects

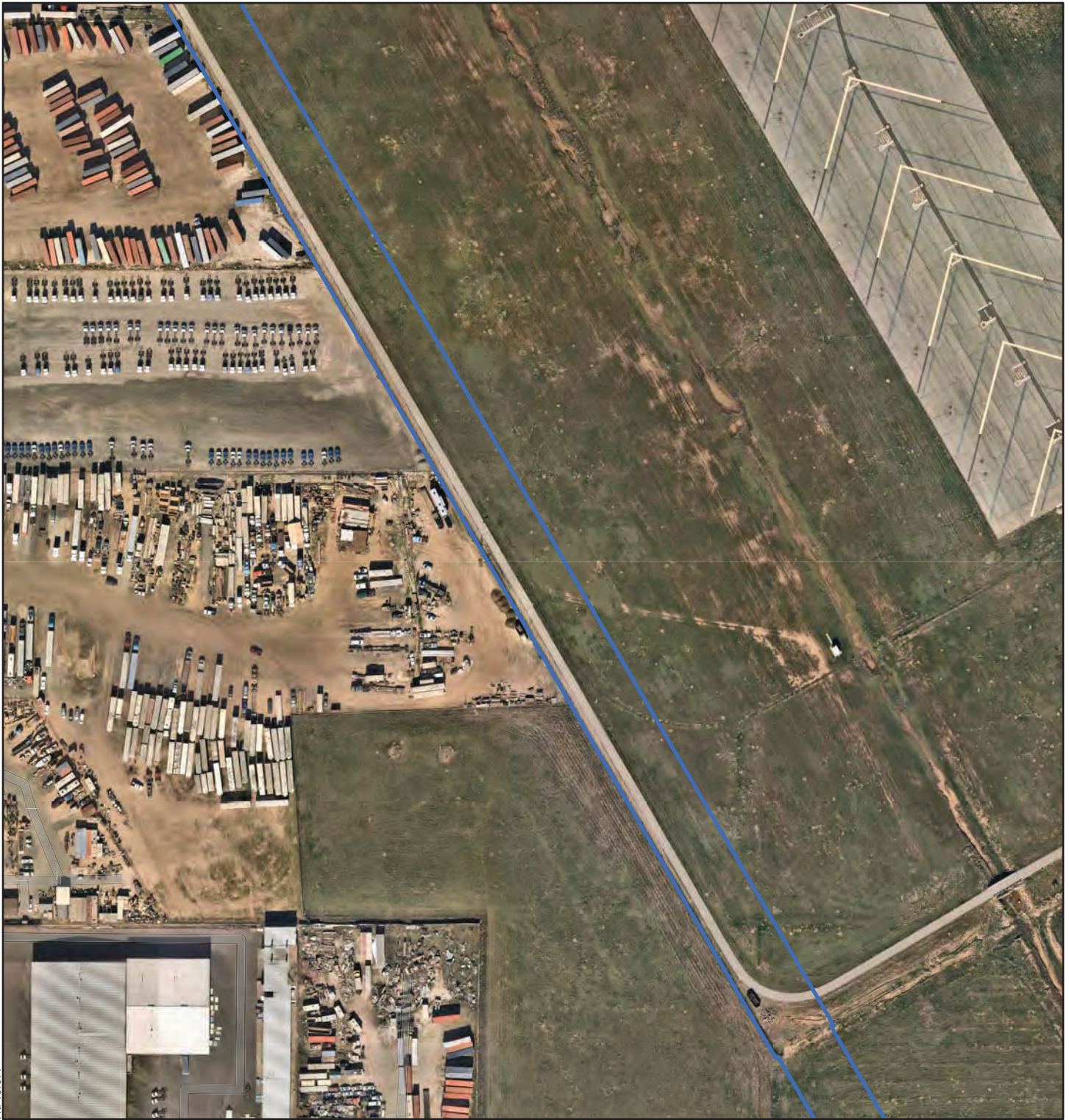




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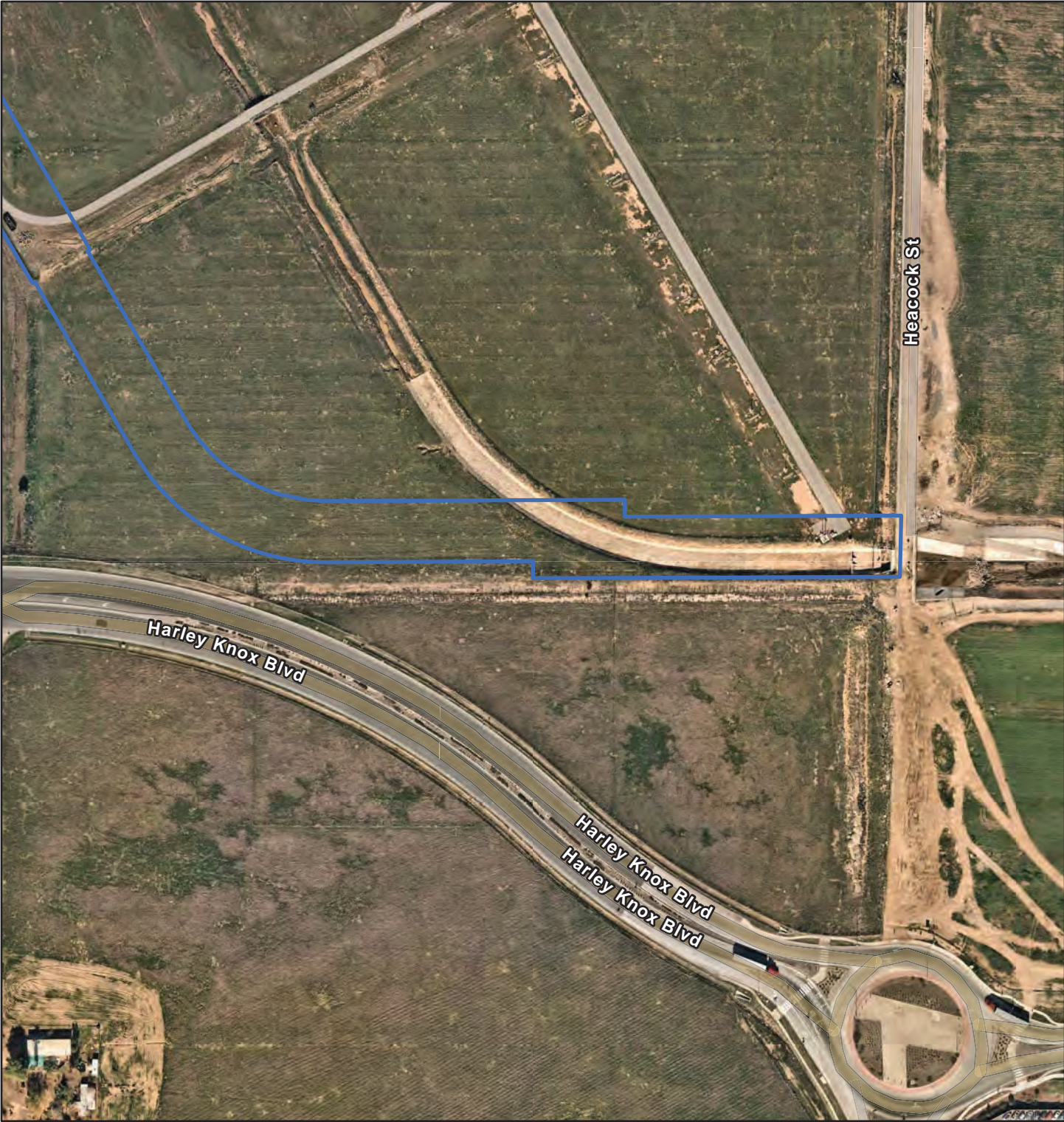
 Project Area



PN: 187014

 Project Area





PN: 187014

 Project Area

Attachment 2 **Records Search Results**

Hearth, Nicholas

From: Darla Radford <dradford@westerncentermuseum.org>
Sent: Thursday, February 17, 2022 2:42 PM
To: Hearth, Nicholas
Subject: EXTERNAL: RE: Paleo Records Search Request
Attachments: Record Search Perris Valley Channel Project.pdf; Inv_2122_from_Western_Center_Community_Foundation_15296.pdf; Perris Valley Channel Project Map.jpg

Hi Nick,

Attached is the results of the record search requested for the Perris Valley Channel Project. The Western Science Center does not have any fossil localities within the project area or a one mile radius, but the underlying sediment is mapped entirely as early Pleistocene alluvial and is considered to be paleontologically sensitive. Please let me know if you have any questions or would like any additional information.

Thank you!

Darla Radford
Collections Manager



2345 Searl Parkway, Hemet, CA 92543
(951)791-0033 . www.WesternScienceCenter.org

From: Hearth, Nicholas [mailto:Nicholas.Hearth@mbakerintl.com]
Sent: Thursday, February 03, 2022 3:11 PM
To: Darla Radford <dradford@westerncentermuseum.org>
Subject: Paleo Records Search Request

Good Afternoon Darla,

Can you please conduct a records search using the attached 1:24k scale topo map with project boundaries for the Perris Valley Channel Project (Project #187014). I've also provide GIS shape files in case it is helpful to you. Thank you so much and please let me know if you need additional information.

Please email the invoice to me and I'll ensure it is paid. Our offices are currently closed.

Nick Hearth | Senior Archaeologist/Principal Investigator
3536 Concours St. #100 | Ontario, CA 91764 | [O] 909.974.4924
nicholas.hearth@mbakerintl.com | www.mbakerintl.com





Michael Baker International
Nicholas Hearth
3536 Concours Street, St. # 100
Ontario, CA 91764

February 17, 2022

Dear Mr. Hearth,

This letter presents the results of a record search conducted for the Perris Valley Channel Project (Project # 187014) in the city of Perris, Riverside County, California. The project site is located east of Interstate 215 and north of Harley Knox Boulevard in Section 36, Township 3 South, and Range 4 West, on the *Perris, CA* and *Steel Peak, CA* USGS 7.5-minute quadrangle.

The geologic units underlying the project area are mapped entirely as alluvial fan deposits dating from the early Pleistocene epoch (Morton et al., 2002). Pleistocene alluvial units are considered to be of high paleontological sensitivity, and while the Western Science Center does not have localities within the project area or a one-mile radius, we do have multiple localities in similarly mapped units throughout the region. Pleistocene alluvial units are known to produce fossil specimens including those associated with mastodon (*Mammut pacificus*), mammoth (*Mammuthus columbi*), ancient horse (*Equus sp.*), camel (*Camelops hesternus*), sabertooth cats (*Smilodon fatalis*) and many more.

Any fossil specimens recovered from the Perris Valley Channel Project would be scientifically significant. Excavation activity associated with the development of the project area would impact the paleontologically sensitive Pleistocene units, and it is the recommendation of the Western Science Center that a paleontological resource mitigation program be put in place to monitor, salvage, and curate any recovered fossils from the study area.

If you have any questions, or would like further information, please feel free to contact me at dradford@westerncentermuseum.org

Sincerely,



A handwritten signature in black ink, appearing to read 'Darla Radford', written in a cursive style.

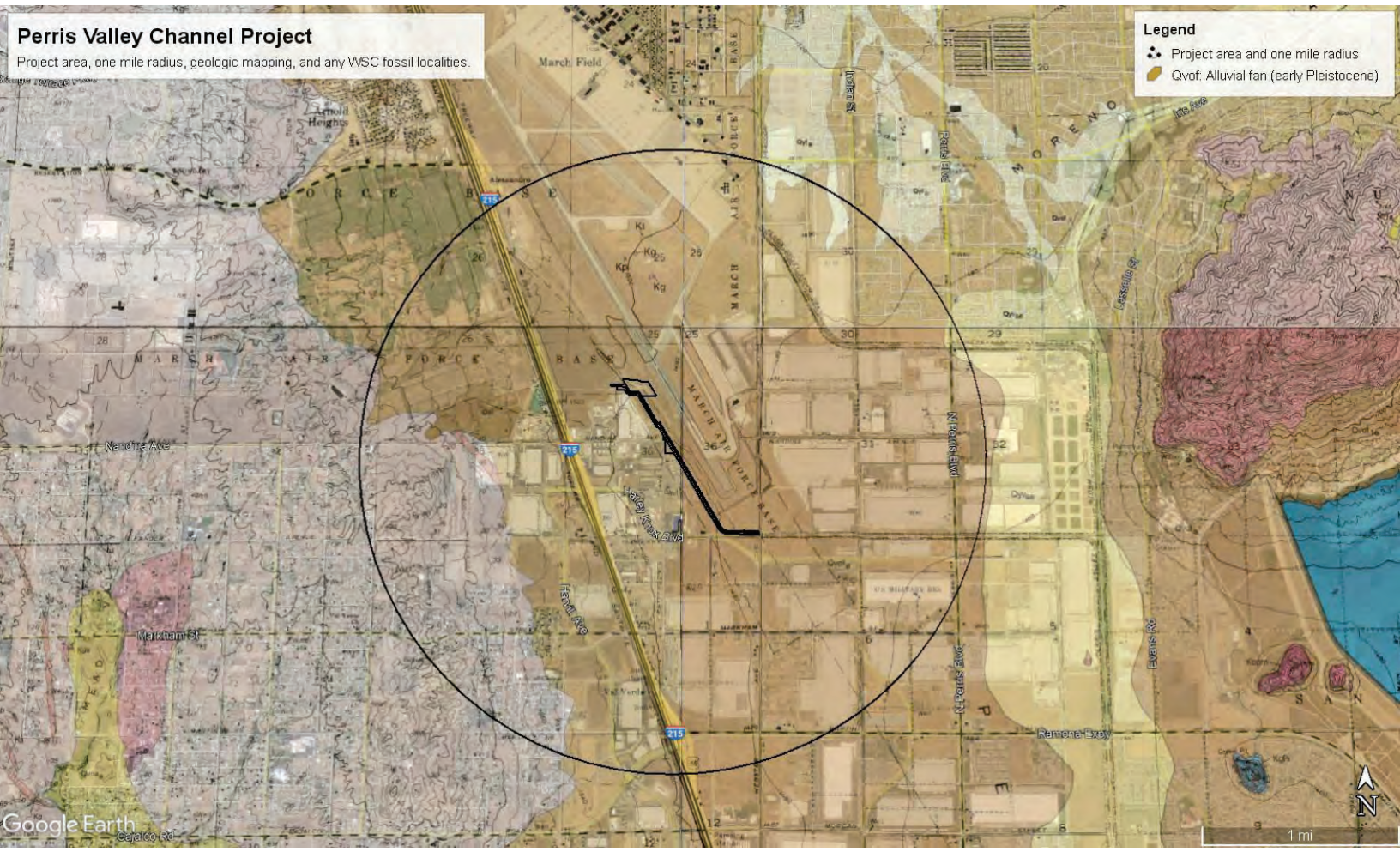
Darla Radford
Collections Manager

Perris Valley Channel Project

Project area, one mile radius, geologic mapping, and any WSC fossil localities.

Legend

-  Project area and one mile radius
-  Qvof: Alluvial fan (early Pleistocene)



Appendix E
Greenhouse Gas Emissions Memorandum

PERRIS VALLEY CHANNEL LATERAL B, STAGE 4 PROJECT

PERRIS VALLEY CHANNEL LATERAL B, STAGE 4 PROJECT

CITY OF PERRIS, COUNTY OF RIVERSIDE, CALIFORNIA

Greenhouse Gas Emissions Technical Memorandum

Prepared For:

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June 2022

JN 187014

PURPOSE

The purpose of this technical memorandum is to evaluate potential greenhouse gas (GHG) impacts that could result from the proposed Perris Valley Channel Lateral B, Stage 4 Project (project), located within the limits of March Air Reserve Base (MARB) and the City of Perris (City), California.

PROJECT LOCATION

The project site is partially located within the limits of the City of Perris and lands owned by March Joint Powers Authority (MJPA) and MARB in southwestern Riverside County. The proposed alignment would be located between the existing Perris Valley Channel (PVC) Lateral B, Stage 2 facility at Heacock Street and the PVC Lateral B, Stage 5 facility that is under construction as part of the VIP 215 project to the northwest. The project is located within Township 3 South, Range 4 West, Section 36 San Bernardino Baseline Meridian within Assessor's Parcel Numbers (APNs) 294-220-003, 294-200-002, 294-180-007, 294-180-006, 294-180-037, 294-180-055, and 294-180-017.

EXISTING SITE CONDITIONS

The project area is characterized as developed and undeveloped-disturbed land. The surrounding areas consists of MARB to the east and scattered industrial development to the north, south, and west. An existing drainage course is located within MARB property approximately 350 feet west of the existing runway and 300 feet east of the western perimeter fence boundary of MARB. Runoff in this area drains from the north to south via this natural drainage course towards a soft bottom open channel at Heacock Street (Heacock Channel) eventually draining east towards Perris Valley Channel.

PROJECT DESCRIPTION

The project would construct PVC Lateral B Stage 4 which consists of approximately 6,000 feet of reinforced concrete box (RCB) culvert starting at Heacock Street (at the upstream end of PVC Lateral B, Stage 2) to the downstream terminus of the PVC Lateral B Stage 5 facility, which is currently under construction as part of the VIP-215 project. The project's general alignment begins at the downstream terminus of PVC Lateral B Stage 5 and heads south and east adjacent to the MARB west perimeter security fence before tying into the PVC Lateral B Stage 2 facility at Heacock Street. The project would include three transitions structures, four junction structures, twelve bolted down manholes for security, and two inlets along the southernmost end of the alignment to collect onsite flows from MARB. The project would also include two lateral stubs and bulkheads for the future construction of Lateral B-7 and Lateral B-8 in the City of Perris. The project would be located mostly within MARB right of way. This alignment will go through APN 294-180-055; where a 45-foot permanent easement has been dedicated for the construction and maintenance of Stage 4.

Construction activities are anticipated to occur over a period of 12 months. Site preparation is anticipated to take approximately one month, grading would take approximately five months, paving would take approximately one and half months, building construction would take approximately 5 months, and site cleanup would take approximately one months. Approximately 25,000 cubic yards of soil export would be required.

GLOBAL CLIMATE CHANGE

The natural process through which heat is retained in the troposphere is called the “greenhouse effect.”¹ The greenhouse effect traps heat in the troposphere through a threefold process as follows: short wave radiation emitted by the sun is absorbed by the Earth; the Earth emits a portion of this energy in the form of long wave radiation; and GHGs in the upper atmosphere absorb this long wave radiation and emit this long wave radiation into space and toward the Earth. This “trapping” of the long wave (thermal) radiation emitted back toward the Earth is the underlying process of the greenhouse effect.

California is a substantial contributor of global GHGs, emitting approximately 418 million metric tons of carbon dioxide equivalent (MMTCO₂e) per year.² A carbon dioxide equivalent is defined as the number of metric tons of CO₂ emissions with the same global warming potential as one metric ton of another GHG. Methane (CH₄) is also an important GHG that potentially contributes to global climate change. GHGs are global in their effect, which is to increase the earth’s ability to absorb heat in the atmosphere. As primary GHGs have a long lifetime in the atmosphere, accumulate over time, and are generally well-mixed, their impact on the atmosphere is mostly independent of the point of emission. Every nation emits GHGs and as a result makes an incremental cumulative contribution to global climate change; therefore, global cooperation will be required to reduce the rate of GHG emissions enough to slow or stop the human-caused increase in average global temperatures and associated changes in climatic conditions.

The impact of human activities on global climate change is apparent in the observational record. Air trapped by ice has been extracted from core samples taken from polar ice sheets to determine the global atmospheric variation of CO₂, CH₄, and nitrous oxide (N₂O) from before the start of industrialization (approximately 1750), to over 650,000 years ago. For that period, it was found that CO₂ concentrations ranged from 180 to 300 parts per million (ppm). For the period from approximately 1750 to the present, global CO₂ concentrations increased from a pre-industrialization period concentration of 280 to 379 ppm in 2005, with the 2005 value far exceeding the upper end of the pre-industrial period range. As of May 2022, the highest monthly average concentration of CO₂ in the atmosphere was recorded at 420 ppm.³

1 The troposphere is the bottom layer of the atmosphere, which varies in height from the Earth’s surface to 10 to 12 kilometers.

2 California Air Resources Board, *California Greenhouse Gas Emissions for 2000 to 2019, Trends of Emissions and Other Indicators*, https://ww2.arb.ca.gov/sites/default/files/classic/cc/inventory/2000_2019_ghg_inventory_trends_20220401.pdf, July 28, 2021, accessed May 6, 2022.

3 Scripps Institution of Oceanography, *Carbon Dioxide Concentration at Mauna Loa Observatory*, <https://scripps.ucsd.edu/programs/keelingcurve/>, accessed May 5, 2022.

The Intergovernmental Panel on Climate Change (IPCC) constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. It concluded that a stabilization of GHGs at 400 to 450 ppm carbon dioxide equivalent (CO₂e)⁴ concentration is required to keep global mean warming below 2 degrees Celsius (°C), which in turn is assumed to be necessary to avoid dangerous climate change.

REGULATORY SETTING

1.1 FEDERAL

To date, no national standards have been established for nationwide GHG reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at the project level. Various efforts, summarized below, have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects.

Energy Independence and Security Act of 2007.

The Energy Independence and Security Act of 2007 (December 2007), among other key measures, requires the following, which would aid in the reduction of national GHG emissions:

- Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
- Set a target of 35 miles per gallon for the combined fleet of cars and light trucks by model year 2020 and direct the National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
- Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

U.S. Environmental Protection Agency Endangerment Finding.

The U.S. Environmental Protection Agency's (EPA) authority to regulate GHG emissions stems from the U.S. Supreme Court decision in *Massachusetts v. EPA* (2007). The Supreme Court ruled that GHGs meet the definition of air pollutants under the existing Clean Air Act and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court's ruling, the EPA finalized an endangerment finding in December 2009. Based on scientific evidence it found that six GHGs (CO₂, CH₄, N₂O, hydrofluorocarbons [HFCs], perfluorocarbons [PFCs], and sulfur hexafluoride [SF₆])

⁴ Carbon Dioxide Equivalent (CO₂e) – A metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential.

constitute a threat to public health and welfare. Thus, it is the Supreme Court’s interpretation of the existing Act and the EPA’s assessment of the scientific evidence that form the basis for the EPA’s regulatory actions.

Presidential Executive Order 13783.

Presidential Executive Order 13783, Promoting Energy Independence and Economic Growth (March 28, 2017), orders all federal agencies to apply cost-benefit analyses to regulations of GHG emissions and evaluations of the social cost of carbon, nitrous oxide, and methane.

1.2 STATE

The State of California has adopted various administrative initiatives and legislation related to climate change, much of which set aggressive goals for GHG emissions reductions statewide. Although lead agencies must evaluate GHG emissions of projects and their effects on climate change as required by the California Environmental Quality Act (CEQA), the CEQA Guidelines do not require or suggest specific methodologies for performing an assessment or specific thresholds of significance, and do not specify GHG reduction mitigation measures. Instead, the CEQA Guidelines allow lead agencies to choose methodologies and make significance determinations based on substantial evidence, as discussed in further detail below. No state agency has promulgated binding regulations for analyzing GHG emissions, determining their significance, or mitigating significant effects in CEQA documents. Thus, lead agencies exercise their discretion in determining how to analyze GHGs.

California Global Warming Solutions Act (Assembly Bill 32)

The primary act that has driven GHG regulation and analysis in California is the California Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32) (Health and Safety Code Sections 38500, 38501, 28510, 38530, 38550, 38560, 38561–38565, 38570, 38571, 38574, 38580, 38590, 38592–38599), which instructs the California Air Resources Board (CARB) to develop and enforce regulations for the reporting and verifying of statewide GHG emissions. The act directed CARB to set a GHG emissions limit based on 1990 levels, to be achieved by 2020. The bill set a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner. The heart of the bill is the requirement that statewide GHG emissions be reduced to 1990 levels by 2020.

CARB Scoping Plan

On December 11, 2008, CARB adopted its Scoping Plan, which functions as a roadmap to achieve GHG reductions in California required by AB 32 through subsequently enacted regulations. CARB’s Scoping Plan contains the main strategies California will implement to reduce GHG emissions by 174 MMTCO₂e, or approximately 30 percent, from the State’s projected 2020 emissions level of 596 MMTCO₂e under a business-as-usual (BAU)⁵ scenario. This is a reduction of 42 MMTCO₂e, or almost ten percent, from 2002

⁵ “Business-as-Usual” refers to emissions that would be expected to occur in the absence of GHG reductions. See <http://www.arb.ca.gov/cc/inventory/data/bau.htm>. Note that there is significant controversy as to what BAU means. In determining the GHG 2020 limit, CARB used the above as the “definition.” It is broad enough to allow for design features to be counted as reductions.

to 2004 average emissions, but requires the reductions in the face of population and economic growth through 2020.

CARB's Scoping Plan calculates 2020 BAU emissions as the emissions that would be expected to occur in the absence of any GHG reduction measures. The 2020 BAU emissions estimate was derived by projecting emissions from a past baseline year using growth factors specific to each of the different economic sectors (e.g., transportation, electrical power, commercial and residential, industrial, etc.). CARB used three-year average emissions by sector for 2002 to 2004 to forecast emissions to 2020. The measures described in CARB's Scoping Plan are intended to reduce the projected 2020 BAU to 1990 levels, as required by AB 32.

AB 32 requires CARB to update the Scoping Plan at least once every five years. CARB adopted the first major update to the Scoping Plan on May 22, 2014. The updated Scoping Plan summarizes recent science related to climate change, including anticipated impacts to California and the levels of GHG reduction necessary to likely avoid risking irreparable damage. It identifies the actions California has already taken to reduce GHG emissions and focuses on areas where further reductions could be achieved to help meet the 2020 target established by AB 32. The Scoping Plan update also looks beyond 2020 toward the 2050 goal, established in Executive Order S-3-05, and observes that "a mid-term statewide emission limit will ensure that the State stays on course to meet our long-term goal." The Scoping Plan update did not establish or propose any specific post-2020 goals, but identified such goals adopted by other governments or recommended by various scientific and policy organizations.

In December 2017, CARB approved the *California's 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Target* (2017 Scoping Plan). This update focuses on implementation of a 40 percent reduction in GHG emissions by 2030 compared to 1990 levels. To achieve this, the 2017 Scoping Plan draws on a decade of successful programs that addresses the major sources of climate changing gases in every sector of the economy:

- *More Clean Cars and Trucks*: The plan sets out far-reaching programs to incentivize the sale of millions of zero-emission vehicles, drive the deployment of zero-emission trucks, and shift to a cleaner system of handling freight statewide.
- *Increased Renewable Energy*: California's electric utilities are ahead of schedule in meeting the requirement that 33 percent of electricity come from renewable sources by 2020. The Scoping Plan guides utilities to 50 percent renewables, as required under Senate Bill (SB)350.
- *Slashing Super-Pollutants*: The plan calls for a significant cut in super-pollutants such as methane and HFC refrigerants, which are responsible for as much as 40 percent of global warming.
- *Cleaner Industry and Electricity*: California's renewed cap-and-trade program extends the declining cap on emissions from utilities and industries and the carbon allowance auctions. The auctions will continue to fund investments in clean energy and efficiency, particularly in disadvantaged communities.

- *Cleaner Fuels*: The Low Carbon Fuel Standard will drive further development of cleaner, renewable transportation fuels to replace fossil fuels.
- *Smart Community Planning*: Local communities will continue developing plans which will further link transportation and housing policies to create sustainable communities.
- *Improved Agriculture and Forests*: The Scoping Plan also outlines innovative programs to account for and reduce emissions from agriculture, as well as forests and other natural lands.

California Green Building Standards

The California Green Building Standards Code (California Code of Regulations, Title 24, Part 11), commonly referred to as the CALGreen Code, is a statewide mandatory construction code developed and adopted by the California Building Standards Commission and the Department of Housing and Community Development. The CALGreen standards require new residential and commercial buildings to comply with mandatory measures under the topics of planning and design, energy efficiency, water efficiency/conservation, material conservation and resource efficiency, and environmental quality. CALGreen also provides voluntary tiers and measures that local governments may adopt that encourage or require additional measures in the five green building topics. The most recent update to the CALGreen Code went into effect January 1, 2020.

Achieving the 2030 target under the 2017 Scoping Plan would also spur the transformation of the California economy and fix its course securely on achieving an 80 percent reduction in GHG emissions by 2050, consistent with the global consensus of the scale of reductions needed to stabilize atmospheric GHG concentrations at 450 ppm CO₂, and reduce the likelihood of catastrophic climate change. Currently, global levels are approximately 420 ppm.⁶ Table 1, California State Climate Change Legislation, provides a brief overview of other California legislation relating to climate change that may affect emissions associated with the proposed project.

⁶ Scripps Institution of Oceanography, *Carbon Dioxide Concentration at Mauna Loa Observatory*, <https://scripps.ucsd.edu/programs/keelingcurve/>, accessed May 5, 2022.

Table 1: California State Climate Change Legislation

Legislation	Description
Assembly Bill 1493 (AB 1493), Advanced Clean Cars Program and Executive Order N-79-20	Assembly Bill 1493 (“the Pavley Standard”) (Health and Safety Code Sections 42823 and 43018.5) aims to reduce GHG emissions from noncommercial passenger vehicles and light-duty trucks of model years 2009 to 2016. By 2025, when all rules will be fully implemented, new automobiles will emit 34 percent fewer CO ₂ e emissions and 75 percent fewer smog-forming emissions. Signed into law in September 2020, Executive Order N-79-20 establishes a goal to make all new passenger cars and trucks (including drayage trucks) sold in California to be zero-emission by 2035, and medium and heavy-duty trucks by 2045, where feasible. Further, all off-road vehicles and equipment shall also be zero-emission by 2035 where feasible.
Executive Order S-01-07 and Low Carbon Fuel Standard	Executive Order S-01-07 (2007) requires a 10 percent or greater reduction in the average fuel carbon intensity for transportation fuels in California. The regulation established the Low Carbon Fuel Standard, which took effect on January 1, 2011, and is codified at Title 17, California Code of Regulations, Sections 95480–95490. The Low Carbon Fuel Standard will reduce GHG emissions by reducing the carbon intensity of transportation fuels used in California by at least 10 percent by 2020.
Renewables Portfolio Standard (Senate Bill X1-2 [SB X1-2], Senate Bill 350 [SB 350], and Senate Bill 100 [SB 100])	California’s Renewables Portfolio Standard (RPS) requires retail sellers of electric services to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020. The 33 percent standard is consistent with the RPS goal established in the Scoping Plan. The passage of SB 350 in 2015 updates the RPS to require the amount of electricity generated and sold to retail customers per year from eligible renewable energy resources to be increased to 50 percent by December 31, 2030. The bill will make other revisions to the RPS program and to certain other requirements on public utilities and publicly-owned electric utilities. The passage of SB 100 in 2018 further requires achieving 60 percent renewable energy resources target by 2030, and 100 percent renewable energy resources target by 2045.
Senate Bill 375 (SB 375)*	SB 375 took effect in 2008 and provides a new planning process to coordinate land use planning, regional transportation plans, and funding priorities to help California meet the GHG reduction goals established in AB 32. SB 375 requires metropolitan planning organizations to incorporate a sustainable communities’ strategy in their regional transportation plans that will achieve GHG emissions reduction targets by reducing vehicle miles traveled from light-duty vehicles through the development of more compact, complete, and efficient communities. SB 375 requires CARB to periodically update the targets, no later than every 8 years. CARB has set regional targets, indexed to years 2020 and 2035, to help achieve significant additional GHG emission reductions from changed land use patterns and improved transportation in support of the State’s climate goals, as well as in support of statewide public health and air quality objectives.
California Building Energy Efficiency Standards (California Energy Code)	In general, the California Building Energy Efficiency Standards require the design of building shells and building components to conserve energy. The California Energy Commission updates the Building Energy Efficiency Standards every three years by working with stakeholders in a public and transparent process. The 2019 Building Energy Efficiency Standards contained in the California Code of Regulations, Title 24, Part 6 (also known as the California Energy Code) took effect on January 1, 2019. The 2019 Building Energy Efficiency Standards are 7 percent more efficient than previous standards for residential construction and once rooftop solar electricity generation is factored in, homes built under the 2019 standards will use about 53 percent less energy than those under the 2016 standards.
Senate Bill 32 (Amendments to California Global Warming Solutions Act of 2006: Emission Limit) (SB 32)	Signed into law in September 2016, SB 32 codifies the 2030 target (reduce Statewide GHG emissions by 40 percent below 1990 levels) in Executive Order B-30-15. The bill authorizes the state board to adopt an interim GHG emissions level target to be achieved by 2030. SB 32 states that the intent is for the legislature and appropriate agencies to adopt complementary policies which ensure that the long-term emissions reductions advance specified criteria. In December 2017, CARB approved the California’s 2017 Climate Change Scoping Plan: The Strategy for Achieving California’s 2030 Greenhouse Gas Target that provides guidance for compliance with SB 32.

*Senate Bill 375 is codified at Government Code Sections 65080, 65400, 65583, 65584.01, 65584.02, 65584.04, 65587, 65588, 14522.1, 14522.2, and 65080.01, as well as at Public Resources Code Sections 21061.3 and 21159.28 and Chapter 4.2.

1.3 REGIONAL

South Coast Air Quality Management District

In 2008, the South Coast Air Quality Management District (SCAQMD) released draft guidance regarding interim CEQA GHG significance thresholds.⁷ Within its October 2008 document, the SCAQMD proposed the use of a percent emission reduction target to determine significance for commercial/residential projects that emit greater than 3,000 metric tons carbon dioxide equivalent (MTCO₂e) per year. Under this proposal, commercial/residential projects that emit fewer than 3,000 MTCO₂e per year would be assumed to have a less than significant impact on climate change. On December 5, 2008, the SCAQMD Governing Board adopted the staff proposal for an interim GHG significance threshold of 10,000 MTCO₂e per year for stationary source/industrial projects where the SCAQMD is the lead agency. However, the SCAQMD has yet to adopt a GHG significance threshold for application by local lead agencies in their review of land use development projects (e.g., residential/commercial projects).

Southern California Association of Governments 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy

On September 3, 2020, the Regional Council of Southern California Association of Governments (SCAG) formally adopted the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments – Connect SoCal (2020–2045 RTP/SCS). The SCS portion of the 2020-2045 RTP/SCS highlights strategies for the region to reach the regional target of reducing GHGs from autos and light-duty trucks by 8 percent per capita by 2020, and 19 percent by 2035 (compared to 2005 levels). Specially, these strategies are:

- Focus growth near destinations and mobility options;
- Promote diverse housing choices;
- Leverage technology innovations;
- Support implementation of sustainability policies; and
- Promote a green region.

Furthermore, the 2020-2045 RTP/SCS discusses a variety of land use tools to help achieve the state-mandated reductions in GHG emissions through reduced per capita vehicle miles traveled (VMT). Some of these tools include center focused placemaking, focusing on priority growth areas, job centers, transit priority areas, as well as high quality transit areas and green regions.

⁷ South Coast Air Quality Management District, *Draft Guidance Document—Interim CEQA Greenhouse Gas (GHG) Significance Threshold*, October 2008.

City of Perris Climate Action Plan

The City of Perris adopted its Climate Action Plan (CAP) on February 23, 2016. The CAP has been developed to address global climate change through the reduction of harmful GHG emissions at the community level, and as part of California's mandated statewide GHG emissions reduction goals (AB 32). However, the City's CAP does not align with the Statewide goals beyond 2020 and thus the CAP is not consistent with the criteria within CEQA Guidelines Section 15183.5 for the post-2020 period. Given that 2020 has passed, the 2016 CAP was not utilized for project consistency.

CALIFORNIA ENVIRONMENTAL QUALITY ACT THRESHOLDS

In accordance with the CEQA Guidelines, project impacts are evaluated to determine whether significant adverse environmental impacts would occur. This analysis will focus on the project's potential impacts and provide mitigation measures, if required, to reduce or avoid any potentially significant impacts that are identified. According to Appendix G of the CEQA Guidelines, the proposed project would have a significant impact related to greenhouse gas emissions, if it would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment (refer to Impact GHG-1); and/or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases (refer to Impact GHG-2).

IMPACT ANALYSIS

IMPACT GHG-1: WOULD THE PROJECT GENERATE GREENHOUSE GAS EMISSIONS, EITHER DIRECTLY OR INDIRECTLY, THAT MAY HAVE A SIGNIFICANT IMPACT ON THE ENVIRONMENT?

Less Than Significant Impact. The City has not adopted a numerical significance threshold for assessing impacts related to GHG emissions. Similarly, the SCAQMD, CARB, or any other state or regional agency has not yet adopted a numerical significance threshold for assessing GHG emissions that applies to the project. Since there is no applicable adopted or accepted numerical threshold of significance for GHG emissions, the methodology for evaluating the project's impacts related to GHG emissions focuses on its consistency with statewide, regional, and local plans adopted for the purpose of reducing and/or mitigating GHG emissions. This evaluation of consistency with such plans is the sole basis for determining the significance of the project's GHG-related impacts on the environment.

Notwithstanding, for informational purposes, the analysis also calculates the amount of GHG emissions that would be attributable to the project using recommended air quality models, as described below. The primary purpose of quantifying the project's GHG emissions is to satisfy State CEQA Guidelines Section

15064.4(a), which calls for a good-faith effort to describe and calculate emissions. The estimated emissions inventory is also used to determine if there would be a reduction in the project’s incremental contribution of GHG emissions as a result of compliance with regulations and requirements adopted to implement plans for the reduction or mitigation of GHG emissions. However, the significance of the project’s GHG emissions impacts is not based on the amount of GHG emissions resulting from the project.

Project-Related Sources of Greenhouse Gases

The proposed project would result in direct and indirect emissions of CO₂, N₂O, and CH₄, and would not result in other GHGs that would facilitate a meaningful analysis. Therefore, this analysis focuses on these three forms of GHG emissions. Project-related GHG emissions include emissions from construction activities. The most recent version of the California Emissions Estimator Model (CalEEMod), version 2020.4.0, was used to calculate direct and indirect project-related GHG emissions. Table 2, *Estimated Greenhouse Gas Emissions*, presents the estimated CO₂, N₂O, and CH₄ emissions associated with the proposed project. CalEEMod outputs are contained within Appendix A, *Greenhouse Gas Emissions Data*.

Table 2: Estimated Greenhouse Gas Emissions

Source	CO ₂	CH ₄		N ₂ O		Total MTCO ₂ e ^{2,3}
	Metric tons/year ¹	Metric tons/year ¹	Metric tons of CO ₂ e ^{1,3}	Metric tons/year ¹	Metric tons of CO ₂ e ^{1,3}	
Direct Emissions						
Construction (amortized over 30 years) ⁴	47.04	0.01	0.36	<0.01	0.05	47.45
<i>Total Project-Related Emissions³</i>	<i>48.36 MTCO₂e/year</i>					
Notes:						
Carbon dioxide equivalent = CO ₂ e; metric tons of carbon dioxide equivalent per year = MTCO ₂ e per year						
1. Project emissions were calculated using CalEEMod version 2020.4.0, as recommended by the SCAQMD.						
2. Totals may be slightly off due to rounding.						
3. Carbon dioxide equivalent values calculated using the U.S. Environmental Protection Agency Website, <i>Greenhouse Gas Equivalencies Calculator</i> , http://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator , accessed May 13, 2022.						
4. Total project construction GHG emissions equate to 1,423.39 MTCO ₂ e. Value shown is amortized over the lifetime of the project (assumed to be 30 years).						
Refer to <u>Appendix A, <i>Greenhouse Gas Emissions Data</i></u> , for detailed model input/output data.						

Construction of the project would emit GHG emissions, as indicated in Table 2. In total, the project would result in approximately 47.45 MTCO₂e per year when amortized over 30 years (or a total of 1,423.39 MTCO₂e emissions). Maintenance activities that may be required during project operation would occur on an as needed basis. Typical maintenance activities for a storm drain facility would include vegetation removal or thinning, sediment removal, debris and trash removal, bank stabilization, and in-channel erosion repair, none of which would have the potential to result in significant air pollution. The project would generate minimal trips in operations. As a result, the project would not result in significant increase in operational GHG emissions.

Mitigation Measures: No mitigation is required.

IMPACT GHG-2: WOULD THE PROJECT CONFLICT WITH AN APPLICABLE PLAN, POLICY OR REGULATION ADOPTED FOR THE PURPOSE OF REDUCING THE EMISSIONS OF GREENHOUSE GASES?

Less Than Significant Impact.

Consistency with Applicable GHG Plans, Policies, or Regulations

The GHG plan consistency analysis for the project is based on the project’s consistency with the 2017 Scoping Plan, and 2020-2045 RTP/SCS. The 2017 Scoping Plan describes the approach California will take to reduce GHG emissions by 40 percent below 1990 levels by the year 2030. The 2020-2045 RTP/SCS is a regional growth management strategy that targets per-capita GHG reduction from passenger vehicles and light-duty trucks in the Southern California region and incorporates local land use projections and circulation networks in city and county general plans. The following discussion analyzes the project’s consistency with the CARB 2017 Scoping Plan, and SCAG 2020-2045 RTP/SCS.

Consistency with the SCAG 2020-2045 RTP/SCS

The SCAG’s 2020-2045 RTP/SCS includes performance goals that were adopted to help focus future investments on the best-performing projects, as well as different strategies to preserve, maintain, and optimize the performance of the existing transportation system. The 2020-2045 RTP/SCS is forecasted to help California reach its GHG reduction goals by reducing GHG emissions from passenger cars by 8 percent below 2005 levels by 2020 and 19 percent by 2035 in accordance with the most recent CARB targets, adopted in March 2018. Five key SCS strategies are included in the 2020-2045 RTP/SCS to help the region meet its regional VMT and GHG reduction goals, as required by the State. Table 3, *Consistency with the 2020-2045 RTP/SCS* shows the project’s consistency with these five strategies found within the 2020-2045 RTP/SCS. As shown, the proposed project would be consistent with the GHG emission reduction strategies contained in the 2020-2045 RTP/SCS.

Table 3: 2020-2045 RTP/SCS Project Consistency Analysis

Reduction Strategy	Applicable Land Use Tools	Project Consistency Analysis
Focus Growth Near Destinations and Mobility Options		
<ul style="list-style-type: none"> Emphasize land use patterns that facilitate multimodal access to work, educational and other destinations Focus on a regional jobs/housing balance to reduce commute times and distances and expand job opportunities near transit and along center-focused main streets Plan for growth near transit investments and support implementation of first/last mile strategies Promote the redevelopment of underperforming retail developments and other outmoded nonresidential uses 	<p>Center Focused Placemaking, Priority Growth Areas (PGA), Job Centers, High Quality Transit Areas (HQTAs), Transit Priority Areas (TPA), Neighborhood Mobility Areas (NMAs), Livable Corridors, Spheres of Influence (SOIs), Green Region, Urban Greening.</p>	<p>Not Applicable. The proposed project consists of a storm drain facility. As such, no new land uses, or development are proposed that would focus growth near destinations and mobility options. Therefore, this strategy is not applicable to the proposed project.</p>
Promote Diverse Housing Choices		
<ul style="list-style-type: none"> Preserve and rehabilitate affordable housing and prevent displacement 	<p>PGA, Job Centers, HQTAs, NMA, TPAs, Livable</p>	<p>Not Applicable. Refer to response above regarding</p>

<ul style="list-style-type: none"> • Identify funding opportunities for new workforce and affordable housing development • Create incentives and reduce regulatory barriers for building context sensitive accessory dwelling units to increase housing supply • Provide support to local jurisdictions to streamline and lessen barriers to housing development that supports reduction of greenhouse gas emissions 	<p>Corridors, Green Region, Urban Greening.</p>	<p>project consistency with the “Focus Growth Near Destinations and Mobility Options” strategy. The proposed project does not include residential development; thus, this strategy is not applicable.</p>
<p>Leverage Technology Innovations</p>		
<ul style="list-style-type: none"> • Promote low emission technologies such as neighborhood electric vehicles, shared rides hailing, car sharing, bike sharing and scooters by providing supportive and safe infrastructure such as dedicated lanes, charging and parking/drop-off space • Improve access to services through technology—such as telework and telemedicine as well as other incentives such as a “mobility wallet,” an app-based system for storing transit and other multi-modal payments • Identify ways to incorporate “micro-power grids” in communities, for example solar energy, hydrogen fuel cell power storage and power generation 	<p>HQTA, TPAs, NMA, Livable Corridors.</p>	<p>Not Applicable. Refer to response above regarding project consistency with the “Focus Growth Near Destinations and Mobility Options” strategy. The proposed project consists of a storm drain facility with minimal maintenance activities anticipated; thus, this strategy is not applicable.</p>
<p>Support Implementation of Sustainability Policies</p>		
<ul style="list-style-type: none"> • Pursue funding opportunities to support local sustainable development implementation projects that reduce greenhouse gas emissions • Support Statewide legislation that reduces barriers to new construction and that incentivizes development near transit corridors and stations • Support local jurisdictions in the establishment of Enhanced Infrastructure Financing Districts (EIFDs), Community Revitalization and Investment Authorities (CRIAs), or other tax increment or value capture tools to finance sustainable infrastructure and development projects, including parks and open space • Work with local jurisdictions/communities to identify opportunities and assess barriers to implement sustainability strategies • Enhance partnerships with other planning organizations to promote resources and best practices in the SCAG region • Continue to support long range planning efforts by local jurisdictions • Provide educational opportunities to local decisions makers and staff on new tools, best practices and policies related to implementing the Sustainable Communities Strategy 	<p>Center Focused Placemaking, Priority Growth Areas (PGA), Job Centers, High Quality Transit Areas (HQTAs), Transit Priority Areas (TPA), Neighborhood Mobility Areas (NMAs), Livable Corridors, Spheres of Influence (SOIs), Green Region, Urban Greening.</p>	<p>Not Applicable. Refer to response above regarding project consistency with the “Focus Growth Near Destinations and Mobility Options” strategy. The proposed project consists of a storm drain facility with minimal maintenance activities anticipated; thus, this strategy is not applicable.</p>
<p>Promote a Green Region</p>		
<ul style="list-style-type: none"> • Support development of local climate adaptation and hazard mitigation plans, as well as project implementation that improves community resiliency to climate change and natural hazards • Support local policies for renewable energy production, reduction of urban heat islands and carbon sequestration • Integrate local food production into the regional landscape 	<p>Green Region, Urban Greening, Greenbelts and Community Separators.</p>	<p>Not Applicable. Refer to response above regarding project consistency with the “Focus Growth Near Destinations and Mobility Options” strategy. The proposed project consists of a storm drain facility with minimal</p>

<ul style="list-style-type: none"> • Promote more resource efficient development focused on conservation, recycling and reclamation • Preserve, enhance and restore regional wildlife connectivity • Reduce consumption of resource areas, including agricultural land • Identify ways to improve access to public park space 		<p>maintenance activities anticipated; thus, this strategy is not applicable.</p>
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Source: Southern California Association of Governments, Connect SoCal: 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy, September 3, 2020.

Consistency with the 2017 Scoping Plan

The 2017 Scoping Plan identifies GHG reduction measures necessary to achieve the 2030 target. These measures build upon those identified in the first update to the Scoping Plan (2013). Although a number of these measures are currently established as policies and measures, some measures have not yet been formally proposed or adopted. It is expected that these measures or similar actions to reduce GHG emissions will be adopted as required to achieve statewide GHG emissions targets. Table 4, Consistency with the 2017 Scoping Plan, provides an evaluation of applicable reduction actions/strategies by emissions source category, and demonstrates that the project would be consistent with the reduction actions/strategies outlined in the 2017 Scoping Plan.

Table 4: Consistency with the 2017 Scoping Plan

Actions and Strategies	Project Consistency Analysis
SB 350	
Achieve a 50 percent Renewables Portfolio Standard (RPS) by 2030, with a doubling of energy efficiency savings by 2030.	Consistent. The proposed project would not be an electrical provider and would not delay the goals of SB 350. Furthermore, the project would not consume electricity during operation. As such, the project would be in compliance with SB 350.
Low Carbon Fuel Standard (LCFS)	
Increase stringency of carbon fuel standards; reduce the carbon intensity of fuels by 18 percent by 2030, which is up from 10 percent in 2020.	Consistent. Motor vehicles (including trucks) driven within the project area and hauling trucks driven during project construction would be use LCFS compliant fuels. As such, the project would be in compliance with LCFS.
Mobile Source Strategy (Cleaner Technology and Fuels Scenario)	
Maintain existing GHG standards of light and heavy-duty vehicles while adding an addition 4.2 million zero-emission vehicles (ZEVs) on the road. Increase the number of ZEV buses, delivery trucks, or other trucks.	Not Applicable. The project proposes a storm drain facility and would only generate minimal trips during operation as the maintenance activities would occur as needed basis. The minimal trip increase would not impeded with implementation of such reduction strategy. As such, the project would not be applicable to this strategy.
Sustainable Freight Action Plan	
Improve the freight system efficiency and maximize the use of near zero emission vehicles and equipment powered by renewable energy. Deploy over 100,000 zero-emission trucks and equipment by 2030.	Not Applicable. As discussed above, the project proposes a storm drain facility and would not generate any trips during operation. As such, the project would not be applicable to this strategy.
Short-Lived Climate Pollutant (SLCP) Reduction Strategy	
Reduce the GHG emissions of methane and hydrofluorocarbons by 40 percent below the 2013 levels by 2030. Furthermore, reduce the emissions of black carbon by 50 percent below the 2013 levels by the year 2030.	Consistent. The project would not emit a large amount of CH ₄ (methane) emissions; refer to <u>Table 2</u> . Additionally, no hydrofluorocarbons would be emitted during project implementation. As such, the proposed project would not conflict with the SLCP reduction strategy.
SB 375 Sustainable Communities Strategies	

Increase the stringency of the 2035 GHG emission per capita reduction target for metropolitan planning organizations (MPO).	Consistent. As shown in Table 4 , the key strategies associated with the 2020-2045 RTP/SCS are not applicable to the proposed storm drain facility. Thus, the project would not conflict with the goals of SB 375.
Post-2020 Cap and Trade Programs	
The Cap-and-Trade Program will reduce greenhouse gas (GHG) emissions from major sources (covered entities) by setting a firm cap on statewide GHG emissions while employing market mechanisms to cost-effectively achieve the emission-reduction goals.	Not Applicable. As shown in Table 2 , the project would generate approximately 47.45 MTCO ₂ e per year, which is below the 25,000 MTCO ₂ e/yr Cap-and-Trade screening level. Therefore, the project would not be applicable to the program.
Source: California Air Resources Board, 2017 Scoping Plan, November 2017.	

Conclusion

In summary, the plan consistency analysis provided above demonstrates that the proposed project complies with or exceeds the plans, policies, regulations and GHG reduction actions/strategies outlined in the 2020-2045 RTP/SCS and CARB 2017 Scoping Plan. Therefore, the project would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing emissions of GHGs. Impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

REFERENCES

Documents

California Building Standards Commission, *2019 California Building Standards Code*, July 1, 2019.

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City of Perris, *Perris Climate Action Plan*, February 23, 2016.

Scripps Institution of Oceanography, *Carbon Dioxide Concentration at Mauna Loa Observatory*, <https://scripps.ucsd.edu/programs/keelingcurve/>, accessed May 5, 2022.

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South Coast Air Quality Management District, *Draft Guidance Document-Interim CEQA Greenhouse Gas (GHG) Significance Threshold*, October 2008.

U.S. Environmental Protection Agency Website, *Greenhouse Gas Equivalencies Calculator*, <http://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>, accessed May 13, 2022.

Websites / Programs

Google Earth, 2022.

South Coast Air Quality Management District, *California Emissions Estimator Model (CalEEMod)*, version 2020.4.0.

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Appendix A Greenhouse Gas Emissions Data

Appendix A Greenhouse Gas Emissions Data

Perris Valley - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Perris Valley

Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	6.00	1000sqft	0.14	6,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use -
- Construction Phase - per construction questionnaire
- Off-road Equipment - per PD
other material handling equipment is for moving RCB during construction
- Off-road Equipment - off-highway trucks includes 2 water trucks and 15 haul trucks
- Off-road Equipment - per PD
- Off-road Equipment - per PD
- Off-road Equipment - per PD
- Trips and VMT - per construction questionnaire
- Grading - per construction questionnaire
- Construction Off-road Equipment Mitigation - Rule 403

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	100.00	150.00
tblConstructionPhase	NumDays	2.00	150.00
tblConstructionPhase	NumDays	5.00	44.00
tblConstructionPhase	NumDays	5.00	22.00
tblConstructionPhase	NumDays	1.00	22.00
tblGrading	MaterialExported	0.00	25,000.00
tblOffRoadEquipment	HorsePower	247.00	187.00
tblOffRoadEquipment	LoadFactor	0.40	0.41
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	HaulingTripLength	20.00	5.00

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.7219	6.4047	8.8424	0.0157	0.3992	0.3079	0.7071	0.1104	0.2833	0.3937	0.0000	1,382.0816	1,382.0816	0.4282	4.9800e-003	1,394.2691
2024	0.0155	0.1297	0.1925	3.4000e-004	1.5700e-003	5.9000e-003	7.4700e-003	4.2000e-004	5.8400e-003	6.2600e-003	0.0000	29.0617	29.0617	2.1000e-003	3.0000e-005	29.1229
Maximum	0.7219	6.4047	8.8424	0.0157	0.3992	0.3079	0.7071	0.1104	0.2833	0.3937	0.0000	1,382.0816	1,382.0816	0.4282	4.9800e-003	1,394.2691

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.7219	6.4047	8.8424	0.0157	0.1823	0.3079	0.4902	0.0501	0.2833	0.3334	0.0000	1,382.0800	1,382.0800	0.4282	4.9800e-003	1,394.2675
2024	0.0155	0.1297	0.1925	3.4000e-004	1.5700e-003	5.9000e-003	7.4700e-003	4.2000e-004	5.8400e-003	6.2600e-003	0.0000	29.0617	29.0617	2.1000e-003	3.0000e-005	29.1229
Maximum	0.7219	6.4047	8.8424	0.0157	0.1823	0.3079	0.4902	0.0501	0.2833	0.3334	0.0000	1,382.0800	1,382.0800	0.4282	4.9800e-003	1,394.2675

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	54.13	0.00	30.36	54.43	0.00	15.08	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-3-2023	7-2-2023	2.2533	2.2533
2	7-3-2023	10-2-2023	3.0460	3.0460
3	10-3-2023	1-2-2024	1.7598	1.7598
4	1-3-2024	4-2-2024	0.1384	0.1384
		Highest	3.0460	3.0460

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	4.8000e-004	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-004	1.5000e-004	0.0000	0.0000	1.6000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	4.8000e-004	0.0000	8.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.5000e-004	1.5000e-004	0.0000	0.0000	1.6000e-004

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	4.8000e-004	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-004	1.5000e-004	0.0000	0.0000	1.6000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	4.8000e-004	0.0000	8.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.5000e-004	1.5000e-004	0.0000	0.0000	1.6000e-004

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/3/2023	5/2/2023	5	22	
2	Grading	Grading	5/1/2023	11/24/2023	5	150	
3	Building Construction	Building Construction	5/1/2023	11/24/2023	5	150	

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	Paving	Paving	1/1/2024	2/29/2024	5	44
5	Site Cleanup	Paving	3/1/2024	4/1/2024	5	22

Acres of Grading (Site Preparation Phase): 22

Acres of Grading (Grading Phase): 375

Acres of Paving: 0.14

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rollers	1	8.00	80	0.38
Site Preparation	Rubber Tired Dozers	2	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Other Material Handling Equipment	17	8.00	168	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Cranes	2	8.00	231	0.29
Building Construction	Excavators	1	8.00	158	0.38
Building Construction	Other Material Handling Equipment	7	8.00	168	0.40
Paving	Pumps	2	8.00	84	0.74
Site Cleanup	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	21	53.00	0.00	3,125.00	14.70	6.90	5.00	LD_Mix	HDT_Mix	HHDT

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Building Construction	10	3.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Cleanup	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1442	0.0000	0.1442	0.0741	0.0000	0.0741	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0150	0.1563	0.0980	2.1000e-004		7.2900e-003	7.2900e-003		6.7000e-003	6.7000e-003	0.0000	18.3535	18.3535	5.9400e-003	0.0000	18.5019
Total	0.0150	0.1563	0.0980	2.1000e-004	0.1442	7.2900e-003	0.1514	0.0741	6.7000e-003	0.0808	0.0000	18.3535	18.3535	5.9400e-003	0.0000	18.5019

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6000e-004	2.6000e-004	3.4500e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9310	0.9310	2.0000e-005	2.0000e-005	0.9388
Total	3.6000e-004	2.6000e-004	3.4500e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9310	0.9310	2.0000e-005	2.0000e-005	0.9388

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0534	0.0000	0.0534	0.0275	0.0000	0.0275	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0150	0.1563	0.0980	2.1000e-004		7.2900e-003	7.2900e-003		6.7000e-003	6.7000e-003	0.0000	18.3535	18.3535	5.9400e-003	0.0000	18.5019
Total	0.0150	0.1563	0.0980	2.1000e-004	0.0534	7.2900e-003	0.0607	0.0275	6.7000e-003	0.0342	0.0000	18.3535	18.3535	5.9400e-003	0.0000	18.5019

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6000e-004	2.6000e-004	3.4500e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9310	0.9310	2.0000e-005	2.0000e-005	0.9388
Total	3.6000e-004	2.6000e-004	3.4500e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9310	0.9310	2.0000e-005	2.0000e-005	0.9388

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2004	0.0000	0.2004	0.0217	0.0000	0.0217	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4887	4.3808	6.0831	0.0105		0.2106	0.2106		0.1938	0.1938	0.0000	925.0374	925.0374	0.2992	0.0000	932.5168
Total	0.4887	4.3808	6.0831	0.0105	0.2004	0.2106	0.4111	0.0217	0.1938	0.2155	0.0000	925.0374	925.0374	0.2992	0.0000	932.5168

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3.3 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.3000e-003	0.0655	0.0326	2.5000e-004	6.7600e-003	4.9000e-004	7.2500e-003	1.8600e-003	4.6000e-004	2.3200e-003	0.0000	24.3241	24.3241	3.6000e-004	3.8300e-003	25.4751
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0129	9.5600e-003	0.1248	3.6000e-004	0.0437	2.1000e-004	0.0439	0.0116	1.9000e-004	0.0118	0.0000	33.6417	33.6417	8.3000e-004	8.8000e-004	33.9253
Total	0.0152	0.0750	0.1574	6.1000e-004	0.0505	7.0000e-004	0.0512	0.0135	6.5000e-004	0.0141	0.0000	57.9658	57.9658	1.1900e-003	4.7100e-003	59.4004

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0743	0.0000	0.0743	8.0400e-003	0.0000	8.0400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4887	4.3808	6.0831	0.0105		0.2106	0.2106		0.1938	0.1938	0.0000	925.0363	925.0363	0.2992	0.0000	932.5157
Total	0.4887	4.3808	6.0831	0.0105	0.0743	0.2106	0.2849	8.0400e-003	0.1938	0.2018	0.0000	925.0363	925.0363	0.2992	0.0000	932.5157

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3.3 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.3000e-003	0.0655	0.0326	2.5000e-004	6.7600e-003	4.9000e-004	7.2500e-003	1.8600e-003	4.6000e-004	2.3200e-003	0.0000	24.3241	24.3241	3.6000e-004	3.8300e-003	25.4751
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0129	9.5600e-003	0.1248	3.6000e-004	0.0437	2.1000e-004	0.0439	0.0116	1.9000e-004	0.0118	0.0000	33.6417	33.6417	8.3000e-004	8.8000e-004	33.9253
Total	0.0152	0.0750	0.1574	6.1000e-004	0.0505	7.0000e-004	0.0512	0.0135	6.5000e-004	0.0141	0.0000	57.9658	57.9658	1.1900e-003	4.7100e-003	59.4004

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2018	1.7892	2.4924	4.2900e-003		0.0893	0.0893		0.0821	0.0821	0.0000	376.6278	376.6278	0.1218	0.0000	379.6730
Total	0.2018	1.7892	2.4924	4.2900e-003		0.0893	0.0893		0.0821	0.0821	0.0000	376.6278	376.6278	0.1218	0.0000	379.6730

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3.4 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.0000e-005	2.5700e-003	1.0200e-003	1.0000e-005	4.7000e-004	2.0000e-005	5.0000e-004	1.4000e-004	2.0000e-005	1.6000e-004	0.0000	1.2619	1.2619	1.0000e-005	1.9000e-004	1.3178
Worker	7.3000e-004	5.4000e-004	7.0600e-003	2.0000e-005	2.4700e-003	1.0000e-005	2.4800e-003	6.6000e-004	1.0000e-005	6.7000e-004	0.0000	1.9043	1.9043	5.0000e-005	5.0000e-005	1.9203
Total	8.1000e-004	3.1100e-003	8.0800e-003	3.0000e-005	2.9400e-003	3.0000e-005	2.9800e-003	8.0000e-004	3.0000e-005	8.3000e-004	0.0000	3.1661	3.1661	6.0000e-005	2.4000e-004	3.2381

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2018	1.7892	2.4924	4.2900e-003		0.0893	0.0893		0.0821	0.0821	0.0000	376.6274	376.6274	0.1218	0.0000	379.6726
Total	0.2018	1.7892	2.4924	4.2900e-003		0.0893	0.0893		0.0821	0.0821	0.0000	376.6274	376.6274	0.1218	0.0000	379.6726

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3.4 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.0000e-005	2.5700e-003	1.0200e-003	1.0000e-005	4.7000e-004	2.0000e-005	5.0000e-004	1.4000e-004	2.0000e-005	1.6000e-004	0.0000	1.2619	1.2619	1.0000e-005	1.9000e-004	1.3178
Worker	7.3000e-004	5.4000e-004	7.0600e-003	2.0000e-005	2.4700e-003	1.0000e-005	2.4800e-003	6.6000e-004	1.0000e-005	6.7000e-004	0.0000	1.9043	1.9043	5.0000e-005	5.0000e-005	1.9203
Total	8.1000e-004	3.1100e-003	8.0800e-003	3.0000e-005	2.9400e-003	3.0000e-005	2.9800e-003	8.0000e-004	3.0000e-005	8.3000e-004	0.0000	3.1661	3.1661	6.0000e-005	2.4000e-004	3.2381

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0135	0.1135	0.1637	2.9000e-004		5.1600e-003	5.1600e-003		5.1600e-003	5.1600e-003	0.0000	24.8691	24.8691	1.0900e-003	0.0000	24.8965
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0135	0.1135	0.1637	2.9000e-004		5.1600e-003	5.1600e-003		5.1600e-003	5.1600e-003	0.0000	24.8691	24.8691	1.0900e-003	0.0000	24.8965

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3.5 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e-004	2.4000e-004	3.2400e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9087	0.9087	2.0000e-005	2.0000e-005	0.9159
Total	3.3000e-004	2.4000e-004	3.2400e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9087	0.9087	2.0000e-005	2.0000e-005	0.9159

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0135	0.1135	0.1637	2.9000e-004		5.1600e-003	5.1600e-003		5.1600e-003	5.1600e-003	0.0000	24.8691	24.8691	1.0900e-003	0.0000	24.8965
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0135	0.1135	0.1637	2.9000e-004		5.1600e-003	5.1600e-003		5.1600e-003	5.1600e-003	0.0000	24.8691	24.8691	1.0900e-003	0.0000	24.8965

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3.5 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e-004	2.4000e-004	3.2400e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9087	0.9087	2.0000e-005	2.0000e-005	0.9159
Total	3.3000e-004	2.4000e-004	3.2400e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9087	0.9087	2.0000e-005	2.0000e-005	0.9159

3.6 Site Cleanup - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5800e-003	0.0159	0.0246	3.0000e-005		7.3000e-004	7.3000e-004		6.7000e-004	6.7000e-004	0.0000	3.0113	3.0113	9.7000e-004	0.0000	3.0357
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.5800e-003	0.0159	0.0246	3.0000e-005		7.3000e-004	7.3000e-004		6.7000e-004	6.7000e-004	0.0000	3.0113	3.0113	9.7000e-004	0.0000	3.0357

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3.6 Site Cleanup - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	7.0000e-005	9.7000e-004	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2726	0.2726	1.0000e-005	1.0000e-005	0.2748
Total	1.0000e-004	7.0000e-005	9.7000e-004	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2726	0.2726	1.0000e-005	1.0000e-005	0.2748

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5800e-003	0.0159	0.0246	3.0000e-005		7.3000e-004	7.3000e-004		6.7000e-004	6.7000e-004	0.0000	3.0113	3.0113	9.7000e-004	0.0000	3.0357
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.5800e-003	0.0159	0.0246	3.0000e-005		7.3000e-004	7.3000e-004		6.7000e-004	6.7000e-004	0.0000	3.0113	3.0113	9.7000e-004	0.0000	3.0357

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3.6 Site Cleanup - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	7.0000e-005	9.7000e-004	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2726	0.2726	1.0000e-005	1.0000e-005	0.2748
Total	1.0000e-004	7.0000e-005	9.7000e-004	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2726	0.2726	1.0000e-005	1.0000e-005	0.2748

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4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated Annual VMT	Mitigated Annual VMT
	Weekday	Saturday	Sunday		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	4.8000e-004	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-004	1.5000e-004	0.0000	0.0000	1.6000e-004
Unmitigated	4.8000e-004	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-004	1.5000e-004	0.0000	0.0000	1.6000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	8.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.9000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-004	1.5000e-004	0.0000	0.0000	1.6000e-004
Total	4.8000e-004	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-004	1.5000e-004	0.0000	0.0000	1.6000e-004

Perris Valley - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	8.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.9000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-004	1.5000e-004	0.0000	0.0000	1.6000e-004
Total	4.8000e-004	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5000e-004	1.5000e-004	0.0000	0.0000	1.6000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

Perris Valley - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Perris Valley - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

Perris Valley - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

Perris Valley - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Appendix F
Phase I Environmental Site Assessment

PERRIS VALLEY CHANNEL LATERAL B, STAGE 4 PROJECT

GROUP



DELTA

PHASE I ENVIRONMENTAL SITE ASSESSMENT
Perris Valley Channel Lateral B, Stage 4 Project
March Air Reserve Base
Perris, California

Prepared for

Michael Baker International
40810 County Center Drive, Suite 200
Temecula, California 92591

Prepared by

GROUP DELTA CONSULTANTS, INC.
1035 South Milliken Avenue, Suite G
Ontario, California 91761
Group Delta Project No. EN8180

May 2022



GROUP DELTA

Michael Baker International
40810 County Center Drive, Suite 200
Temecula, California 92591

May 2022
Project No. EN8180

Attention: Mr. Peter Minegar

Subject: Phase I Environmental Site Assessment (ESA)
Perris Valley Channel Lateral B, Stage 4 Project
March Air Reserve Base
Perris, California

Dear Mr. Minegar:

Group Delta Consultants, Inc. is pleased to submit to Michael Baker International this Phase I Environmental Site Assessment report for the property located in Perris, California. This report discusses our project purpose, scope of work, execution of work, conclusions, and recommendations for the site. This Environmental Site Assessment was performed in general accordance with our proposal submitted on October 21, 2021.

We appreciate your selection of Group Delta Consultants for this project and look forward to assisting you further on this and other projects. If you have any questions, please do not hesitate to contact us.

Should you have any questions regarding this report, please feel free to call us at (949) 450-2100.

Sincerely,
GROUP DELTA CONSULTANTS, INC.

Glenn Burks, Ph.D., P.E.
Principal, Director of Environmental Services
Environmental Professional

Laura Botzong
Project Scientist

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Figure:

Figure 1 Site Location Map

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Appendix B Environmental Data Resources, Inc. Report (Radius Search Map, Sanborn Maps, Aerial Photographs, Topographic Maps & City Directories)
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EXECUTIVE SUMMARY

Michael Baker International (herein referred to as Client) has engaged Group Delta Consultants, Inc. (Group Delta) to perform a Phase I Environmental Site Assessment (ESA) for the site at Perris Valley Channel Lateral B, Stage 4 Project (Site) within March Air Reserve Base (MARB) in Perris, California (Figure 1).

The Perris Valley Channel Lateral B, Stage 4 Project Site is located within the limits of MARB and the City of Perris in Western Riverside County, east of the Interstate 215 freeway (I-215). The proposed alignment would be located between the existing Perris Valley Channel (PVC) Lateral B, Stage 2 facility at Heacock Street and the PVC Lateral B, Stage 5 facility that is under construction as part of the VIP 215 project to the northwest; refer to Appendix C. The project is located within Township 3 South, Range 4 West, Section 36 San Bernardino Baseline Meridian within Assessor's Parcel Numbers (APNs) 294-220-003, 294-200-002, 294-180-007, 294-180-006, 294-180-037, and 294-180-055.

The project area is characterized as developed and undeveloped-disturbed land. The surrounding areas consists of MARB to the east and scattered industrial development to the north, south, and west. An existing drainage course is located within MARB property approximately 350 feet west of the existing runway and 300 feet east of the western perimeter fence boundary of MARB. Runoff in this area drains from the north to south via this natural drainage course towards a soft bottom open channel at Heacock Street (Heacock Channel) eventually draining east towards Perris Valley Channel.

The Perris Valley Master Drainage Plan (MDP) was adopted in July 1987 and last revised in 1991 with the purpose of identifying the drainage problems and providing a guide for the construction of primary drainage facilities in the Perris Valley area. The MDP Line B (now "Lateral B") was originally proposed as an open channel on the west side of I-215 from Van Buren Boulevard to just south of Harley Knox Boulevard before extending east to Perris Valley Channel. However, since the MDP was last updated, the Perris Valley area surrounding March Air Reserve Base (MARB) has experienced new development that has prompted the need to revise the alignment and construct Lateral B to support existing and future drainage needs for the area.

The purpose of the project is to provide flood protection to MARB and the adjacent area by constructing the regional storm drain facility needed to convey 100-year runoff to the existing Lateral B, Stage 2 channel east of Heacock Street. A secondary objective of the project is to

provide an adequate outlet for Lateral B-7 and B-8 to be constructed as part of future development proposals in the City of Perris.

The Riverside County Flood Control and Water Conservation District (District), in partnership with the March Joint Powers Authority (MJPA) and MARB, is proposing to construct the PVC Lateral B, Stage 4 Project (project). PVC Lateral B-5 Stage 1 and Stage 2 and PVC Lateral B Stage 2 and 3 of the Lateral B system have already been constructed between Heacock Street and I-215. The project would construct PVC Lateral B Stage 4 which consists of approximately 6,000 feet of reinforced concrete box (RCB) culvert starting at Heacock Street (at the upstream end of PVC Lateral B, Stage 2) to the downstream terminus of the PVC Lateral B Stage 5 facility, which is currently under construction as part of the VIP-215 project. The project's general alignment begins at the downstream terminus of PVC Lateral B Stage 5 and heads south and east adjacent to the MARB west perimeter security fence before tying into the PVC Lateral B Stage 2 facility at Heacock Street; refer to Appendix C. The project would include three transition structures, four junction structures, twelve bolted down manholes for security, and two inlets along the southernmost end of the alignment to collect onsite flows from MARB. The project would also include two lateral stubs and bulkheads for the future construction of Lateral B-7 and Lateral B-8 in the City of Perris. The project would be located mostly within MARB right of way, as shown on Exhibit 1 within Appendix C. This alignment will go through APN 294-180-055; where a 45-foot permanent easement has been dedicated for the construction and maintenance of Stage 4.

As shown on Exhibit 2 within Appendix C, specific details of the project design include:

- One transition from double 14'x9' RCB to double 10'x10' RCB at STA 10+43.58-10+73.58 located at the intersection of Perris Valley Lateral B Stage 2 and Heacock Street;
- Approximately 3,000 LF of 10'x10' RCB from STA 10+73 located at the intersection of Perris Valley Lateral B Stage 2 and Heacock Street to STA 42+00 at APN 294200005;
- One transition from double 10'x10' to 10'x14' RCB at STA 42+00 – STA 42+30;
- Approximately 3,000 LF of 10'x14' RCB from STA 42+30 at APN 294200005 to STA 67+50 at APN 294180038;
- One transition from 10'x14' RCB to single 10'x10' RCB at STA to STA 67+50 - 67+66.97 at APN 294180038;
- Two inlets collecting onsite flows from MARB;
- Two lateral stubs and bulkheads (for Lateral B-7 and Lateral B-8);
- Approximately 12 manholes bolted down for MARB security;
- MARB Perimeter fence replacement at various locations;
- Removal and replacement of MARB perimeter road, as needed; and

- Removal of the Stage 5 interim outlet structure.

This Phase I ESA was performed in accordance with the American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, Designation E1527-21. This version of the ASTM standard complies with the Federal All Appropriate Inquiry (AAI) rule (40 Code of Federal Regulations [CFR] Part 312 – Standards and Practices for All Appropriate Inquiries). The purpose of the Phase I ESA is to review, evaluate, and document present and past land use and practices, and visually examine Site conditions to identify Recognized Environmental Conditions (RECs). The Phase I ESA included a Site reconnaissance, observation of adjacent properties, environmental regulatory agency records review, review of available historic documents, and an interview.

A Site reconnaissance was performed on January 19, 2022 as part of the ESA to observe current conditions throughout the Site. No evidence of RECs was identified during the Site reconnaissance.

This assessment also included a review of available federal and state data reported by Environmental Data Resources (EDR), available regulatory agency environmental records, and available site history and records. No environmental concerns were identified for the Site during the regulatory database review. The review also included properties in the vicinity of the Site. Records indicated listed locations within ½ mile of the Site as listed in the EDR report. However, based on type of regulatory listing, regulatory status of the case, and/or location with respect to regional groundwater flow, the likelihood of Site contamination from an off-site source is considered low. The information procured during this investigation was used to identify, to the extent practical and within the limitations of the Scope, RECs associated with the Site due to current or past land use.

The Site is located on the March Air Force Base (MAFB) National Priority List (NPL) site in Riverside, California. The 7,123-acre MARB and the former MAFB has been used for aircraft maintenance and repair, refueling operations, and training activities since 1918. Facility operations contaminated soil and groundwater with hazardous chemicals. Three zones of groundwater contamination beneath the base were identified. Groundwater contamination has migrated to drinking water wells located off Base that are no longer in use. However, a groundwater containment system has been installed to prevent off-site groundwater migration and the off-site plume is being monitored. The MAFB NPL long-term cleanup is ongoing.

This assessment has revealed the following evidence of RECs in connection to the Site:

- The MARB and former MAFB NPL site represents a REC to the Site. No direct evidence of contaminated soil on the Site was found; however, contaminated groundwater underlies the Site. Planned construction activities should include a health and safety plan and soil/groundwater management plan to address potential worker contact with, and

management of, potentially volatile organic compound (VOC)- or petroleum-hydrocarbon-contaminated soil or groundwater. If encountered, expected ordnance would likely be limited to potential lead-containing bullets and spent cartridge casings. MARB may require site-specific training, including spent ordnance training, prior to construction.

Additionally, this assessment has revealed the following areas of concern (AOCs) in connection to the Site:

- The potential for per- and poly-fluorinated alkyl substances (PFAS)-impacted groundwater underlying the Site represents an AOC. The plans recommended above should include the potential for PFAS-contaminated soil or groundwater.
- Signage for a high-pressure gas pipeline was observed at the adjoining property to the east (5137 Patterson Avenue) at the Site perimeter. No evidence of natural gas pipelines was found on the National Pipeline Mapping System (NPMS) database. However, the signage may refer to an inactive, old, unreported, or abandoned pipeline. The potential east-adjoining high-pressure gas pipeline represents an AOC to the Site. Planned construction activities should include measures to identify if the potential pipeline encroaches onto the Site and whether it will be encountered during construction activities.

1.0 INTRODUCTION

1.1 Background and Project Description

Michael Baker International (herein referred to as Client) has engaged Group Delta Consultants, Inc. (Group Delta) to perform a Phase I Environmental Site Assessment (ESA) for the Perris Valley Channel Lateral B, Stage 4 Project (Site) within March Air Reserve Base (MARB) in Perris, California.

The Perris Valley Channel Lateral B, Stage 4 Project Site is located within the limits of MARB and the City of Perris in Western Riverside County, east of the Interstate 215 freeway (I-215). The proposed alignment would be located between the existing Perris Valley Channel (PVC) Lateral B, Stage 2 facility at Heacock Street and the PVC Lateral B, Stage 5 facility that is under construction as part of the VIP 215 project to the northwest; refer to Appendix C. The project is located within Township 3 South, Range 4 West, Section 36 San Bernardino Baseline Meridian within Assessor's Parcel Numbers (APNs) 294-220-003, 294-200-002, 294-180-007, 294-180-006, 294-180-037, and 294-180-055.

The project area is characterized as developed and undeveloped-disturbed land. The surrounding areas consists of MARB to the east and scattered industrial development to the north, south, and west. An existing drainage course is located within MARB property approximately 350 feet west of the existing runway and 300 feet east of the western perimeter fence boundary of MARB. Runoff in this area drains from the north to south via this natural drainage course towards a soft bottom open channel at Heacock Street (Heacock Channel) eventually draining east towards Perris Valley Channel.

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The purpose of the project is to provide flood protection to MARB and the adjacent area by constructing the regional storm drain facility needed to convey 100-year runoff to the existing Lateral B, Stage 2 channel east of Heacock Street. A secondary objective of the project is to

provide an adequate outlet for Lateral B-7 and B-8 to be constructed as part of future development proposals in the City of Perris.

The Riverside County Flood Control and Water Conservation District (District), in partnership with the March Joint Powers Authority (MJPA) and MARB, is proposing to construct the PVC Lateral B, Stage 4 Project (project). PVC Lateral B-5 Stage 1 and Stage 2 and PVC Lateral B Stage 2 and 3 of the Lateral B system have already been constructed between Heacock Street and I-215. The project would construct PVC Lateral B Stage 4 which consists of approximately 6,000 feet of reinforced concrete box (RCB) culvert starting at Heacock Street (at the upstream end of PVC Lateral B, Stage 2) to the downstream terminus of the PVC Lateral B Stage 5 facility, which is currently under construction as part of the VIP-215 project. The project's general alignment begins at the downstream terminus of PVC Lateral B Stage 5 and heads south and east adjacent to the MARB west perimeter security fence before tying into the PVC Lateral B Stage 2 facility at Heacock Street; refer to Appendix C. The project would include three transition structures, four junction structures, twelve bolted down manholes for security, and two inlets along the southernmost end of the alignment to collect onsite flows from MARB. The project would also include two lateral stubs and bulkheads for the future construction of Lateral B-7 and Lateral B-8 in the City of Perris. The project would be located mostly within MARB right of way, as shown on Exhibit 1 within Appendix C. This alignment will go through APN 294-180-055; where a 45-foot permanent easement has been dedicated for the construction and maintenance of Stage 4.

As shown on Exhibit 2 within Appendix C, specific details of the project design include:

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- One transition from double 10'x10' to 10'x14' RCB at STA 42+00 – STA 42+30;
- Approximately 3,000 LF of 10'x14' RCB from STA 42+30 at APN 294200005 to STA 67+50 at APN 294180038;
- One transition from 10'x14' RCB to single 10'x10' RCB at STA to STA 67+50 - 67+66.97 at APN 294180038;
- Two inlets collecting onsite flows from MARB;
- Two lateral stubs and bulkheads (for Lateral B-7 and Lateral B-8);
- Approximately 12 manholes bolted down for MARB security;
- MARB Perimeter fence replacement at various locations;
- Removal and replacement of MARB perimeter road, as needed; and
- Removal of the Stage 5 interim outlet structure.

1.2 Purpose

The purpose of the Phase I ESA is to review, evaluate, and document present and past land uses and practices, and visually examine Site conditions to identify Recognized Environmental Conditions (RECs). A REC is defined as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. The REC term does not include de minimis conditions that generally do not present a threat to human health or the environment, and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

1.3 Detailed Scope of Work

Group Delta has interpreted American Society for Testing and Materials (ASTM) E1527-21 as the guidance document and used its provisions to the extent deemed appropriate for this report. In general, the scope of work included:

- Review of available information to describe the general geology and hydrogeology at the Site and adjacent areas;
- Search of regulatory records regarding possible hazardous material handling, spills, storage, or production at the Site or in its vicinity;
- Review of on-line available data including databases maintained by the Department of Toxic Substances Control (DTSC) and the State Water Resources Control Board (SWRCB);
- Perform agency records review of available files from the Santa Ana Regional Water Quality Control Board (SARWQCB), DTSC, Department of Transportation Pipeline and Hazardous Materials Administration (PHMSA) National Pipeline Mapping System (NPMS), and California Geologic Energy Management Division (CalGEM) for on-site wells;
- Review of historic aerial photographs, historic topographic maps, Sanborn® fire maps, City Directories, and a radius map database search provided by Environmental Data Resources, Inc. (EDR);
- Reconnaissance of the Site and the immediately surrounding area to identify indicators of the existence of hazardous materials or RECs;
- Interview of an owner representative for the Site;
- Development of conclusions and findings, and;
- Preparation of a report describing the assessment and presenting the results and findings.

A statement of interpretive limitations is contained in Section 1.5 of the report.

1.4 Significant Assumptions

As stated in the previous section, this ESA was conducted in general accordance with ASTM E1527-21 to the extent deemed appropriate. This was done to identify and analyze environmental conditions that constitute existing, past, or potential environmental risks associated with the Site. Performance in accord with this standard is intended to reduce, but not eliminate uncertainty with respect to the potential for RECs associated with the Site.

1.5 Limitations and Exceptions

This ESA report is intended for the sole use of the Client and on the specific project identified. Our services have been performed under mutually agreed-upon terms and conditions. If other parties wish to rely on this report, please have them contact us so that a mutual understanding and agreement of the terms and conditions for our services can be established prior to their use and reliance of this report and the information it contains.

The findings and opinions presented are relative to the dates of our Site work and should not be relied on to represent conditions at substantially later dates. The opinions included herein are based on information obtained during the study and our experience. If additional information becomes available, which might impact our environmental findings, we request the opportunity to review the information, reassess the potential conditions, and modify our opinions, if warranted.

Although this assessment has attempted to identify the potential for environmental impacts to the Site, potential sources of contamination may have escaped detection due to: (1) the limited scope of this assessment, (2) the inaccuracy of public records, and/or (3) the presence of undetected or unreported environmental incidents.

It was not within the scope of this assessment to address issues not included in ASTM E1527-21 (such as radon, lead in drinking water, naturally-occurring hazardous materials or vegetation, endangered species, wetlands, etc.). Furthermore, it was not the purpose of this study to determine the degree or extent of contamination, if any, at the Site.

Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar conditions, by reputable environmental consultants practicing in this or similar localities. No other warranty, expressed or implied, is made regarding the professional information in this report.

1.6 Special Terms and Conditions

All appropriate inquiry (AAI) into the prior uses of the Site was made in accordance with good commercial and customary practices to identify and analyze RECs constituting existing, past or potential environmental conditions in connection with the Site.

There are no special terms and conditions that apply to the preparation of this report.

1.7 User Reliance

This assessment was performed at the request of the Client, utilizing methods and procedures consistent with good commercial or customary practices designed to conform to acceptable industry standards. The assessment and conclusions presented in this report represent the best professional judgment of the Environmental Professional based on the conditions that existed during the assessment and the information and data available to us during the course of this assignment.

Factual information regarding operations and conditions provided by the Client, owner, or their representative has been assumed to be correct and complete.

The report may be distributed and relied upon by the Client, its successors and assigns. Reliance on the information and conclusions presented in this report by any other party or parties is not authorized without the written consent of Group Delta.

2.0 SITE DESCRIPTION

2.1 Location and Legal Description of the Site

The Perris Valley Channel Lateral B, Stage 4 Project Site is located within the limits of MARB and the City of Perris in Western Riverside County, east of the Interstate 215 freeway (I-215) (Figure 1). The proposed alignment would be located between the existing PVC Lateral B, Stage 2 facility at Heacock Street and the PVC Lateral B, Stage 5 facility that is under construction as part of the VIP 215 project to the northwest; refer to Exhibit 1. The project is located within Township 3 South, Range 4 West, Section 36 San Bernardino Baseline Meridian within APNs 294-220-003, 294-200-002, 294-180-007, 294-180-006, 294-180-037, and 294-180-055.

2.2 Site and Vicinity General Characteristics

The Site is currently vacant land with an asphalt-paved road traversing the Site from north to south. The Site is bordered on the north, south, and east by MARB; and on the west by PODS Moving and Storage (1330 Nandina Avenue), and multiple exterior equipment storage yards.

The Site's vicinity is generally characterized by industrial and military uses.

2.3 Current Use of the Site

The Site is currently vacant land with an asphalt-paved road traversing the Site from north to south.

Photographic documentation of the Site is provided in Appendix A.

2.4 Site Geology

The MARB is located on the Perris Erosional Surface and the Paloma Surface. The depositional surface is underlain by sediments of various thicknesses that have filled the Perris Groundwater Basin. There are bedrock outcroppings in the western and central portions of the MARB. The buried bedrock surface was defined by a gravimetric survey and described as complex bedrock scour surface morphology. The ground surface at the Main Base is relatively flat. Depth to bedrock ranges from the surface (at the bedrock outcroppings) to 900 feet below ground surface (bgs). Subsurface investigations at the Main Base show that most of the underlying sediments consist of laterally discontinuous, interbedded fine to medium sands, silts, and lean clays with minor amounts of gravel. The uppermost units are not affected by elevation changes in the bedrock surface; deeper units are interrupted by bedrock highs.

2.5 Site Hydrology

The aquifer underlying the MARB has been divided into three hydrostratigraphic units (HSUs) including the upper alluvium, lower alluvium and bedrock units based on variations in contaminant concentrations. The upper alluvial unit is approximately 70 feet thick (northwestern portion of the MARB) to 170 feet thick (east of the Base) and extends from the ground surface to elevations ranging from 1,478 feet above mean sea level (msl) at the northwestern portion of the MARB to 1,290 feet above msl southeast of the MARB. This unit predominantly comprises silts and clays. The lower alluvial unit has a thickness that varies across the MARB and region based on buried bedrock elevation. This unit includes sands, silts, and clays. The bedrock unit, which is composed of weathered and fractured bedrock, ranges in thickness from 10 feet to 200 feet across the MARB and region. Groundwater on the MARB has been characterized as semi-confined. Groundwater at in the western portion of MARB is essentially unconfined. Groundwater on western MARB exists in a relatively thin layer of weathered crystalline bedrock and alluvial soils. On the MARB, groundwater flow direction in the upper alluvial unit is generally to the southeast. Regional groundwater elevations have been rising since the 1970s; this rise in groundwater levels, along with changes in well production on and around the MARB, has caused changes in the groundwater flow direction over the years.

2.6 Current Uses of Adjacent Properties

The Site is bordered on the north, south, and east by MARB; and on the west by PODS Moving and Storage (1330 Nandina Avenue), and multiple exterior equipment storage yards.

3.0 USER PROVIDED INFORMATION

3.1 Title Records

No title records were provided by the User during this ESA.

3.2 Environmental Liens or Activity and Other Use Limitations (AUL)

No reports of environmental liens or AULs were provided by the User during this ESA or identified in the title report.

3.3 Owner/Occupant Interviews

3.3.1 Current Owners

Chris Wagner, United States Air Force representative, was interviewed during the Site reconnaissance on January 19, 2022. According to Ms. Wagner, no hazardous materials spills or releases have occurred on the Site. She indicated that she had previously encountered lead bullets from military training activities on Site. For further discussion of the MARB and Site, please refer to Section 5.1.2.

3.3.2 Previous Owners

The previous owner of the Site was not identified during this Phase I ESA.

3.4 Reason for Performing ESA

The purpose of the ESA is to identify apparent and potential sources of contamination for the Site that, by their association or proximity to the Site, could represent an REC. This report can serve to identify environmental conditions at the Site that may impact the proposed project and may permit the User to satisfy one of the requirements to qualify for the bona fide prospective purchaser limitations on Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) liability (42 U.S.C. §9601). It was not the purpose of this study to determine the degree or extent of contamination, if any, but rather to identify the potential for contamination or environmental concern.

3.5 Review of Existing Site Reports

No prior environmental reports at the Site were provided by the User.

4.0 ENVIRONMENTAL DATA SEARCH

4.1 Database Information on the Site and the Adjacent Properties

4.1.1 Standard Environmental Record Sources for the Site and Vicinity

Group Delta conducted a review of reasonably ascertainable environmental regulatory agency databases to identify known or suspected environmental concerns or RECs that may be associated with the Site. A search of readily available environmental records was obtained from EDR of Shelton, Connecticut (Appendix B). The purpose of the regulatory database report review was to evaluate to the extent possible whether prior activities, processes, operations, or actions on the Site, adjoining properties, and nearby locations have the potential to adversely impact the environmental integrity of the Site, are suspected sources of environmental contamination, or present RECs for the Site. The regulatory database report provides information regarding current operations and prior regulatory listings for the Site and previous owners and/or operators on the Site. The presence or absence of information about the Site does not necessarily mean that there are or are not environmental issues associated with the Site.

The regulatory database report includes a list of government databases searched, a statistical profile listing the number of properties within ASTM Standard Practice specified search radii, selected detailed information from environmental regulatory agency databases, and a map illustrating the identified properties, sites, or facilities of interest.

The regulatory database report provides a mechanism to evaluate a relatively large number of environmental regulatory agency databases and eliminate many properties, sites, operations, and/or facilities that have a low potential of adversely impacting the Site. However, it should be noted that the information included in the regulatory database report is not necessarily all-inclusive and environmental regulatory agency files may have been purged by public officials prior to release to the public. In addition, mapping errors may not reflect actual distances and directions between the Site and the properties, sites, operations, and/or facilities listed in the regulatory database report.

The regulatory database report includes information from federal, state, local, military, and tribal environmental regulatory agency databases.

4.1.2 Site Records

The Site was identified in the EDR regulatory database report and the findings are discussed below.

Table 1 – Environmental Atlas Findings – Site Findings
March Air Force Base (MAFB) (22 CSG/CC)
Map Key Number 0, 32, 33, 34, 41
EDR Listing of Concern and Associated Databases: Multiple
The Site is located on the MAFB National Priority List (NPL) site in Riverside, California. For further discussion, please refer to Section 5.1.2.

4.1.3 Vicinity Records Search

The following sites were identified in the EDR database radius search for the project area.

Table 2 – Environmental Atlas Findings – Site Vicinity Findings
Lawler Woodcrest Services, Inc. DBA Lawler’s Triple L (1090 Harley Knox Boulevard)
Map Key Number 3 and 4
EDR Listing of Concern and Associated Databases: RCRA NONGEN / NLR
The adjoining property to the west is listed on the RCRA NONGEN / NLR database. According to the listings, this facility is classified as “not a generator, verified”. The facility is described as automotive repair and maintenance. Based on this information, the adjoining property to the west does not represent a REC to the Site.
Integrity Rebar Placers (1345 Nandina Avenue)
Map Key Number 8
EDR Listing of Concern and Associated Databases: RCRA NONGEN / NLR
The adjoining property to the west is listed on the RCRA NONGEN / NLR database. According to the listings, this facility is classified as “not a generator, verified”. The facility is described as drywall and insulation contractors. Based on this information, the adjoining property to the west does not represent a REC to the Site.
Clean Tide Container (1440 Airport Way)
Map Key Number 10
EDR Listing of Concern and Associated Databases: Multiple
The adjoining property to the west is listed on multiple regulatory databases. According to the listings, this facility was classified as a large-quantity hazardous waste generator in 2014. The facility is described as septic tank and related services. No evidence of violations, spills, or releases were found in connection to these listings. Based on this information, the adjoining property to the west does not represent a REC to the Site.
Goldstar Asphalt Products (1354 Jet Way)
Map Key Number 12 and 13
EDR Listing of Concern and Associated Databases: Multiple

Table 2 – Environmental Atlas Findings – Site Vicinity Findings
<p>The adjoining property to the west is listed on multiple regulatory databases. According to the listings, the facility was classified as a chemical storage facility, hazardous waste generator, and aboveground petroleum storage facility. No evidence of spills or releases were found in connection to these listings. Based on this information, the adjoining property to the west does not represent a REC to the Site.</p>
<p>US Air Force, March Air Reserve Base – OU-1 - Site</p>
<p>Map Key Number 18-21, 26, 28, 30, 37, 38, 39, 44</p>
<p>EDR Listing of Concern and Associated Databases: LUST</p>
<p>Operable Unit 1 is an area of MARB approximately 0.80-mile northeast of the Site. The March Installation Restoration Program (IRP) began in September 1983. The initial study identified 30 potential contaminated sites for further investigation. A second study, completed in March 1987, consisted of the collection of soil, water, and soil gas samples. In June 1987, further investigation was conducted. This investigation indicated that additional investigation was required to better define the extent of soil and groundwater contamination and off-base migration of trichloroethene (TCE) in groundwater. In November 1991, March was listed on U.S. EPA NPL due to the presence of contamination in groundwater beneath the base. Sites were placed into 3 separate Operable Units (OU). IRP Sites 5, 9, 10, 13, 14, 15, 16, 29, 31, 34, are in OU-1.</p> <p>IRP Site 5 Landfill Number 3 covers approximately five acres and located southeast of the present flightline. The landfill was reportedly operated from the late 1940s to approximately 1960. Landfill wastes consist primarily of sanitary waste and construction rubble. From data collected during site investigation studies, no unacceptable risk or impact to groundwater quality was identified. Therefore, no further action was required. The following contaminants of concern were detected below the Preliminary Remediation Goals (PRGs): metals, di-n-butyl phthalate, fluoranthene, DDE, and DDT. The case was issued closure by the SARWQCB on December 22, 1995.</p> <p>IRP Site 9 Main Oil/Water Separator is located north of IRP Site 5 at the southeast end of the flightline apron. The facility was constructed in 1974 and serves the main storm drainage system for the flightline apron and the flightline shops. The storm drains have reportedly received waste oils, hydraulic fluids, diesel fuel, waste paints, spent solvents, paint strippers, paint thinners, and battery acids. The oil/water separator is of earthen construction with a large baffle that divides the separator into two compartments. The separated oil was picked up by a skimmer and pumped into a holding tank for off-site disposal. This facility drains into the Flightline Drainage Channel and then to the Perris Valley Storm Drain Lateral A. From data collected during the site investigation studies, no unacceptable risk was identified at this site. Therefore, no further action was required. The case was issued closure by the U.S. EPA, DTSC, and SARWCB on December 22, 1995.</p> <p>Remedial action for IRP Site 10 Flightline Drainage Channel included removal and disposal of contaminated sediments in the channel. This cleanup activity required the complete removal of all the sediments from the concrete channel. No confirmation sample collection was required following sediment removal. Remedial excavation was performed in July 1995. Soil removed from the site was transported for bioremediation at an off-site facility. The case was issued closure by the DTSC and SARWQCB on March 2, 1995.</p>

Table 2 – Environmental Atlas Findings – Site Vicinity Findings

IRP Site 15 Fire Protection Training Area Number 3 is located southeast of the end of runway 12-30 and between IRP Sites 5 and 7. The area was developed in 1978 and was reportedly constructed by placing an underdrain system and gravel over a clay liner. Approximately 6,000 gallons per year of contaminated JP-4 (jet propulsion fuel, grade 4) have been burned in training exercises since the facility was constructed. The primary contaminant of concern is phenanthrene, a PAH (polycyclic aromatic hydrocarbon). Soil contaminated with total petroleum hydrocarbons and polycyclic aromatic hydrocarbons were excavated in June and July 1995. The excavated soil was stockpiled on site with excavated soil from Site 10 and an evaporation pond. Approximately 8,950 tons of impacted soils were transported for bioremediation at an off-site facility. The case was issued closure by the U.S. EPA, DTSC, and SARWCB on March 1, 1996.

IRP Site 13 Tank Truck Spill Site is located along the eastern perimeter road of the base, with the northern portion of IRP Site 5. In 1973, approximately 5,000 gallons of JP-4 (jet propulsion fuel, grade 4) spilled from a tank truck to the ground at the location. There was no reported spill containment or spill cleanup. From data collected during investigation studies, no unacceptable risk or release was identified at this site. Therefore, no further action was required. The case was issued closure by the DTSC and SARWQCB on December 22, 2005.

IRP Site 14 Liquid Fuel Pump Station Overflow is located southeast of the flightline apron and about 50 to 100 feet west of the East March sludge Drying Beds (IRP Site 16). In 1973, approximately 1,000 gallons of JP-4 (jet propulsion fuel, grade 4) spilled onto the ground. The spill occurred due to an overflow of the liquid fuels pump station at Building 1245. The spill was contained in the unpaved area south of the pump station and allowed to percolate into the ground. From the data collected during investigation studies, no unacceptable risk or release was identified. Therefore, no further action was required. The case was issued closure by the DTSC and SARWQCB on December 22, 2005.

IRP Site 16 East March Sludge Drying Beds was located on the eastern part of the base, at the south end of the flight line parking apron. The treatment plant was constructed in 1938 and provided secondary treatment for sanitary and industrial wastewater. Primary and secondary sludges were digested anaerobically, dewatered on unlined sludge drying beds, and disposed of in an on-base landfill. The sludge may have contained heavy metals and organic compounds resulting from discharges of industrial wastes to the sanitary sewer system. These beds operated from 1938 to 1977, when the plant was destroyed in place. From data collected during the site investigation studies, no unacceptable risk was identified at this site. Therefore, no further action was required. The case was issued closure by the U.S. EPA, DTSC, and SARWQCB on December 22, 1995.

Fire Fighting Area No. 1, IRP Site 29, is located on the eastern part of the base, north of IRP Site 9. The area was used as a fire training pit prior to 1951. Suspected contaminants at the site include fuel, waste oil, and spent solvents. Site 29 contaminants detected in soil exceeding the PRGs were: 1,2,3,4,6,7,8-heptachlorodibenzo-p-dioxin, total heptachlorinated dibenzo-p-dioxin, beryllium, lead, and manganese. In 1995, the remedy selected for Site 29 was no further action (NFA) based on a risk assessment using industrial toxicity criteria, and the Air Force Implemented land use controls (LUCs). The Remedial Action Completion Report dated January 2018 documents the removal of LUCs,

Table 2 – Environmental Atlas Findings – Site Vicinity Findings
<p>formerly prohibiting residential use at Site 29. The case was issued closure by the SARWQCB on January 24, 2018.</p>
<p>IRP Site 31 Solvent Disposal is located off Graeber Street on the east side of Building 1211. The practice of discharging solvents on the ground reportedly occurred from about the mid-1950s to the mid-1970s. In addition, floor drains from maintenance shops may have leaked solvents to the subsurface. Groundwater sampling at the site has indicated release of chlorinated volatile organic compounds (VOCs). Soil sampling indicated the presence of polycyclic aromatic hydrocarbons at this site. Remedial actions performed include groundwater extraction, dual-phase extraction, and soil vapor extraction. In June 2013, the groundwater portion of this Site was transferred to Site CG049. On April 9, 2019, soil portion was issued closure by the U.S. EPA, SARWQCB, and DTSC.</p>
<p>IRP Site 34 Pritchard Aircraft Fueling System was constructed in 1960 from six 50,000-gallon underground storage tanks (USTs) that were moved from the Panero refueling system. In 1990, use of the Pritchard refueling system was discontinued. The piping system and USTs were removed in 1991 and the fuel contaminated soil was placed back in the excavation. Surface and subsurface soil samples collected during 1992 indicated the presence of volatile organic compounds, semi-volatile organic compounds, jet fuel (JP-4 - jet propulsion, grade 4) and diesel fuel. A bioventing system remedy was operated at the site from March 1994 until April 1996. In 1999, contaminated soil from an additional 550-gallon UST excavation and from a location beneath a bend in the piping totaling approximately 8.18 tons was removed from the site and disposed off-site. An additional Background Evaluation for CPAHs and Human Health Risk Assessment were conducted in 2016 and 2017. The case was issued closure by the U.S. EPA and SARWQCB on June 1, 2010.</p>
<p>For further discussion of the MARB and former MAFB, please refer to Section 5.1.2.</p>
<p>March Air Force Base (Building 550 Graham, Riverside Drive)</p>
<p>Map Key Number 22</p>
<p>EDR Listing of Concern and Associated Databases: LUST</p>
<p>The Building 550 Base Exchange Service Station was located on the southwest corner of Riverside Drive and Castle Street, approximately 2.43 miles north of the Site. The site was used as an automobile service and fueling station from 1965 to June 1996. In June 1996, a preliminary soil and groundwater quality assessment was conducted. An unauthorized release of gasoline that impacted soil and groundwater was discovered at that time. Remedial actions performed include pump and treat groundwater from 2002 to 2008, soil vapor extraction from 2000 to 2003, and monitored natural attenuation. The case was issued closure by the SARWQCB on April 19, 2011.</p>
<p>For further discussion of the MARB and former MAFB, please refer to Section 5.1.2.</p>
<p>March Air Reserve Base (Building 480 Panero S-33 Aircraft Parking Apron)</p>
<p>Map Key Number 23</p>
<p>EDR Listing of Concern and Associated Databases: LUST</p>

Table 2 – Environmental Atlas Findings – Site Vicinity Findings
<p>The former Panero aircraft refueling system is located approximately 1.58 miles north of the Site. The Panero system consisted of thirty-four 50,000-gallon USTs, a 550-gallon vapor recovery tank, a pump house with 34 600-gallon a minute pumps, and approximately 7,500 feet of associated piping connected to 10 pits with 20 fuel hydrants. When the system was constructed in 1952, the UST farm consisted of 40 50,000-gallon tanks. Six tanks were removed in 1962. The release of jet fuel was discovered in 1987, during tank maintenance. Subsequently, the USTs, pump house, and the majority of piping were removed.</p> <p>Remedial actions from 1993 to 2011 have included free product removal, excavation, and soil vapor extraction. The source area and plume cover approximately 80 acres. The current remedy was approved on December 22, 2003 and implemented at this site. The remedy consists of: 1) free product skimming; and 2) institutional control, including monitoring and site use restrictions. The case is “open – remediation” as of December 4, 2004 under SARWQCB oversight.</p> <p>For further discussion of the MARB and former MAFB, please refer to Section 5.1.2.</p>
US Air Force, March Air Reserve Base – OU2 - Site
Map Key Number 24, 25, 27, 35, 36, 40, 48, 52
EDR Listing of Concern and Associated Databases: LUST
<p>Operable Unit 2 occupies multiple areas within MARB, and the closest area is approximately 0.56-mile west of the Site. The March IRP began in September of 1983. The initial study identified 30 potential contaminated sites for further investigation. A second study, completed in March 1987, consisted of the collection of soil, water, and soil gas samples. A June 1987 investigation indicated that further investigation was required to better define the extent of soil and groundwater contamination and off-base migration of TCE in groundwater. In November 1991, March was listed on U.S. EPA NPL due to the presence of contamination in groundwater beneath the base. Sites were placed into 3 separate OU. The OU-2 Record of Decision (ROD) was final in April 2004.</p> <p>IRP Site 3 was a former Landfill no. 5 located on West March. The landfill occupied an area of approximately 23 acres and was used from 1954 to 1974. The landfill received household and dumpster waste, construction debris, and military waste from the former base. The military waste included empty tanks, spent munitions, and miscellaneous wastes such as parachutes, medical waste, and fire hoses. Two major, intermittent, surface drainage channels flow through the site. The contaminants of concern for the site included: volatile organic compounds, pesticides, polychlorinated biphenyls, polycyclic aromatic hydrocarbons, and munitions residues. In 1995 and 1996, approximately 223,200 cubic yards of landfilled materials and soil were removed. The footprint of landfill removed was approximately 12 acres. Excavated materials from Site 3 were transported to IRP Site 6 for disposal on site in a lined engineered waste cell as non-hazardous solid waste. Confirmation sampling conducted after the interim removal confirmed that the site had been cleaned up to levels protective of human health and the environment. No restrictions on land use were required. After the interim removal action, the site was restored by backfilling with clean soil and revegetating the site. The site closure report is dated February 1997. In the Record of Decision for OU-2 dated May 2004, the U.S. EPA, DTSC, and SARWQCB agreed to no further action at Site 3.</p>

Table 2 – Environmental Atlas Findings – Site Vicinity Findings

IRP Site 6 was a former Landfill no. 4 located on West March. The landfill comprised three discrete areas: 6a the location of the main former landfill area; 6b the location of a former quarry; and 6c the location of a pond. The landfill occupied an area of approximately 20 acres and was used from the 1950s to 1980s. The landfill received household and dumpster waste, construction debris, and military waste from the former base. The contaminants of concern for the site included: polychlorinated biphenyls, polycyclic aromatic hydrocarbons, pesticides, herbicides, and dioxins. In 1995, approximately 63,000 cubic yards of landfilled materials and soil were removed from 6a and temporarily stockpiled. Waste at 6a was removed from the vadose zone and beneath groundwater including soil contaminated with petroleum hydrocarbons. Waste was also removed from the pond, including debris and tar. Two engineered cells, over 12 acres in size, were constructed on the 6a footprint. Excavated landfilled waste from 6a and 6b along with excavated materials from other sites were disposed into the lined engineered waste cell as non-hazardous solid waste. Confirmation sampling conducted after the interim removal confirmed that the site had been cleaned up to levels protective of human health and the environment. No restrictions on land use were required outside of the footprint of the new cells. After the interim removal action, the portions of the site not within the footprint of the new cells was restored by backfilling with clean soil and re-vegetated. The landfill is closed and under an ongoing post-closure maintenance and monitoring program.

IRP Site 12 Civil Engineering Yard was the former Civil engineering Yard located on the northern portion of the former base, north of Meyer Drive and west of Riverside Drive. Activities at the former facility included office, carpentry, electrical work, pesticide storage and heavy equipment storage. The contaminants of concern for soil were: aromatic and halogenated VOCs, oil and grease, phenols, petroleum hydrocarbons, lead, polycyclic aromatic hydrocarbons, and for groundwater were: VOCs principally trichloroethylene and tetrachloroethylene. In 1996, approximately 2,000 cubic yards of contaminated soil were excavated from the oil disposal trench, oil/water separator, and wash rack area, and placed into the Site 6 engineered waste cells. Closure of the Site 12 soil contamination areas was agreed to by the parties to the Federal Facility Agreement in 1996, and all parties further concluded that institutional controls regarding groundwater were appropriate. Long-term groundwater monitoring began at Site 12 in 1993. Five groundwater monitoring wells were located to monitor contaminant concentrations in groundwater until the groundwater cleanup goals set in the ROD were met. The ROD criteria were met in June 2007. The case was issued closure by the SARWQB and DTSC on June 25, 2008.

IRP Site 17 was the base swimming pool located on the main base on U Street. The area is vacant land adjacent to housing. The former swimming pool was closed in the 1970s. After it was closed, the pool was used as a disposal site and the wastes were covered with soil. The pool and its contents were removed during a 1994 interim removal action. The waste was taken off base for disposal. Post removal sampling indicated low levels of polychlorinated biphenyls (PCBs) at a depth of 8 feet below ground surface. The site was backfilled with clean soil. The risk posed by the soils at depth of 8 feet exceeds the residential and industrial screening values. The selected remedy was institutional controls to prevent or limit exposure to contaminants. The institutional controls are a prohibition against use as residential, school, day care, or hospital land and drilling or excavation of more than 7 feet below ground surface. The case was issued closure by the U.S. EPA, DTSC, and SARWQCB on December 6, 2017.

Table 2 – Environmental Atlas Findings – Site Vicinity Findings

IRP Site 19 was the West March Sludge Drying Beds. The site was located on the southern end of former West March east of the wastewater treatment plant. The site was about 7 acres. The site contained four lined sludge drying beds and three unlined sludge drying beds. In the past, wastewater sludge was spread out into ten unlined beds for drying. When dry, the sludge was removed from the drying beds. Approximately 7,000 cubic yards of surface and near-surface soil contamination were estimated to exist over the site. No consistent pattern to the contamination throughout the site was shown. The contaminants of concern and ecological concern were: PAHs, PCBs, hexavalent chromium, and thallium. The current and future land use expected for the site is a public wastewater treatment facility. The case was issued closure by the U.S. EPA, DTSC, and SARWQCB on October 26, 2016.

IRP Site 20 was a former landfill Number 7 located on West March. The landfill occupied an area of approximately 5.5 acres and was used intermittently from 1958 to 1965. The landfill received household waste and demolition debris from the former base. About 5,000 cubic yards of lime and soda ash were placed on top of Site 20 between 1965 and 1984. The contaminants of concern for the site were: arsenic, barium, beryllium, chromium, cobalt copper, nickel, vanadium, total petroleum hydrocarbons, Aroclor 1242, Aroclor 1254, chrysene, benzo(b)fluoroanthene, and benzo(k)fluoroanthene. In 1996, approximately 90,330 cubic yards of landfilled materials and soil were removed. Excavated material from Site 20 were transported to IRP Site 6 for disposal on site in a lined engineered waste cell. Confirmation sampling conducted after the interim removal confirmed that the site had been cleaned up to levels protective of human health and the environment. No restrictions on land use were required. After the interim removal action, the site was restored by backfilling with clean soil and re-vegetation the site. The case was issued closure by the DTSC and SARWQCB on February 27, 1997.

IRP Site 24 was a former landfill Number 1. The case was issued closure by the U.S. EPA, DTSC, and SARWQCB on May 12, 2004.

IRP Site 25 was a munitions residue burial site. The case was issued closure by the U.S. EPA, DTSC, and SARWQCB on May 12, 2004.

IRP Site 40 is a former landfill used for disposing wastes from MAFB. Site 40 is approximately 18 acres of rolling land and the central portion of the property consists of a pond which accumulates surface runoff. Buried drums at this landfill were filled with sodium hydroxide, roofing tar, asphalt solids and waste, and oil and grease. There was potential contamination of the surface and storm water due to exposure to the drums and debris. Field execution of the remedial action resulted in removing approximately seventy 5-gallon to 20-gallon decomposed drums filled with sodium hydroxide and thirty 55-gallon drums filled with roofing tar, asphalt solids and waste, and oil grease solids. Approximately 200 cubic yards of contaminated overburden material extending above and to the sides of the drums, in addition to the drums, were combined in 85-gallon overpack drums and transported off site for treatment/stabilization in lined end-dumps. Approximately 14 tons of debris containing non-friable asbestos as less than 10% by total weight were placed in a lined roll-off box and transported off-site for disposal. In addition, approximately 6,800 cubic yards of non-hazardous materials (consisting of soil and debris) were transported to IRP Site 6a. As part of Site 40 restoration,

Table 2 – Environmental Atlas Findings – Site Vicinity Findings
<p>the water's elevation in the pond was raised by installing a concrete weir at the outlet of the pond. Each site location, including the creek bed, was restored. Vegetation destroyed during construction was replaced with California native plants. The case was issued closure by the U.S. EPA, DTSC, and SARWQCB on May 12, 2004.</p> <p>For further discussion of the MARB and former MAFB, please refer to Section 5.1.2.</p>
<p>March Air Force Base (Site 43, 35th Street)</p>
<p>Map Key Number 42</p>
<p>EDR Listing of Concern and Associated Databases: LUST</p>
<p>MARB Site 43 is located approximately 2.73 miles north-northwest of the Site. MARB Site 43 was discovered in 1991 as a result of investigation of adjacent lubrication racks that had surface petroleum contamination. Remedial actions performed included excavation and removal of approximately 811 cubic yards of soil and groundwater monitoring. The case was issued closure by SARWQCB on August 21, 2003.</p> <p>For further discussion of the MARB and former MAFB, please refer to Section 5.1.2.</p>
<p>March Air Force Base (Building 2406, Site 39, Graber Street)</p>
<p>Map Key Number 43</p>
<p>EDR Listing of Concern and Associated Databases: LUST</p>
<p>MARB Site 39 is located approximately 2.46 miles north of the Site. According to the listings, an unauthorized release of gasoline that impacted soil only was discovered on July 18, 1991. The source of the release was a gasoline UST. The case was issued closure by SARWQCB on October 10, 2000.</p> <p>For further discussion of the MARB and former MAFB, please refer to Section 5.1.2.</p>
<p>March Air Force Base (IRP S34 NW Corner of Fueling Facility)</p>
<p>Map Key Number 45</p>
<p>EDR Listing of Concern and Associated Databases: LUST</p>
<p>IRP Site 34 is located approximately 0.42 mile east of the Site. According to the listing, an unauthorized release of gasoline that impacted soil and groundwater was discovered upon removal of a 550-gallon UST and associated piping on August 7, 1998. The leak was stopped via UST closure. The case was issued closure by the SARWQCB on May 1, 2002.</p> <p>For further discussion of the MARB and former MAFB, please refer to Section 5.1.2.</p>
<p>Camp Haan (J09CA0279, West and North of the intersection of Nandina Avenue)</p>
<p>Map Key Number 46, 51</p>
<p>EDR Listing of Concern and Associated Databases: Multiple</p>

Table 2 – Environmental Atlas Findings – Site Vicinity Findings
<p>The former Camp Haan is located southeast of Riverside and west of Moreno Valley, approximately 0.83 mile northwest of the Site. It was developed in November 1940 as a Coast Artillery Antiaircraft Replacement Training Center on property adjacent to March Army Air Field. Camp Haan was transferred to the United States Veterans Administration (USVA) to establish the Riverside National Cemetery in 1976. A landfill at and near a former incinerator encompasses approximately 76 acres, and is located at the south end of the former Camp Haan. The incinerator was used to burn waste generated during Camp Haan operations. Camp Haan was closed in 1946, the incinerator was demolished and buried under approximately 12 feet of soil. The landfill has received solid wastes including miscellaneous municipal wastes, ash from the incinerator, and construction debris. USVA has used the site for disposal of soil and vegetative wastes. Chemicals of concern at the landfill include lead, cadmium, copper, and nickel. Because the hazardous wastes are buried deep, the Army Corps of Engineers concludes that the Site poses no health risks to human health. The case is listed as “inactive – needs evaluation” as of August 6, 2020 under DTSC oversight. Based on the contaminants of concern (heavy metals) and distance from the Site, this open case does not represent a REC to the Site.</p>
<p>Building 962, March Air Force Base</p>
<p>Map Key Number 49</p>
<p>EDR Listing of Concern and Associated Databases: Multiple</p>
<p>Building 962 is located approximately 1.06 miles north of the Site. According the listings, a pump tripped at the lift station on March 23, 1997. Two check valves failed causing a tank to overflow, which resulted in a spill of approximately 500 to 1000 gallons of TCE. The spill was reportedly contained and cleaned up by the AFB Conversion Agency.</p>
<p>For further discussion of the MARB and former MAFB, please refer to Section 5.1.2.</p>

A copy of the Radius Search Map is provided in Appendix B.

4.2 Historical Use Information on the Site and Adjoining Properties

Group Delta reviewed available historical information to ascertain the historical uses of the Site and the adjoining properties. Reviewed information included Sanborn insurance maps, historic aerial photographs, historic topographic maps, and city directories.

4.2.1 Historical Aerial Photography, Topographic Map Review, Sanborn Map Review

Aerial photographs and historical topographic maps of the Site and adjoining properties were provided by EDR and reviewed to identify historical land development. Aerial photographs and historical topographic maps dating between 1938 and 2018 were reviewed. Tables 3 and 4 summarize the results of the aerial photograph and topographic map reviews. Copies of the aerial photographs and topographic maps provided by EDR are included as Appendix B. No coverage

was found for the Site in the Sanborn Fire Insurance Map library. A Letter of No Coverage is included as Appendix B.

Table 3 – Summary of Aerial Photographs	
Year	Summary
1938 and 1949	The Site appears to be agricultural land (row crops). The surrounding vicinity appears to be agricultural land (row crops).
1953	The Site appears to be agricultural land (row crops). The surrounding vicinity appears to be agricultural land (row crops), with the existing MARB runway visible to the north.
1961, 1967, 1978, 1985, 1989, 1990, 1994, 1997, 2002, 2006, 2009, 2012, and 2016	The Site appears to be vacant land, with an asphalt-paved road traversing the Site from north to south. The MARB runway appears in its current configuration to the east of the Site. The adjoining properties to the west of the Site start to be developed industrially by 1978, and reach their current configuration by 1990.

Table 4 – Summary of Topographic Maps	
Year	Summary
1942	The Site and surrounding vicinity are depicted as vacant land. An unimproved road is depicted intersecting the central portion of the Site.
1953	The Site and surrounding vicinity are depicted as vacant land. Nandina Avenue is depicted intersecting the central portion of the Site. MARB is visible to the northeast of the Site.
1967, 1973, 2012, 2015, 2018	The Site is depicted as vacant land. An intermittent stream is depicted east of the Site, followed by the MARB runway.

The Site is part of MARB, which is listed on the USEPA NPL. For further discussion of the Site and its relationship to MARB, please refer to Section 5.1.2.

Representative aerial photographs and topographic maps are included in Appendix B.

4.2.2 City Directory Report

The EDR City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. City directories generally include listings of residents or businesses organized both alphabetically and alphanumerically by street names and street addresses and are prepared for many urban and suburban areas of the United States dating back to the early 1900s.

Group Delta reviewed the city directory search prepared by EDR. The Site is vacant land and has no known street addresses associated with it. The search was performed for the adjacent properties.

According to the city directory, the surrounding properties to the west have been occupied for industrial purposes, such as tractor and forklift sales, auto dismantling, rebar, pipeline, and building materials sales from 1992 to 2017. For further discussion, please refer to Section 4.1.3.

The city directory search results prepared by EDR are presented in Appendix B.

5.0 REGULATORY AGENCY RECORDS

5.1 Online Available Records

5.1.1 Department of Toxic Substances Control (DTSC)

Group Delta reviewed available files of the State of California DTSC published on the internet records database Envirostor. The purpose of this search was to identify any evidence of unauthorized releases of hazardous materials to the surface, subsurface soil, and groundwater.

MARB and the former MAFB was identified on the Envirostor database. For further discussion, please refer to Section 5.1.2.

5.1.2 State Water Resources Control Board (SWRCB)

Group Delta reviewed available files of the State Water Resources Control Board published on the internet records database GeoTracker. The purpose of this search was to identify any evidence of unauthorized releases of hazardous materials to the surface, subsurface soil, and groundwater.

MARB and the former MAFB was identified on the GeoTracker database.

The Site is located on the MAFB NPL site in Riverside, California. The 7,123-acre MARB and the former MAFB has been used for aircraft maintenance and repair, refueling operations, and training activities since 1918. Facility operations contaminated soil and groundwater with hazardous chemicals. Three zones of groundwater contamination beneath the base were identified. Groundwater contamination has migrated to drinking water wells located off Base that are no longer in use. However, a groundwater containment system has been installed to prevent off-site groundwater migration and the off-site plume is being monitored. The MAFB NPL long-term cleanup is ongoing.

According to a review of closed and open release cases at MARB and the former MAFB, no documented releases have occurred within the Site boundaries, including all individual sites associated with OU-1 and OU-2 summarized in Section 4.1.2.

The Final Fourth Five-Year Review Report at MARB and Former MAFB, California was prepared and dated July 16, 2019. According to sampling results from 2017, none of the upper and lower alluvial or bedrock groundwater contamination plumes for tetrachloroethene (PCE), TCE, or carbon tetrachloride are located beneath the Site. Based on the current monitoring well network, the groundwater plumes are generally decreasing in size. Although some contaminants were detected in off-Base water supply wells, the contaminant concentrations were below California Maximum Contaminant Levels (MCLs) for drinking water and were generally not

increasing. The Expanded Groundwater Extraction and Treatment System (EGETS) is in place and functioning as designed, however it may be providing incomplete hydraulic control at the eastern Base boundary. The protectiveness evaluation for the groundwater extraction and treatment remedy shall be reviewed once the per- and polyfluorinated alkyl substances (PFAS) investigation at former MAFB is complete, and a cleanup level is established in the future. The EGETS is located approximately 1.41 miles northeast of the Site.

The 2019-2020 Annual Groundwater Monitoring Report for Site CG049, Basewide Groundwater Monitoring Program, Operable Unit 5 at MARB and Former MAFB, California was performed by CH2M and dated November 2021. The on-Site groundwater monitoring well 89F4E-MW-001 is not sampled as part of the Basewide Groundwater Monitoring Program. Groundwater monitoring well 89F4E-MW-001 is located on Site and is discussed further in the paragraph below. The Basewide contaminants of concern (COCs) include PCE, TCE, and carbon tetrachloride. As groundwater rises, it may encounter pre-existing contamination in the vadose zone or it may spread contaminated groundwater into previously uncontaminated portions of the vadose zone. Therefore, historical groundwater elevations in wells that have shown rising COC concentrations in the upper alluvial unit were evaluated to assess if a correlation could be established. Site-by-site evaluation indicates rising groundwater has a varying effect on contaminant concentrations, ranging from no observed effects to increasing contaminant concentrations and extents of plumes exceeding the MCLs. However, according to the groundwater sampling results from 2019-2020, none of the upper and lower alluvial or bedrock groundwater contamination plumes for PCE, TCE, or carbon tetrachloride are located beneath the Site.

A Final Site Inspection Report of Aqueous Film Forming Foam (AFFF) Release Areas, MARB, California was prepared by Amec Foster Wheeler Programs, Inc. and dated December 2017. The purpose of the site inspection was to determine, through environmental media sampling, if a release of per- and polyfluorinated alkyl substances (PFAS, PFOS, and PFOA) has occurred at potential AFFF release areas identified by others during a Preliminary Assessment in 2015. The USEPA Office of Water issued lifetime drinking water Health Advisory (HA) values for PFOS and PFOA in May 2016. The HA values for PFOS and PFOA are 0.07 micrograms per liter ($\mu\text{g}/\text{L}$) for each constituent. Eleven AFFF release areas were identified and recommended for site inspection. The closest AFFF Release Area to the Site is AFFF Release Area 11, which is located approximately 0.42-mile north of the Site, discussed below. Review of analytical results indicated that PFAS are present in soil and groundwater at MARB in excess of applicable USEPA HA value and/or RSLs. PFOS concentrations in soil exceeded the RSL at AFFF Release Areas 4 and 5. PFOS, PFOA, and/or PFOS+PFOA concentrations in groundwater exceeded the USEPA HA values at AFFF Release Areas 2, 4, 5, 6, 8, 9, 10, and 11. The closest AFFF Release Area to the Site is AFFF Release Area 11, which is located approximately 0.42-mile north of the Site. AFFF Release Area 11 was the site of a 1989 F-4E Crash. This one-time event occurred in July 1989 when an unknown amount of AFFF was potentially used to extinguish an aircraft fire. If used, a small volume of AFFF would have infiltrated into the ground in the vicinity of the crash in a grassy/bare soil field.

According to the Final Addendum to the Site Inspection of AFFF Release Areas dated January 26, 2018, groundwater monitoring well 89F4E-MW-001 was proposed for installation in the northern portion of the Site to assess PFAS presence in groundwater within the upper alluvial hydrostratigraphic unit, and at the southwestern installation boundary, downgradient within the bedrock channel. Groundwater monitoring well 89F4E-MW-001 was observed in the northern portion of the Site during the Site reconnaissance on January 19, 2022. No sampling data for the well was provided on GeoTracker.

Based on the information provided, the MARB and former MAFB NPL site represents a REC to the Site. If encountered, expected ordnance would likely be limited to potential lead-containing bullets and spent cartridge casings.

Based on the eleven identified potential PFAS release sites due to the use of AFFF, the potential PFAS-impacted groundwater underlying the Site represents an area of concern (AOC).

5.1.3 California Geologic Energy Management Division (CalGEM)

Group Delta reviewed mapping available on the CalGEM website for oil and gas wells on or in the vicinity of the Project. The purpose of this search was to identify any evidence of oil production activities on or around the Site.

The Site was not identified on the CalGEM database.

No RECs were identified as a result of the CalGEM database review.

5.1.4 Office of California State Fire Marshall

Group Delta reviewed available files through the online National Pipeline Mapping System (NPMS) database maintained by the Office of California State Fire Marshal. NPMS is a Geographic Information System (GIS) database of pipeline information for the specific intent of emergency response. The database does not include natural gas lines or liquefied natural gas facilities.

The Site was not identified on the NPMS database.

No RECs were identified as a result of the NPMS database review.

6.0 SITE RECONNAISSANCE

6.1 Methodology and Limiting Conditions

A site reconnaissance was performed on January 19, 2022 by Laura Botzong of Group Delta.

The purpose of the Site reconnaissance was to observe the present Site use and conditions as they relate to the possible presence of potentially hazardous substances and petroleum products. In addition, adjoining properties and roads were visually observed from the Site to identify land uses and the potential presence of structures, operations, activities, or environmental conditions that may involve the use, treatment, storage, disposal, or generation of hazardous wastes and/or petroleum products that may pose an environmental concern to the Site. Photographic documentation of the reconnaissance is included in Appendix A.

6.2 General Site Setting

The Site is comprised of an approximately 6,000 lineal-foot site located within the MARB in Riverside County, California. An asphalt-paved access road traverses the Site from north to south. An intermittent streambed was observed east of the Site, which was partially paved with concrete in the northern and southern portions. East of the streambed, the MARB aircraft flightline and runway was observed.

The Site was vacant land, and no stressed vegetation was observed. One groundwater monitoring well (89F4E-MW-001) was observed in the northern portion of the Site. For further discussion, please refer to Section 5.1.2.

6.3 Adjacent Properties Site Observations

The properties adjacent to the Site were observed from the Site to assess if they had potential to present RECs for the Site. The Site is bordered on the north, south, and east by MARB; and on the west by PODS Moving and Storage (1330 Nandina Avenue), and multiple exterior equipment storage yards.

Signage for a high-pressure gas pipeline was observed at the adjoining property to the east (5137 Patterson Avenue) at the Site perimeter. No evidence of natural gas pipelines were found on the NPMS database. However, the signage may refer to an inactive, old, unreported, or abandoned pipeline. The potential east-adjoining high-pressure gas pipeline represents an AOC to the Site.

6.4 Site Visit Findings

One groundwater monitoring well (89F4E-MW-001) was observed in the northern portion of the Site. For further discussion, please refer to Section 5.1.2.

7.0 SIGNIFICANT DATA GAPS

7.1 Data Gaps

In general, a Data Gap is the inability to gather information as prescribed in the ASTM Standard Practice despite good faith efforts. This may include, but not be limited to, a lack of historical information, inability to interview knowledgeable individuals, or inspect portions of the Site.

No data gaps were encountered during this assessment.

7.2 Data Failures

The objective of reviewing historical information is to identify all obvious uses of the Site from first developed use or 1940, whichever is earlier, to identify the likelihood of previous uses resulting in an REC(s). Generally, a Data Failure is when all obvious uses of the site cannot be determined despite gathering and reviewing all of the standard historical sources that are reasonably ascertainable. A historical source is considered reasonably ascertainable if it is (1) publicly available, (2) obtainable within a reasonable period of time and at a reasonable cost, and (3) practically reviewable.

The Site uses were identified back to 1938. Therefore, data failure was not encountered during the course of this assessment.

8.0 FINDINGS AND CONCLUSIONS

Group Delta has performed a Phase I ESA for the site at Perris Valley Channel Lateral B, Stage 4 Project within MARB in Perris, California. This ESA was conducted in general accordance with the scope of work, under guidance provided by the ASTM E1527-21 standard, and in a manner generally consistent with the agreement between the Client and Group Delta for this type of report.

The information procured during this investigation was used to identify, to the extent practical and within the limitations of the Scope, RECs associated with the Site due to current or past land use.

This assessment has revealed the following evidence of RECs in connection to the Site:

- The MARB and former MAFB NPL site represents a REC to the Site. No direct evidence of contaminated soil on the Site was found; however, contaminated groundwater underlies the Site. Planned construction activities should include a health and safety plan and soil/groundwater management plan to address potential worker contact with, and management of, potentially VOC- or petroleum-hydrocarbon-contaminated soil or groundwater. If encountered, expected ordnance would likely be limited to potential lead-containing bullets and spent cartridge casings. MARB may require site-specific training, including spent ordnance training, prior to construction.

Additionally, this assessment has revealed the following AOCs in connection to the Site:

- The potential for PFAS-impacted groundwater underlying the Site represents an AOC. The plans recommended above should include the potential for PFAS-contaminated soil or groundwater.
- Signage for a high-pressure gas pipeline was observed at the adjoining property to the east (5137 Patterson Avenue) at the Site perimeter. No evidence of natural gas pipelines was found on the NPMS database. However, the signage may refer to an inactive, old, unreported, or abandoned pipeline. The potential east-adjoining high-pressure gas pipeline represents an AOC to the Site. Planned construction activities should include measures to identify if the potential pipeline encroaches onto the Site and whether it will be encountered during construction activities.

9.0 DEVIATIONS

There were no deviations to the ASTM Standard Practice associated with the preparation and development of this Phase I ESA.

10.0 REFERENCES

California Department of Toxic Substances Control, EnviroStor Database, January 21, 2022.
www.envirostor.dtsc.ca.gov.

Department of Transportation, National Pipeline Mapping System, January 21, 2022.
<https://www.npms.phmsa.dot.gov/PublicViewer/>,

Environmental Data Resources, Inc., The EDR Radius Map Report with GeoCheck dated January 5, 2022.

Environmental Data Resources, Inc., Certified Sanborn Map Report dated January 4, 2022.

Environmental Data Resources, Inc., Historical Topographic Map Report dated January 4, 2022.

Environmental Data Resources, Inc., The EDR-City Directory Image Report dated January 5, 2022.

Environmental Data Resources, Inc. Aerial Photo Decade Package dated January 4, 2022.

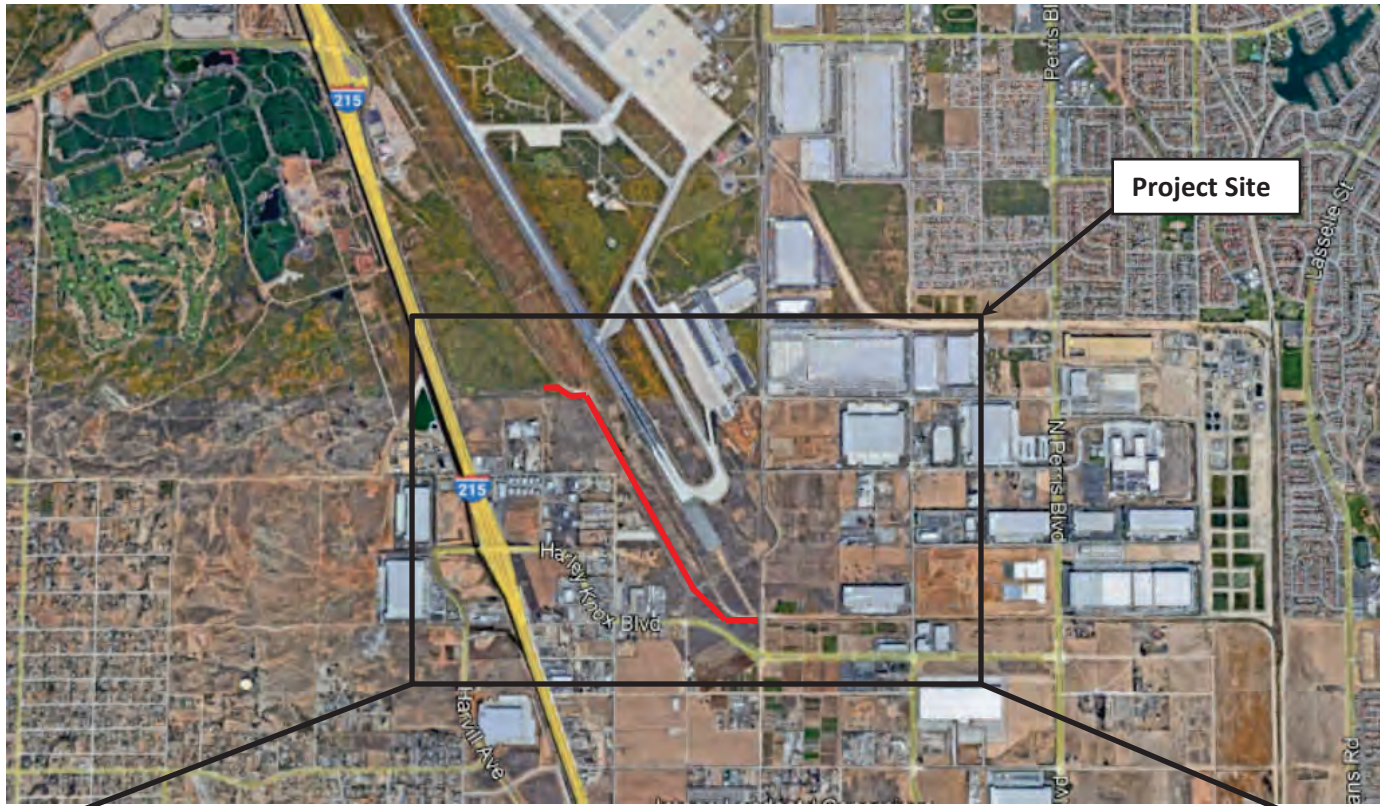
Google Maps, <http://maps.google.com>

Office of California State Fire Marshal, January 21, 2022.
http://osfm.fire.ca.gov/pipeline/pipeline_mapping.php.

State of California, Department of Conservation, Geologic Energy Management Division, January 21, 2022.
<https://maps.conservation.ca.gov/doggr/wellfinder/#openModal>.

State Water Resources Control Board, GeoTracker Database, January 21, 2022.
<http://geotracker.waterboards.ca.gov/>.

Figure



Reference: *Google Earth*

 Site boundary



GDC Project No. EN8180

Project Location Map

Initial Site Assessment

Perris Valley Channel Lateral B, Stage 4 Project
 March Air Reserve Base (MARB)
 Perris, California

Figure 1

Appendix A

Site Photographs



1. View from Site looking northwest



2. View from Site looking north



3. View of groundwater monitoring well 89F4E-MW-001



4. View of groundwater monitoring well 89F4E-MW-001



5. View of northern portion of Site, facing north



6. View to the east of MARB flightline and runway



7. View of high-pressure gas pipeline signage at 5137 Patterson Avenue



8. View of central portion of Site, facing south



9. View of southern portion of Site



10. View of paved streambed in southern portion of Site



11. View of flood control equipment in southern portion of Site



12. Adjoining property to the west



11. Adjoining property to the west



12. Adjoining property to the west



11. View of adjoining MARB flightline and runway, from south facing north

Appendix B

**Environmental Data Resources, Inc. Report
(Radius Search Map, Sanborn Maps, Aerial Photographs,
Topographic Maps, & City Directories)**

Perris Valley Channel

Nandina Avenue and Patterson Avenue
March Air Reserve Ba, CA 92518

Inquiry Number: 6798685.2s

December 23, 2021

The EDR Radius Map™ Report with GeoCheck®



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527-21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

NANDINA AVENUE AND PATTERSON AVENUE
MARCH AIR RESERVE BA, CA 92518

COORDINATES

Latitude (North): 33.8659320 - 33° 51' 57.35"
Longitude (West): 117.2518720 - 117° 15' 6.73"
Universal Tranverse Mercator: Zone 11
UTM X (Meters): 476703.1
UTM Y (Meters): 3747125.5
Elevation: 1484 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 12015925 STEELE PEAK, CA
Version Date: 2018

Northeast Map: 12015927 SUNNYMEAD, CA
Version Date: 2018

Southeast Map: 12015907 PERRIS, CA
Version Date: 2018

Northwest Map: 12014858 RIVERSIDE EAST, CA
Version Date: 2018

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20140527, 20140603
Source: USDA

MAPPED SITES SUMMARY

Target Property Address:
 NANDINA AVENUE AND PATTERSON AVENUE
 MARCH AIR RESERVE BA, CA 92518

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
Reg	MARCH AIR FORCE BASE		DOD	Same	1 ft.
Reg	MARCH AIR FORCE BASE	22 CSG/CC	NPL, SEMS, RCRA-LQG, US ENG CONTROLS, US INST...	Same	1 ft.
A1	EMPIRE TRACTOR CO	23130 NANDINA AVE	RCRA-SQG, FINDS, ECHO	Higher	485, 0.092, West
A2	TRIWAY INDUSTRIES	23100 NANDINA	RCRA-SQG, FINDS, ECHO, EMI, HWTS	Higher	510, 0.097, West
B3	LAWLER WOODCREST SER	1090 HARLEY KNOX BLV	RCRA NonGen / NLR	Higher	702, 0.133, SSE
B4	LAWLER WOODCREST SER	1090 HARLEY KNOX BLV	RCRA NonGen / NLR	Higher	702, 0.133, SSE
5	L & R BUTLER AUTO DI	5008 PATTERSON AVENU	RCRA NonGen / NLR	Higher	710, 0.134, SSW
B6	SUPREME TRUCK BODIE	1190 HARLEY KNOX	RCRA NonGen / NLR	Higher	712, 0.135, SSE
B7	UNITED MATERIAL HAND	1190 HARLEY KNOX BLV	RCRA NonGen / NLR	Higher	712, 0.135, SSE
8	INTEGRITY REBAR PLAC	1345 NANDINA AVE	RCRA NonGen / NLR	Higher	841, 0.159, West
9	AMAZON.COM SERVICES	4501 PATTERSON AVE	CERS HAZ WASTE, NPDES, CIWQS, CERS, HWTS	Higher	858, 0.162, South
10	CLEAN TIDE CONTAINER	1440 AIRPORT WAY	RCRA-LQG, FINDS	Higher	933, 0.177, WSW
11	INLAND PLASTERING	1153 W OLEANDER AVE	UST	Higher	1141, 0.216, South
C12	GOLD STAR	1354 JETWAY	CERS HAZ WASTE, CERS TANKS, CERS	Higher	1216, 0.230, WSW
C13	GOLDSTAR ASPHALT PRO	1354 JET WAY	RCRA NonGen / NLR	Higher	1260, 0.239, WSW
D14	EMPIRE TRACTOR	1480 NANDINA AVE	LUST, Cortese, HIST CORTESE, CERS	Higher	1517, 0.287, West
D15	EMPIRE TRACTOR CO	1480 NANDINA AVE	LUST, HWTS	Higher	1517, 0.287, West
E16	PULLIAM FAMILY TRUST	1569 NANDINA AVE	LUST	Higher	1952, 0.370, West
E17	NANDINA LIQUOR	1569 NANDINA AVE	LUST, SWEEPS UST, CA FID UST, Cortese, HIST...	Higher	1952, 0.370, West
F18	US AIR FORCE, MARCH		LUST	Lower	2194, 0.416, ENE
F19	US AIR FORCE, MARCH		LUST	Lower	2194, 0.416, ENE
F20	US AIR FORCE, MARCH		LUST	Lower	2194, 0.416, ENE
F21	US AIR FORCE, MARCH		LUST	Lower	2194, 0.416, ENE
F22	MARCH AIR FORCE BASE	BLDG 550 GRAHAM (RIV	LUST	Lower	2194, 0.416, ENE
F23	MARCH AIR RESERVE BA	BLDG 480 PANERO S-33	LUST	Lower	2194, 0.416, ENE
F24	US AIR FORCE, MARCH		LUST	Lower	2194, 0.416, ENE
F25	US AIR FORCE, MARCH		LUST	Lower	2194, 0.416, ENE
F26	US AIR FORCE, MARCH		LUST	Lower	2194, 0.416, ENE
F27	US AIR FORCE, MARCH		LUST	Lower	2194, 0.416, ENE
F28	US AIR FORCE, MARCH		LUST	Lower	2194, 0.416, ENE
F29	MARCH AIR RESERVE BA		LUST	Lower	2194, 0.416, ENE
F30	US AIR FORCE, MARCH		LUST	Lower	2194, 0.416, ENE
F31	US AIR FORCE, MARCH		LUST	Lower	2194, 0.416, ENE
F32	MARCH AIR RESERVE BA	3,545 ACRES; EAST OF	ENVIROSTOR, HIST Cal-Sites	Lower	2194, 0.416, ENE
F33	MARCH AIR FORCE BASE		CA BOND EXP. PLAN	Lower	2194, 0.416, ENE
F34	US AIR FORCE, MARCH		LUST	Lower	2194, 0.416, ENE
F35	US AIR FORCE, MARCH		LUST	Lower	2194, 0.416, ENE
F36	US AIR FORCE, MARCH		LUST	Lower	2194, 0.416, ENE
F37	US AIR FORCE, MARCH		LUST	Lower	2194, 0.416, ENE

MAPPED SITES SUMMARY

Target Property Address:
 NANDINA AVENUE AND PATTERSON AVENUE
 MARCH AIR RESERVE BA, CA 92518

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
F38	US AIR FORCE, MARCH		LUST	Lower	2194, 0.416, ENE
F39	US AIR FORCE, MARCH		LUST	Lower	2194, 0.416, ENE
F40	US AIR FORCE, MARCH		LUST	Lower	2194, 0.416, ENE
F41	MARCH AIR RESERVE BA	3 545 ACRES OF RIVER	HIST CORTESE	Lower	2194, 0.416, ENE
F42	MARCH AIR FORCE BASE	SITE 43 35TH STREET	LUST	Lower	2194, 0.416, ENE
F43	MARCH AIR RESERVE BA	BLDG 2406 SITE 39 GR	LUST	Lower	2194, 0.416, ENE
F44	US AIR FORCE, MARCH		LUST	Lower	2194, 0.416, ENE
F45	MARCH AIR RESERVE BA	IRP S34 NW CORNOR OF	LUST	Lower	2194, 0.416, ENE
46	CAMP HAAN (J09CA0279	WEST AND NORTH OF TH	RESPONSE, ENVIROSTOR	Higher	3483, 0.660, West
G47	PANERO AIRCRAFT FUEL	MARCH AFB	Notify 65	Higher	4080, 0.773, NNE
G48	MARCH AIR FORCE BASE	7,123 ACRES; EAST OF	HIST Cal-Sites	Higher	4080, 0.773, NNE
G49	BUILDING 962	MARCH AFB	CHMIRS, Notify 65	Higher	4080, 0.773, NNE
H50	PISTOL RANGE		UXO	Higher	4653, 0.881, WNW
H51	CAMP HAAN		FUDS	Higher	4653, 0.881, WNW
52	MARCH AIR FORCE BASE	7,123 ACRES; EAST OF	RESPONSE, ENVIROSTOR, HIST Cal-Sites	Higher	4989, 0.945, NNW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

Proposed NPL..... Proposed National Priority List Sites
NPL LIENS..... Federal Superfund Liens

Lists of Federal Delisted NPL sites

Delisted NPL..... National Priority List Deletions

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY..... Federal Facility Site Information listing

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE..... Superfund Enterprise Management System Archive

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS..... Corrective Action Report

Lists of Federal RCRA TSD facilities

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Lists of Federal RCRA generators

RCRA-VSQG..... RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

Federal institutional controls / engineering controls registries

LUCIS..... Land Use Control Information System

Federal ERNS list

ERNS..... Emergency Response Notification System

EXECUTIVE SUMMARY

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF..... Solid Waste Information System

Lists of state and tribal leaking storage tanks

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

CPS-SLIC..... Statewide SLIC Cases

Lists of state and tribal registered storage tanks

FEMA UST..... Underground Storage Tank Listing

AST..... Aboveground Petroleum Storage Tank Facilities

INDIAN UST..... Underground Storage Tanks on Indian Land

Lists of state and tribal voluntary cleanup sites

VCP..... Voluntary Cleanup Program Properties

INDIAN VCP..... Voluntary Cleanup Priority Listing

Lists of state and tribal brownfield sites

BROWNFIELDS..... Considered Brownfields Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT..... Waste Management Unit Database

SWRCY..... Recycler Database

HAULERS..... Registered Waste Tire Haulers Listing

INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands

ODI..... Open Dump Inventory

DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations

IHS OPEN DUMPS..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL..... Delisted National Clandestine Laboratory Register

SCH..... School Property Evaluation Program

CDL..... Clandestine Drug Labs

Toxic Pits..... Toxic Pits Cleanup Act Sites

US CDL..... National Clandestine Laboratory Register

PFAS..... PFAS Contamination Site Location Listing

AQUEOUS FOAM..... Former Fire Training Facility Assessments Listing

Local Lists of Registered Storage Tanks

SWEEPS UST..... SWEEPS UST Listing

EXECUTIVE SUMMARY

HIST UST..... Hazardous Substance Storage Container Database
CA FID UST..... Facility Inventory Database

Local Land Records

LIENS..... Environmental Liens Listing
LIENS 2..... CERCLA Lien Information
DEED..... Deed Restriction Listing

Records of Emergency Release Reports

HMIRS..... Hazardous Materials Information Reporting System
CHMIRS..... California Hazardous Material Incident Report System
LDS..... Land Disposal Sites Listing
MCS..... Military Cleanup Sites Listing
SPILLS 90..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

SCRD DRYCLEANERS..... State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR..... Financial Assurance Information
EPA WATCH LIST..... EPA WATCH LIST
2020 COR ACTION..... 2020 Corrective Action Program List
TSCA..... Toxic Substances Control Act
TRIS..... Toxic Chemical Release Inventory System
SSTS..... Section 7 Tracking Systems
RMP..... Risk Management Plans
RAATS..... RCRA Administrative Action Tracking System
PADS..... PCB Activity Database System
ICIS..... Integrated Compliance Information System
FTTS..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS..... Material Licensing Tracking System
COAL ASH DOE..... Steam-Electric Plant Operation Data
COAL ASH EPA..... Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER..... PCB Transformer Registration Database
RADINFO..... Radiation Information Database
HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS..... Incident and Accident Data
CONSENT..... Superfund (CERCLA) Consent Decrees
INDIAN RESERV..... Indian Reservations
FUSRAP..... Formerly Utilized Sites Remedial Action Program
UMTRA..... Uranium Mill Tailings Sites
LEAD SMELTERS..... Lead Smelter Sites
US AIRS..... Aerometric Information Retrieval System Facility Subsystem
US MINES..... Mines Master Index File
ABANDONED MINES..... Abandoned Mines
FINDS..... Facility Index System/Facility Registry System
ECHO..... Enforcement & Compliance History Information
DOCKET HWC..... Hazardous Waste Compliance Docket Listing
FUELS PROGRAM..... EPA Fuels Program Registered Listing
CUPA Listings..... CUPA Resources List
DRYCLEANERS..... Cleaner Facilities
EMI..... Emissions Inventory Data
ENF..... Enforcement Action Listing

EXECUTIVE SUMMARY

Financial Assurance.....	Financial Assurance Information Listing
HAZNET.....	Facility and Manifest Data
ICE.....	ICE
HWP.....	EnviroStor Permitted Facilities Listing
HWT.....	Registered Hazardous Waste Transporter Database
MINES.....	Mines Site Location Listing
MWMP.....	Medical Waste Management Program Listing
NPDES.....	NPDES Permits Listing
PEST LIC.....	Pesticide Regulation Licenses Listing
PROC.....	Certified Processors Database
UIC.....	UIC Listing
UIC GEO.....	UIC GEO (GEOTRACKER)
WASTEWATER PITS.....	Oil Wastewater Pits Listing
WDS.....	Waste Discharge System
WIP.....	Well Investigation Program Case List
MILITARY PRIV SITES.....	MILITARY PRIV SITES (GEOTRACKER)
PROJECT.....	PROJECT (GEOTRACKER)
WDR.....	Waste Discharge Requirements Listing
CIWQS.....	California Integrated Water Quality System
CERS.....	CERS
NON-CASE INFO.....	NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS.....	OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS.....	PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT.....	SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ.....	Well Stimulation Project (GEOTRACKER)
MINES MRDS.....	Mineral Resources Data System
HWTS.....	Hazardous Waste Tracking System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP.....	EDR Proprietary Manufactured Gas Plants
EDR Hist Auto.....	EDR Exclusive Historical Auto Stations
EDR Hist Cleaner.....	EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF.....	Recovered Government Archive Solid Waste Facilities List
RGA LUST.....	Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

EXECUTIVE SUMMARY

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL: Also known as Superfund, the National Priority List database is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund program. The source of this database is the U.S. EPA.

A review of the NPL list, as provided by EDR, and dated 10/20/2021 has revealed that there is 1 NPL site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MARCH AIR FORCE BASE Cerclis ID:: 902761 EPA Id: CA4570024527	22 CSG/CC	0 - 1/8 (0.000 mi.)	0	9

Lists of Federal sites subject to CERCLA removals and CERCLA orders

SEMS: SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the SEMS list, as provided by EDR, and dated 10/20/2021 has revealed that there is 1 SEMS site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MARCH AIR FORCE BASE Site ID: 0902761 EPA Id: CA4570024527	22 CSG/CC	0 - 1/8 (0.000 mi.)	0	9

Lists of Federal RCRA generators

RCRA-LQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

A review of the RCRA-LQG list, as provided by EDR, and dated 09/13/2021 has revealed that there are 2 RCRA-LQG sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MARCH AIR FORCE BASE	22 CSG/CC	0 - 1/8 (0.000 mi.)	0	9

EXECUTIVE SUMMARY

EPA ID:: CA4570024527

CLEAN TIDE CONTAINER

EPA ID:: CAL000328179

1440 AIRPORT WAY

WSW 1/8 - 1/4 (0.177 mi.)

10

72

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 09/13/2021 has revealed that there are 2 RCRA-SQG sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
EMPIRE TRACTOR CO EPA ID:: CAD981969959	23130 NANDINA AVE	W 0 - 1/8 (0.092 mi.)	A1	46
TRIWAY INDUSTRIES EPA ID:: CAD982503336	23100 NANDINA	W 0 - 1/8 (0.097 mi.)	A2	49

Federal institutional controls / engineering controls registries

US ENG CONTROLS: A listing of sites with engineering controls in place.

A review of the US ENG CONTROLS list, as provided by EDR, and dated 08/23/2021 has revealed that there is 1 US ENG CONTROLS site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MARCH AIR FORCE BASE EPA ID:: CA4570024527 EPA ID:: CA4570024527	22 CSG/CC	0 - 1/8 (0.000 mi.)	0	9

US INST CONTROLS: A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

A review of the US INST CONTROLS list, as provided by EDR, and dated 08/23/2021 has revealed that there is 1 US INST CONTROLS site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MARCH AIR FORCE BASE EPA ID:: CA4570024527	22 CSG/CC	0 - 1/8 (0.000 mi.)	0	9

EXECUTIVE SUMMARY

Lists of state- and tribal (Superfund) equivalent sites

RESPONSE: Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

A review of the RESPONSE list, as provided by EDR, has revealed that there are 2 RESPONSE sites within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
CAMP HAAN (J09CA0279) Database: RESPONSE, Date of Government Version: 07/22/2021 Status: Inactive - Needs Evaluation Facility Id: 71000062	WEST AND NORTH OF TH	W 1/2 - 1 (0.660 mi.)	46	175
MARCH AIR FORCE BASE Database: RESPONSE, Date of Government Version: 07/22/2021 Status: Certified Facility Id: 33970003 Facility Id: 33350014	7,123 ACRES; EAST OF	NNW 1/2 - 1 (0.945 mi.)	52	187

Lists of state- and tribal hazardous waste facilities

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 07/22/2021 has revealed that there are 3 ENVIROSTOR sites within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
CAMP HAAN (J09CA0279) Facility Id: 71000062 Status: Inactive - Needs Evaluation	WEST AND NORTH OF TH	W 1/2 - 1 (0.660 mi.)	46	175
MARCH AIR FORCE BASE Facility Id: 33970003 Facility Id: 33350014 Status: Certified	7,123 ACRES; EAST OF	NNW 1/2 - 1 (0.945 mi.)	52	187
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MARCH AIR RESERVE BA Facility Id: 33970004 Status: Active	3,545 ACRES; EAST OF	ENE 1/4 - 1/2 (0.416 mi.)	F32	123

EXECUTIVE SUMMARY

Lists of state and tribal leaking storage tanks

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 29 LUST sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
EMPIRE TRACTOR Database: LUST REG 8, Date of Government Version: 02/14/2005 Facility Status: Leak being confirmed Global ID: T0606500575	1480 NANDINA AVE	W 1/4 - 1/2 (0.287 mi.)	D14	89
EMPIRE TRACTOR CO Database: RIVERSIDE CO. LUST, Date of Government Version: 09/29/2021 Database: LUST, Date of Government Version: 09/07/2021 Status: Completed - Case Closed Facility Id: 9914949 Global Id: T0606500575 Facility Status: 9	1480 NANDINA AVE	W 1/4 - 1/2 (0.287 mi.)	D15	91
PULLIAM FAMILY TRUST Database: LUST REG 8, Date of Government Version: 02/14/2005 Facility Status: Preliminary site assessment workplan submitted Global ID: T0606500307	1569 NANDINA AVE	W 1/4 - 1/2 (0.370 mi.)	E16	93
NANDINA LIQUOR Database: RIVERSIDE CO. LUST, Date of Government Version: 09/29/2021 Database: LUST, Date of Government Version: 09/07/2021 Status: Completed - Case Closed Facility Id: 93025 Global Id: T0606500307 Facility Status: 9	1569 NANDINA AVE	W 1/4 - 1/2 (0.370 mi.)	E17	94
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
US AIR FORCE, MARCH Database: LUST REG 8, Date of Government Version: 02/14/2005 Global ID: DOD100281800		ENE 1/4 - 1/2 (0.416 mi.)	F18	107
US AIR FORCE, MARCH Database: LUST REG 8, Date of Government Version: 02/14/2005 Global ID: DOD100290000		ENE 1/4 - 1/2 (0.416 mi.)	F19	108
US AIR FORCE, MARCH Database: LUST REG 8, Date of Government Version: 02/14/2005 Global ID: DOD100282100		ENE 1/4 - 1/2 (0.416 mi.)	F20	109
US AIR FORCE, MARCH Database: LUST REG 8, Date of Government Version: 02/14/2005 Global ID: DOD100281900		ENE 1/4 - 1/2 (0.416 mi.)	F21	110
MARCH AIR FORCE BASE Database: LUST REG 8, Date of Government Version: 02/14/2005 Facility Status: Remedial action (cleanup) Underway Global ID: T0606500401	BLDG 550 GRAHAM (RIV	ENE 1/4 - 1/2 (0.416 mi.)	F22	111
MARCH AIR RESERVE BA Database: LUST REG 8, Date of Government Version: 02/14/2005	BLDG 480 PANERO S-33	ENE 1/4 - 1/2 (0.416 mi.)	F23	112

EXECUTIVE SUMMARY

Facility Status: Remedial action (cleanup) Underway			
Global ID: T0606500146			
US AIR FORCE, MARCH	ENE 1/4 - 1/2 (0.416 mi.)	F24	114
Database: LUST REG 8, Date of Government Version: 02/14/2005			
Global ID: DOD100321100			
US AIR FORCE, MARCH	ENE 1/4 - 1/2 (0.416 mi.)	F25	115
Database: LUST REG 8, Date of Government Version: 02/14/2005			
Global ID: DOD100319500			
US AIR FORCE, MARCH	ENE 1/4 - 1/2 (0.416 mi.)	F26	116
Database: LUST REG 8, Date of Government Version: 02/14/2005			
Global ID: DOD100289900			
US AIR FORCE, MARCH	ENE 1/4 - 1/2 (0.416 mi.)	F27	117
Database: LUST REG 8, Date of Government Version: 02/14/2005			
Global ID: DOD100321200			
US AIR FORCE, MARCH	ENE 1/4 - 1/2 (0.416 mi.)	F28	118
Database: LUST REG 8, Date of Government Version: 02/14/2005			
Global ID: DOD100286600			
MARCH AIR RESERVE BA	ENE 1/4 - 1/2 (0.416 mi.)	F29	119
Database: LUST REG 8, Date of Government Version: 02/14/2005			
Global ID: T0606531112			
US AIR FORCE, MARCH	ENE 1/4 - 1/2 (0.416 mi.)	F30	121
Database: LUST REG 8, Date of Government Version: 02/14/2005			
Global ID: DOD100286800			
US AIR FORCE, MARCH	ENE 1/4 - 1/2 (0.416 mi.)	F31	122
Database: LUST REG 8, Date of Government Version: 02/14/2005			
Global ID: DOD100321400			
US AIR FORCE, MARCH	ENE 1/4 - 1/2 (0.416 mi.)	F34	162
Database: LUST REG 8, Date of Government Version: 02/14/2005			
Global ID: DOD100289800			
US AIR FORCE, MARCH	ENE 1/4 - 1/2 (0.416 mi.)	F35	163
Database: LUST REG 8, Date of Government Version: 02/14/2005			
Global ID: DOD100319700			
US AIR FORCE, MARCH	ENE 1/4 - 1/2 (0.416 mi.)	F36	165
Database: LUST REG 8, Date of Government Version: 02/14/2005			
Global ID: DOD100319600			
US AIR FORCE, MARCH	ENE 1/4 - 1/2 (0.416 mi.)	F37	166
Database: LUST REG 8, Date of Government Version: 02/14/2005			
Global ID: DOD100286900			
US AIR FORCE, MARCH	ENE 1/4 - 1/2 (0.416 mi.)	F38	167
Database: LUST REG 8, Date of Government Version: 02/14/2005			
Global ID: DOD100282000			
US AIR FORCE, MARCH	ENE 1/4 - 1/2 (0.416 mi.)	F39	168
Database: LUST REG 8, Date of Government Version: 02/14/2005			
Global ID: DOD100286700			
US AIR FORCE, MARCH	ENE 1/4 - 1/2 (0.416 mi.)	F40	169
Database: LUST REG 8, Date of Government Version: 02/14/2005			
Global ID: DOD100321300			
MARCH AIR FORCE BASE	SITE 43 35TH STREET	ENE 1/4 - 1/2 (0.416 mi.)	F42
Database: LUST REG 8, Date of Government Version: 02/14/2005			

EXECUTIVE SUMMARY

Facility Status: Case Closed
Global ID: T0606553811

MARCH AIR RESERVE BA	BLDG 2406 SITE 39 GR	ENE 1/4 - 1/2 (0.416 mi.)	F43	172
Database: LUST REG 8, Date of Government Version: 02/14/2005				
Facility Status: Case Closed				
Global ID: T0606500293				
US AIR FORCE, MARCH		ENE 1/4 - 1/2 (0.416 mi.)	F44	173
Database: LUST REG 8, Date of Government Version: 02/14/2005				
Global ID: DOD100319400				
MARCH AIR RESERVE BA	IRP S34 NW CORNOR OF	ENE 1/4 - 1/2 (0.416 mi.)	F45	174
Database: LUST REG 8, Date of Government Version: 02/14/2005				
Facility Status: Case Closed				
Global ID: T0606592846				

Lists of state and tribal registered storage tanks

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, has revealed that there is 1 UST site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
INLAND PLASTERING	1153 W OLEANDER AVE	S 1/8 - 1/4 (0.216 mi.)	11	75
Database: UST, Date of Government Version: 09/07/2021				
Facility Id: 410				

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Hazardous waste / Contaminated Sites

HIST Cal-Sites: Formerly known as ASPIS, this database contains both known and potential hazardous substance sites. The source is the California Department of Toxic Substance Control. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

A review of the HIST Cal-Sites list, as provided by EDR, and dated 08/08/2005 has revealed that there are 3 HIST Cal-Sites sites within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MARCH AIR FORCE BASE	7,123 ACRES; EAST OF	NNE 1/2 - 1 (0.773 mi.)	G48	180
MARCH AIR FORCE BASE	7,123 ACRES; EAST OF	NNW 1/2 - 1 (0.945 mi.)	52	187
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MARCH AIR RESERVE BA	3,545 ACRES; EAST OF	ENE 1/4 - 1/2 (0.416 mi.)	F32	123

EXECUTIVE SUMMARY

CERS HAZ WASTE: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

A review of the CERS HAZ WASTE list, as provided by EDR, and dated 07/15/2021 has revealed that there are 2 CERS HAZ WASTE sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
AMAZON.COM SERVICES	4501 PATTERSON AVE	S 1/8 - 1/4 (0.162 mi.)	9	68
GOLD STAR	1354 JETWAY	WSW 1/8 - 1/4 (0.230 mi.)	C12	76

Local Lists of Registered Storage Tanks

CERS TANKS: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

A review of the CERS TANKS list, as provided by EDR, and dated 07/15/2021 has revealed that there is 1 CERS TANKS site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
GOLD STAR	1354 JETWAY	WSW 1/8 - 1/4 (0.230 mi.)	C12	76

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 09/13/2021 has revealed that there are 7 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
LAWLER WOODCREST SER	1090 HARLEY KNOX BLV	SSE 1/8 - 1/4 (0.133 mi.)	B3	53
LAWLER WOODCREST SER	1090 HARLEY KNOX BLV	SSE 1/8 - 1/4 (0.133 mi.)	B4	56
L & R BUTLER AUTO DI EPA ID:: CAL000114927	5008 PATTERSON AVENU	SSW 1/8 - 1/4 (0.134 mi.)	5	58
SUPREME TRUCK BODIE EPA ID:: CAL000446309	1190 HARLEY KNOX	SSE 1/8 - 1/4 (0.135 mi.)	B6	61
UNITED MATERIAL HAND EPA ID:: CAC002989795	1190 HARLEY KNOX BLV	SSE 1/8 - 1/4 (0.135 mi.)	B7	63
INTEGRITY REBAR PLAC EPA ID:: CAL000434988	1345 NANDINA AVE	W 1/8 - 1/4 (0.159 mi.)	8	66
GOLDSTAR ASPHALT PRO EPA ID:: CAL000329049	1354 JET WAY	WSW 1/8 - 1/4 (0.239 mi.)	C13	86

EXECUTIVE SUMMARY

FUDS: The Listing includes locations of Formerly Used Defense Sites Properties where the US Army Corps Of Engineers is actively working or will take necessary cleanup actions.

A review of the FUDS list, as provided by EDR, and dated 08/10/2021 has revealed that there is 1 FUDS site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
CAMP HAAN		WNW 1/2 - 1 (0.881 mi.)	H51	186

DOD: Consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

A review of the DOD list, as provided by EDR, and dated 12/31/2005 has revealed that there is 1 DOD site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MARCH AIR FORCE BASE		0 - 1/8 (0.000 mi.)	0	9

ROD: Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid the cleanup.

A review of the ROD list, as provided by EDR, and dated 10/20/2021 has revealed that there is 1 ROD site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MARCH AIR FORCE BASE EPA ID:: CA4570024527	22 CSG/CC	0 - 1/8 (0.000 mi.)	0	9

PRP: A listing of verified Potentially Responsible Parties

A review of the PRP list, as provided by EDR, and dated 10/20/2021 has revealed that there is 1 PRP site within approximately 0.001 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MARCH AIR FORCE BASE	22 CSG/CC	0 - 1/8 (0.000 mi.)	0	9

UXO: A listing of unexploded ordnance site locations

A review of the UXO list, as provided by EDR, and dated 12/31/2018 has revealed that there is 1 UXO site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PISTOL RANGE		WNW 1/2 - 1 (0.881 mi.)	H50	185

EXECUTIVE SUMMARY

CA BOND EXP. PLAN: Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

A review of the CA BOND EXP. PLAN list, as provided by EDR, and dated 01/01/1989 has revealed that there is 1 CA BOND EXP. PLAN site within approximately 1 mile of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MARCH AIR FORCE BASE		ENE 1/4 - 1/2 (0.416 mi.)	F33	162

Cortese: The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

A review of the Cortese list, as provided by EDR, and dated 09/20/2021 has revealed that there are 2 Cortese sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
EMPIRE TRACTOR Cleanup Status: COMPLETED - CASE CLOSED	1480 NANDINA AVE	W 1/4 - 1/2 (0.287 mi.)	D14	89
NANDINA LIQUOR Cleanup Status: COMPLETED - CASE CLOSED	1569 NANDINA AVE	W 1/4 - 1/2 (0.370 mi.)	E17	94

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CAL SITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 3 HIST CORTESE sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
EMPIRE TRACTOR Reg Id: 083303385T	1480 NANDINA AVE	W 1/4 - 1/2 (0.287 mi.)	D14	89
NANDINA LIQUOR Reg Id: 083302212T	1569 NANDINA AVE	W 1/4 - 1/2 (0.370 mi.)	E17	94

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MARCH AIR RESERVE BA Reg Id: 33970004	3 545 ACRES OF RIVER	ENE 1/4 - 1/2 (0.416 mi.)	F41	170

Notify 65: Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

A review of the Notify 65 list, as provided by EDR, and dated 03/12/2021 has revealed that there are 2 Notify 65 sites within approximately 1 mile of the target property.

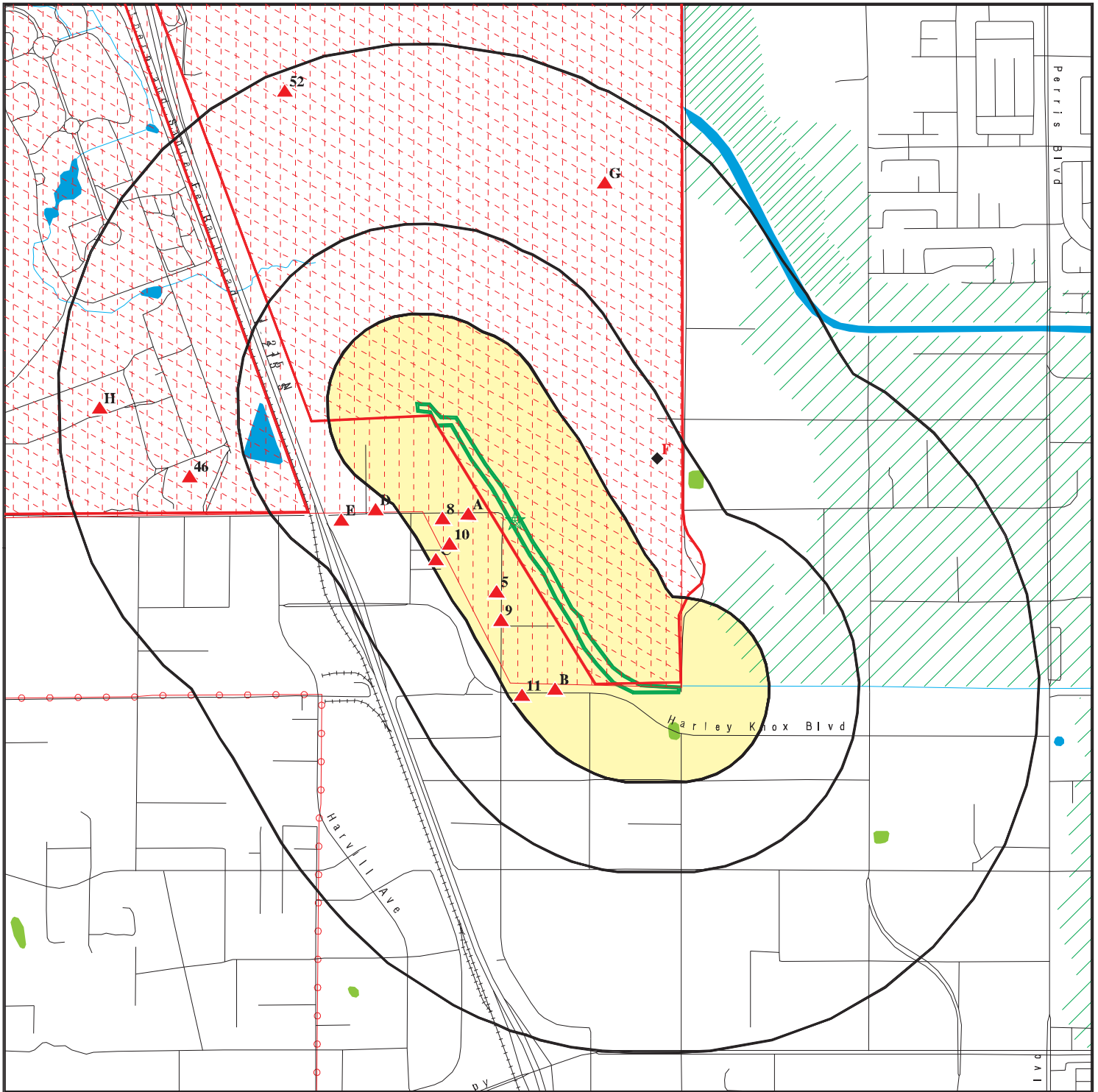
<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PANERO AIRCRAFT FUEL BUILDING 962	MARCH AFB MARCH AFB	NNE 1/2 - 1 (0.773 mi.) NNE 1/2 - 1 (0.773 mi.)	G47 G49	179 184

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 1 records.

<u>Site Name</u>	<u>Database(s)</u>
FUTURE TRUCK TERMINAL	CPS-SLIC

OVERVIEW MAP - 6798685.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Power transmission lines

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

Areas of Concern

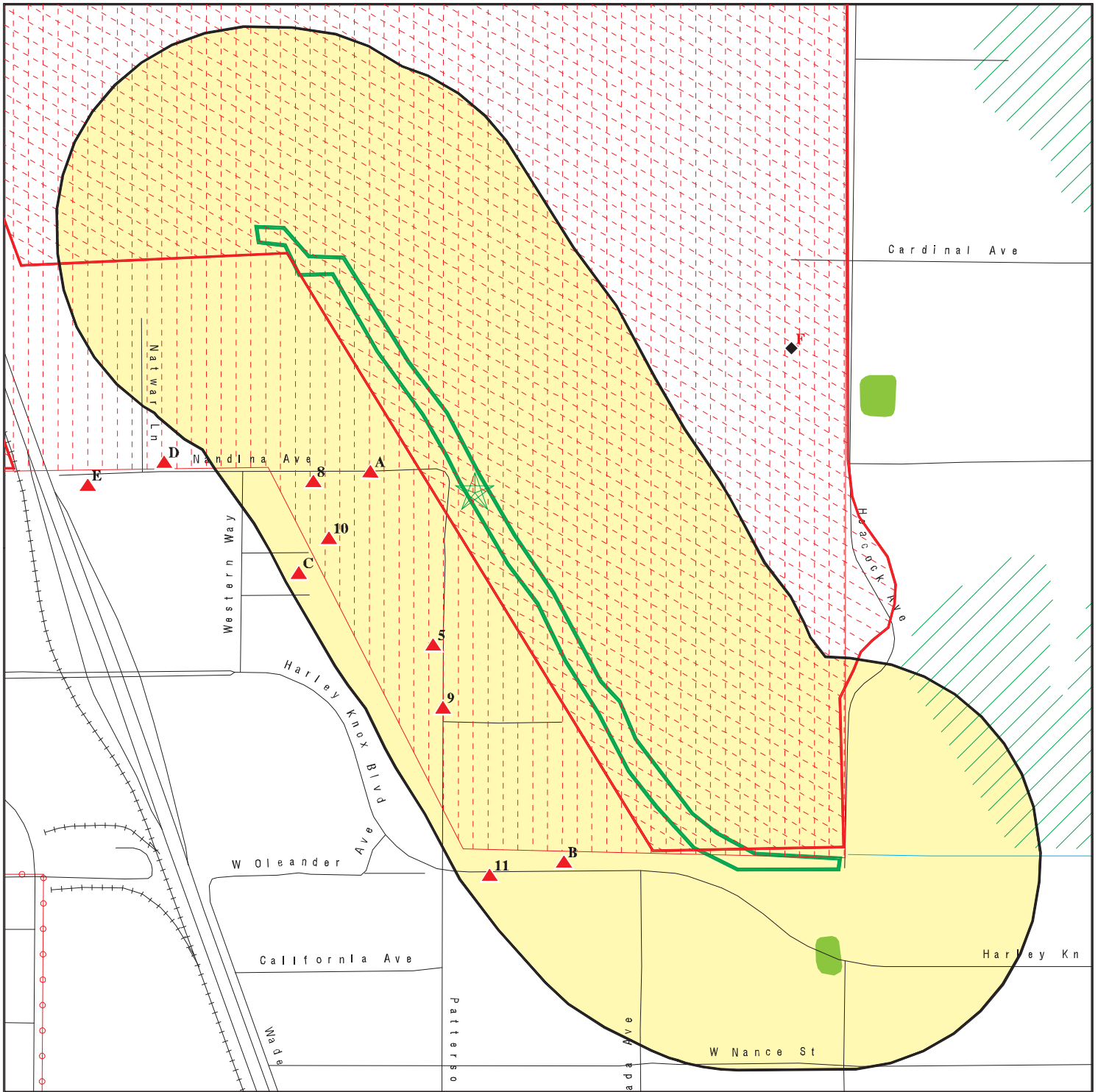


This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Perris Valley Channel
 ADDRESS: Nandina Avenue and Patterson Avenue
 March Air Reserve Ba CA 92518
 LAT/LONG: 33.865932 / 117.251872

CLIENT: Group Delta Consultants
 CONTACT: Laura Botzong
 INQUIRY #: 6798685.2s
 DATE: December 23, 2021 8:19 am

DETAIL MAP - 6798685.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Power transmission lines

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

Areas of Concern



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Perris Valley Channel
 ADDRESS: Nandina Avenue and Patterson Avenue
 March Air Reserve Ba CA 92518
 LAT/LONG: 33.865932 / 117.251872

CLIENT: Group Delta Consultants
 CONTACT: Laura Botzong
 INQUIRY #: 6798685.2s
 DATE: December 23, 2021 8:19 am

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
<i>Lists of Federal NPL (Superfund) sites</i>								
NPL	1.000		1	0	0	0	NR	1
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
<i>Lists of Federal Delisted NPL sites</i>								
Delisted NPL	1.000		0	0	0	0	NR	0
<i>Lists of Federal sites subject to CERCLA removals and CERCLA orders</i>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		1	0	0	NR	NR	1
<i>Lists of Federal CERCLA sites with NFRAP</i>								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
<i>Lists of Federal RCRA facilities undergoing Corrective Action</i>								
CORRACTS	1.000		0	0	0	0	NR	0
<i>Lists of Federal RCRA TSD facilities</i>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<i>Lists of Federal RCRA generators</i>								
RCRA-LQG	0.250		1	1	NR	NR	NR	2
RCRA-SQG	0.250		2	0	NR	NR	NR	2
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
<i>Federal institutional controls / engineering controls registries</i>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		1	0	0	NR	NR	1
US INST CONTROLS	0.500		1	0	0	NR	NR	1
<i>Federal ERNS list</i>								
ERNS	0.001		0	NR	NR	NR	NR	0
<i>Lists of state- and tribal (Superfund) equivalent sites</i>								
RESPONSE	1.000		0	0	0	2	NR	2
<i>Lists of state- and tribal hazardous waste facilities</i>								
ENVIROSTOR	1.000		0	0	1	2	NR	3
<i>Lists of state and tribal landfills and solid waste disposal facilities</i>								
SWF/LF	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<i>Lists of state and tribal leaking storage tanks</i>								
LUST	0.500		0	0	29	NR	NR	29
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	0	NR	NR	0
<i>Lists of state and tribal registered storage tanks</i>								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	1	NR	NR	NR	1
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
<i>Lists of state and tribal voluntary cleanup sites</i>								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
<i>Lists of state and tribal brownfield sites</i>								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
<u>ADDITIONAL ENVIRONMENTAL RECORDS</u>								
<i>Local Brownfield lists</i>								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
<i>Local Lists of Landfill / Solid Waste Disposal Sites</i>								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
<i>Local Lists of Hazardous waste / Contaminated Sites</i>								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	1	2	NR	3
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
CERS HAZ WASTE	0.250		0	2	NR	NR	NR	2
US CDL	0.001		0	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
AQUEOUS FOAM	TP		NR	NR	NR	NR	NR	0
<i>Local Lists of Registered Storage Tanks</i>								
SWEEPS UST	0.250		0	0	NR	NR	NR	0
HIST UST	0.250		0	0	NR	NR	NR	0
CA FID UST	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CERS TANKS	0.250		0	1	NR	NR	NR	1
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	7	NR	NR	NR	7
FUDS	1.000		0	0	0	1	NR	1
DOD	1.000		1	0	0	0	NR	1
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		1	0	0	0	NR	1
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		1	NR	NR	NR	NR	1
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	1	NR	1

MAP FINDINGS SUMMARY

<u>Database</u>	<u>Search Distance (Miles)</u>	<u>Target Property</u>	<u>< 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>> 1</u>	<u>Total Plotted</u>
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NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

**DOD
Region**

**MARCH AIR FORCE BASE (CLOSED)
MARCH AIR FORCE BASE (CLO (County), CA**

**DOD CUSA143538
N/A**

< 1/8
1 ft.

DOD:
 Feature 1: Air Force DOD
 Feature 2: Not reported
 Feature 3: Not reported
 URL: Not reported
 Name 1: March Air Force Base (Closed)
 Name 2: Not reported
 Name 3: Not reported
 State: CA
 DOD Site: Yes
 Tile name: CARIVERSIDE

**NPL
Region**

**MARCH AIR FORCE BASE
22 CSG/CC
RIVERSIDE, CA 92518**

**NPL 1000169261
SEMS CA4570024527
RCRA-LQG
US ENG CONTROLS
US INST CONTROLS
ROD
PRP**

< 1/8
1 ft.

NPL:
 EPA Region: 9
 EPA ID: CA4570024527
 Site ID: 902761
 Name: MARCH AIR FORCE BASE
 Address: 22 CSG/CC
 City,State,Zip: RIVERSIDE, CA 92518
 Federal: Y
 Final Date: 1989-11-21 00:00:00
 Latitude: 33.906389
 Longitude: -117.2557
 Site Score: 31.940000000000001
 NAI: Not reported
 Native American Entity: Not reported

NPL:
 NPL Status: Currently on the Final NPL
 Substance ID: Not reported
 CAS Number: Not reported
 Substance: Not reported
 Pathway: Not reported
 Scoring: Not reported

NPL Status: Currently on the Final NPL
 Substance ID: A046
 CAS Number: 1336-36-3
 Substance: POLYCHLORINATED BIPHENYLS
 Pathway: GROUND WATER PATHWAY
 Scoring: 3

NPL Status: Currently on the Final NPL
 Substance ID: U210
 CAS Number: 127-18-4
 Substance: TETRACHLOROETHENE

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

Pathway: GROUND WATER PATHWAY
 Scoring: 2

NPL Status: Currently on the Final NPL
 Substance ID: U228
 CAS Number: 79-01-6
 Substance: TRICHLOROETHYLENE (TCE)
 Pathway: GROUND WATER PATHWAY
 Scoring: 2

Summary Details:

Conditions at proposal July 14, 1989): March Air Force Base (MAFB) covers approximately 7,000 acres near Riverside in the Moreno Valley in Riverside County, California. MAFB is adjacent to light industrial, agricultural, and residential areas. Established in 1918 as the Alessandro Aviation Field, MAFB has served as a training base and refueling operations base. Industrial operations including aircraft maintenance and repair) involved use of solvents and disposal of solvent wastes. MAFB is participating in the Installation Restoration Program (IRP), established in 1978. Under this program, the Department of Defense seeks to identify, investigate, and clean up contamination from hazardous materials. As part of IRP, the Air Force investigated 28 potentially contaminated disposal areas. MAFB Well No. 1 on-base was found to be contaminated with trichloroethylene, tetrachloroethylene, and cis-1,2-dichloroethylene at levels that exceed State drinking water standards. It was taken out of service. Soils on the base are contaminated with toluene and benzene. An estimated 11,600 people obtain drinking water from municipal wells within 3 miles of hazardous substances on MAFB. The Air Force is conducting a remedial investigation/ feasibility study (RI/FS) to determine the type and extent of contamination at the base and identify alternatives for remedial action. Status November 21, 1989): Field work continues on the RI/FS.

NPL:

NPL Status: Currently on the Final NPL
 Category Description: Depth To Aquifer-> 50 And <= 100 Feet
 Category Value: 65

NPL Status: Currently on the Final NPL
 Category Description: Distance To Nearest Population-> 0 And <= 1/4 Mile
 Category Value: 10

NPL:

NPL Name: MARCH AIR FORCE BASE

NPL:

EPA Region: 09
 Site ID: 0902761
 Site Status: F
 Federal Site: Y
 Date Deleted: Not reported
 Date Finalized: 11/21/89
 Date Proposed: 07/14/89

NPL:

Proposed Date: 07/14/1989

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

Final Date: 11/21/1989
Deleted Date: Not reported
NPL Status: Final

SEMS:

Site ID: 0902761
EPA ID: CA4570024527
Name: MARCH AIR FORCE BASE
Address: 22 CSG/CC
Address 2: Not reported
City,State,Zip: RIVERSIDE, CA 92518
Cong District: 41,43
FIPS Code: 06065
Latitude: 33.906389
Longitude: -117.255700
FF: Y
NPL: Currently on the Final NPL
Non NPL Status: Not reported

SEMS Detail:

Region: 09
Site ID: 0902761
EPA ID: CA4570024527
Site Name: MARCH AIR FORCE BASE
NPL: F
FF: Y
OU: 00
Action Code: AR
Action Name: ADMIN REC
SEQ: 1
Start Date: 2000-10-24 04:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0902761
EPA ID: CA4570024527
Site Name: MARCH AIR FORCE BASE
NPL: F
FF: Y
OU: 00
Action Code: NP
Action Name: PROPOSED
SEQ: 1
Start Date: 1989-07-14 04:00:00
Finish Date: 7/14/1989 4:00:00 AM
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0902761
EPA ID: CA4570024527
Site Name: MARCH AIR FORCE BASE
NPL: F
FF: Y

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

OU: 00
Action Code: NF
Action Name: NPL FINL
SEQ: 1
Start Date: 1989-11-21 05:00:00
Finish Date: 11/21/1989 5:00:00 AM
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0902761
EPA ID: CA4570024527
Site Name: MARCH AIR FORCE BASE
NPL: F
FF: Y
OU: 00
Action Code: HR
Action Name: HAZRANK
SEQ: 1
Start Date: 1987-06-01 04:00:00
Finish Date: 6/1/1987 4:00:00 AM
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0902761
EPA ID: CA4570024527
Site Name: MARCH AIR FORCE BASE
NPL: F
FF: Y
OU: 02
Action Code: LW
Action Name: FF RI/FS
SEQ: 4
Start Date: 1992-01-24 05:00:00
Finish Date: 4/30/1995 4:00:00 AM
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902761
EPA ID: CA4570024527
Site Name: MARCH AIR FORCE BASE
NPL: F
FF: Y
OU: 02
Action Code: RO
Action Name: ROD
SEQ: 5
Start Date: 2005-09-30 04:00:00
Finish Date: 9/30/2005 4:00:00 AM
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902761
EPA ID: CA4570024527

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

Site Name: MARCH AIR FORCE BASE
NPL: F
FF: Y
OU: 05
Action Code: RO
Action Name: ROD
SEQ: 6
Start Date: 2019-04-22 05:00:00
Finish Date: 4/22/2019 5:00:00 AM
Qual: R
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902761
EPA ID: CA4570024527
Site Name: MARCH AIR FORCE BASE
NPL: F
FF: Y
OU: 00
Action Code: SI
Action Name: SI
SEQ: 1
Start Date: 1987-06-01 04:00:00
Finish Date: 6/1/1987 4:00:00 AM
Qual: L
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902761
EPA ID: CA4570024527
Site Name: MARCH AIR FORCE BASE
NPL: F
FF: Y
OU: 05
Action Code: LW
Action Name: FF RI/FS
SEQ: 5
Start Date: 2005-10-30 04:00:00
Finish Date: 5/21/2015 5:00:00 AM
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902761
EPA ID: CA4570024527
Site Name: MARCH AIR FORCE BASE
NPL: F
FF: Y
OU: 02
Action Code: RO
Action Name: ROD
SEQ: 4
Start Date: 2004-05-11 04:00:00
Finish Date: 5/11/2004 4:00:00 AM
Qual: Not reported
Current Action Lead: Fed Fac

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

Region: 09
Site ID: 0902761
EPA ID: CA4570024527
Site Name: MARCH AIR FORCE BASE
NPL: F
FF: Y
OU: 01
Action Code: LW
Action Name: FF RI/FS
SEQ: 1
Start Date: 1990-09-27 04:00:00
Finish Date: 6/20/1996 4:00:00 AM
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902761
EPA ID: CA4570024527
Site Name: MARCH AIR FORCE BASE
NPL: F
FF: Y
OU: 04
Action Code: LW
Action Name: FF RI/FS
SEQ: 2
Start Date: 1990-09-27 04:00:00
Finish Date: 9/29/2005 4:00:00 AM
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902761
EPA ID: CA4570024527
Site Name: MARCH AIR FORCE BASE
NPL: F
FF: Y
OU: 04
Action Code: RO
Action Name: ROD
SEQ: 3
Start Date: 2005-09-29 04:00:00
Finish Date: 9/29/2005 4:00:00 AM
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902761
EPA ID: CA4570024527
Site Name: MARCH AIR FORCE BASE
NPL: F
FF: Y
OU: 01
Action Code: LX
Action Name: FF RD
SEQ: 1
Start Date: 1996-04-07 05:00:00
Finish Date: 4/18/1996 4:00:00 AM

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0902761
EPA ID:	CA4570024527
Site Name:	MARCH AIR FORCE BASE
NPL:	F
FF:	Y
OU:	00
Action Code:	DS
Action Name:	DISCVRY
SEQ:	1
Start Date:	1985-02-01 06:00:00
Finish Date:	2/1/1985 6:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0902761
EPA ID:	CA4570024527
Site Name:	MARCH AIR FORCE BASE
NPL:	F
FF:	Y
OU:	01
Action Code:	LY
Action Name:	FF RA
SEQ:	1
Start Date:	1996-03-05 05:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0902761
EPA ID:	CA4570024527
Site Name:	MARCH AIR FORCE BASE
NPL:	F
FF:	Y
OU:	02
Action Code:	RO
Action Name:	ROD
SEQ:	7
Start Date:	2004-04-01 05:00:00
Finish Date:	4/1/2004 5:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0902761
EPA ID:	CA4570024527
Site Name:	MARCH AIR FORCE BASE
NPL:	F
FF:	Y
OU:	02
Action Code:	LW
Action Name:	FF RI/FS

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MAP FINDINGS

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EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

SEQ: 6
Start Date: 1995-07-01 04:00:00
Finish Date: 7/1/1997 4:00:00 AM
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902761
EPA ID: CA4570024527
Site Name: MARCH AIR FORCE BASE
NPL: F
FF: Y
OU: 01
Action Code: RO
Action Name: ROD
SEQ: 1
Start Date: 1996-06-20 04:00:00
Finish Date: 6/20/1996 4:00:00 AM
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902761
EPA ID: CA4570024527
Site Name: MARCH AIR FORCE BASE
NPL: F
FF: Y
OU: 00
Action Code: PA
Action Name: PA
SEQ: 1
Start Date: 1987-02-01 05:00:00
Finish Date: 2/1/1987 5:00:00 AM
Qual: L
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902761
EPA ID: CA4570024527
Site Name: MARCH AIR FORCE BASE
NPL: F
FF: Y
OU: 01
Action Code: EE
Action Name: EE/CA
SEQ: 1
Start Date: 2018-11-12 06:00:00
Finish Date: 11/12/2018 6:00:00 AM
Qual: Not reported
Current Action Lead: Fed Fac

RCRA-LQG:

Date Form Received by Agency: 20200708
Handler Name: MARCH AIR RESERVE BASE
Handler Address: 610 MEYER DR
Handler City,State,Zip: MARCH ARB, CA 92518

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MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

EPA ID:	CA4570024527
Contact Name:	SEAN LEE
Contact Address:	MEYER DR
Contact City,State,Zip:	MARCH ARB, CA 92518
Contact Telephone:	951-655-5082
Contact Fax:	Not reported
Contact Email:	SEAN.LEE.19@US.AF.MIL
Contact Title:	HAZARDOUS MATERIALS / WASTE MANAGER
EPA Region:	09
Land Type:	Federal
Federal Waste Generator Description:	Large Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	2019
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	MEYER DR
Mailing City,State,Zip:	MARCH ARB, CA 92518
Owner Name:	US AIR FORCE
Owner Type:	Federal
Operator Name:	BRIG. GEN MELISSA COBURN
Operator Type:	Federal
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	The land is federally-owned, The site is federally-owned, The site is federally-operated
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No

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MARCH AIR FORCE BASE (Continued)

1000169261

TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20200928
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Biennial: List of Years

Year: 2019

Click Here for Biennial Reporting System Data:
Year: 2015

Click Here for Biennial Reporting System Data:
Year: 2013

Click Here for Biennial Reporting System Data:
Year: 2011

Click Here for Biennial Reporting System Data:
Year: 2009

Click Here for Biennial Reporting System Data:
Year: 2007

Click Here for Biennial Reporting System Data:
Year: 2005

Click Here for Biennial Reporting System Data:
Year: 2003

Click Here for Biennial Reporting System Data:
Year: 2001

Click Here for Biennial Reporting System Data:

Hazardous Waste Summary:

Waste Code: D001
Waste Description: IGNITABLE WASTE

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MARCH AIR FORCE BASE (Continued)

1000169261

Waste Code: D002
Waste Description: CORROSIVE WASTE

Waste Code: D003
Waste Description: REACTIVE WASTE

Waste Code: D004
Waste Description: ARSENIC

Waste Code: D005
Waste Description: BARIUM

Waste Code: D006
Waste Description: CADMIUM

Waste Code: D007
Waste Description: CHROMIUM

Waste Code: D008
Waste Description: LEAD

Waste Code: D009
Waste Description: MERCURY

Waste Code: D011
Waste Description: SILVER

Waste Code: D018
Waste Description: BENZENE

Waste Code: D021
Waste Description: CHLOROBENZENE

Waste Code: D035
Waste Description: METHYL ETHYL KETONE

Waste Code: D039
Waste Description: TETRACHLOROETHYLENE

Waste Code: D040
Waste Description: TRICHLORETHYLENE

Waste Code: F001
Waste Description: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLORETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste Code: F002
Waste Description: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLORETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2,

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MARCH AIR FORCE BASE (Continued)

1000169261

TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste Code: F003
Waste Description: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste Code: F005
Waste Description: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste Code: P098
Waste Description: POTASSIUM CYANIDE (OR) POTASSIUM CYANIDE K(CN)

Waste Code: U188
Waste Description: PHENOL

Waste Code: U227
Waste Description: 1,1,2-TRICHLOROETHANE (OR) ETHANE, 1,1,2-TRICHLORO-

Handler - Owner Operator:

Owner/Operator Indicator: Owner
Owner/Operator Name: US AIR FORCE
Legal Status: Federal
Date Became Current: 19450101
Date Ended Current: Not reported
Owner/Operator Address: 2145 GRAEBER
Owner/Operator City,State,Zip: MARCH ARB, CA 92518
Owner/Operator Telephone: 951-655-4665
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: MULTIPLE OPS - ALL USAF COMMANDS
Legal Status: Federal
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 22 CSG/CC
Owner/Operator City,State,Zip: CITY NOT REPORTED, CA 99999
Owner/Operator Telephone: 714-655-4735

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MARCH AIR FORCE BASE (Continued)

1000169261

Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	COL. RUSSELL A MUNCY
Legal Status:	Federal
Date Became Current:	20131101
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	UNITED STATES AIR FORCE
Legal Status:	Private
Date Became Current:	19180101
Date Ended Current:	Not reported
Owner/Operator Address:	2145 GRAEBER STREET, ST 117
Owner/Operator City,State,Zip:	MARCH AIR RESERVE BASE, CA 92518
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	COLONEL JAMES T. RUBEOR
Legal Status:	Federal
Date Became Current:	20030719
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	GENERAL JAMES L. MELIN
Legal Status:	Private
Date Became Current:	20060723
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	USAF RESERVE COMMAND
Legal Status:	Federal
Date Became Current:	19180101
Date Ended Current:	Not reported

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Database(s)

EDR ID Number
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MARCH AIR FORCE BASE (Continued)

1000169261

Owner/Operator Address:	2145 GRABER STREET SUITE 117
Owner/Operator City,State,Zip:	MARCH ARB, CA 92518-2166
Owner/Operator Telephone:	951-655-4520
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	BRIG. GEN MELISSA COBURN
Legal Status:	Federal
Date Became Current:	20190101
Date Ended Current:	Not reported
Owner/Operator Address:	2145 GRAEBER ST., STE 117
Owner/Operator City,State,Zip:	MARCH AIR RESERVE BASE, CA 92518
Owner/Operator Telephone:	951-655-4520
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	MELISSA.COBURN@US.AF.MIL
Owner/Operator Indicator:	Operator
Owner/Operator Name:	GEN. RUSSELL A. MUNCY
Legal Status:	Federal
Date Became Current:	20131101
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	GENERAL JAMES T. RUBEOR
Legal Status:	Federal
Date Became Current:	20030719
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	COL MARY ARB
Legal Status:	Federal
Date Became Current:	20100101
Date Ended Current:	Not reported
Owner/Operator Address:	2145 GRABER STREET SUITE 117
Owner/Operator City,State,Zip:	MARCH ARB, CA 92518-2166
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	US AIR FORCE

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Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

Legal Status:	Federal
Date Became Current:	19470101
Date Ended Current:	Not reported
Owner/Operator Address:	2145 GRAEBER ST, BLDG 470
Owner/Operator City,State,Zip:	MARCH ARB, CA 92518
Owner/Operator Telephone:	951-655-4665
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	US AIR FORCE
Legal Status:	Federal
Date Became Current:	19450101
Date Ended Current:	Not reported
Owner/Operator Address:	2145 GRAEBER
Owner/Operator City,State,Zip:	MARCH ARB, CA 92518
Owner/Operator Telephone:	951-655-4665
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	USAF RESERVE COMMAND
Legal Status:	Federal
Date Became Current:	20060723
Date Ended Current:	Not reported
Owner/Operator Address:	2145 GRAEBER STREET, ST 117
Owner/Operator City,State,Zip:	MARCH AIR RESERVE BASE, CA 92518
Owner/Operator Telephone:	951-655-4520
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	GENERAL JAMES L. MELIN
Legal Status:	Federal
Date Became Current:	20060723
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	CA 92518
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	USAF
Legal Status:	Federal
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	452 SPTG CEV
Owner/Operator City,State,Zip:	MARCH ARB, CA 92518-2166
Owner/Operator Telephone:	909-655-5069
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

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EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

Owner/Operator Indicator: Owner
Owner/Operator Name: US AIR FORCE
Legal Status: Federal
Date Became Current: 19180101
Date Ended Current: Not reported
Owner/Operator Address: 2145 GRAEBER ST., SUITE 117
Owner/Operator City,State,Zip: MARCH AIR RESERVE BASE, CA 92518-1667
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: UNITED STATES AIR FORCE
Legal Status: Federal
Date Became Current: 19180101
Date Ended Current: Not reported
Owner/Operator Address: 2145 GRAEBER STREET, SUITE 117
Owner/Operator City,State,Zip: MARCH AIR RESERVE BASE, CA 92518
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:

Receive Date: 20100715
Handler Name: MARCH AIR RESERVE BASE
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20130320
Handler Name: MARCH AIR RESERVE BASE
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20141022
Handler Name: MARCH AIR RESERVE BASE
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: Yes
Recognized Trader Importer: No

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MARCH AIR FORCE BASE (Continued)

1000169261

Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20160229
Handler Name: MARCH AIR RESERVE BASE
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: Yes
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20200708
Handler Name: MARCH AIR RESERVE BASE
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

Receive Date: 19960901
Handler Name: MARCH AIR RESERVE BASE
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20000714
Handler Name: MARCH AIR RESERVE BASE
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported

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MARCH AIR FORCE BASE (Continued)

1000169261

Electronic Manifest Broker:	Not reported
Receive Date:	19920330
Handler Name:	MARCH AIR FORCE BASE
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported
Receive Date:	19940331
Handler Name:	MARCH AIR FORCE BASE, CA
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported
Receive Date:	19960326
Handler Name:	MARCH AFB, CA
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported
Receive Date:	19990304
Handler Name:	MARCH ARB, CA
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported
Receive Date:	20001012
Handler Name:	MARCH ARB CA
Federal Waste Generator Description:	Large Quantity Generator

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MARCH AIR FORCE BASE (Continued)

1000169261

State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20020410
Handler Name: MARCH AIR RESERVE BASE
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: Yes
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20040225
Handler Name: MARCH AIR RESERVE BASE
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: Yes
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20060208
Handler Name: MARCH AIR RESERVE BASE
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20080326
Handler Name: MARCH AIR RESERVE BASE
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	92811
NAICS Description:	NATIONAL SECURITY
NAICS Code:	92812
NAICS Description:	INTERNATIONAL AFFAIRS

Facility Has Received Notices of Violation:

Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	Generators - General
Date Violation was Determined:	19950427
Actual Return to Compliance Date:	20000427

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

Return to Compliance Qualifier:	Not Resolved
Violation Responsible Agency:	EPA
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	002
Date of Enforcement Action:	19950428
Enforcement Responsible Agency:	EPA
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	Generators - General
Date Violation was Determined:	19840305
Actual Return to Compliance Date:	19950404
Return to Compliance Qualifier:	Unverifiable
Violation Responsible Agency:	EPA
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	001
Date of Enforcement Action:	19840518
Enforcement Responsible Agency:	EPA
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9EPA

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Evaluation Action Summary:
Evaluation Date: 20061102
Evaluation Responsible Agency: State
Found Violation: No
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19950404
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20000427
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19840305
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19950404
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19960506
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	FOLLOW-UP INSPECTION
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

Site:

Name: MARCH AIR FORCE BASE
Address: 22 CSG/CC
Address 2: Not reported
City,State,Zip: RIVERSIDE, CA 92518
Event Code: Not reported
Action Taken Date: 08/01/2017
EPA ID: CA4570024527
Action Name: ROD Amendment
Action ID: 1
Operable Unit: 01
Contaminated Media: Soil
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2017
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: 33.906389
Longitude: -117.255700

Media:

EPA ID: CA4570024527
Contaminated Media: Not reported
Action ID: 7
Operable Unit: 02
Action Name: Record of Decision
Action Taken Date: 04/01/2004
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2004
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: 33.906389
Longitude: -117.255700

EPA ID: CA4570024527
Contaminated Media: Soil
Action ID: 1
Operable Unit: 01
Action Name: Explanation of Significant Differences
Action Taken Date: 08/24/2000
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2000
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: 33.906389
Longitude: -117.255700

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

EPA ID: CA4570024527
Contaminated Media: Soil
Action ID: 1
Operable Unit: 01
Action Name: ROD Amendment
Action Taken Date: 08/01/2017
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2017
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: 33.906389
Longitude: -117.255700

EPA ID: CA4570024527
Contaminated Media: Soil
Action ID: 1
Operable Unit: 01
Action Name: ROD Amendment
Action Taken Date: 08/01/2017
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2017
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: 33.906389
Longitude: -117.255700

EPA ID: CA4570024527
Contaminated Media: Soil
Action ID: 1
Operable Unit: 01
Action Name: ROD Amendment
Action Taken Date: 08/01/2017
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2017
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: 33.906389
Longitude: -117.255700

EPA ID: CA4570024527
Contaminated Media: Soil
Action ID: 1
Operable Unit: 01
Action Name: ROD Amendment
Action Taken Date: 08/01/2017

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2017
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: 33.906389
Longitude: -117.255700

EPA ID: CA4570024527
Contaminated Media: Soil
Action ID: 1
Operable Unit: 01
Action Name: ROD Amendment
Action Taken Date: 08/01/2017
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2017
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: 33.906389
Longitude: -117.255700

EPA ID: CA4570024527
Contaminated Media: Soil
Action ID: 1
Operable Unit: 01
Action Name: ROD Amendment
Action Taken Date: 08/01/2017
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2017
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: 33.906389
Longitude: -117.255700

EPA ID: CA4570024527
Contaminated Media: Groundwater
Action ID: 5
Operable Unit: 02
Action Name: Record of Decision
Action Taken Date: 09/30/2005
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2005

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: 33.906389
Longitude: -117.255700

EPA ID: CA4570024527
Contaminated Media: Soil
Action ID: 5
Operable Unit: 02
Action Name: Record of Decision
Action Taken Date: 09/30/2005
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2005
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: 33.906389
Longitude: -117.255700

EPA ID: CA4570024527
Contaminated Media: Soil Gas
Action ID: 1
Operable Unit: 01
Action Name: ROD Amendment
Action Taken Date: 08/01/2017
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2017
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: 33.906389
Longitude: -117.255700

EPA ID: CA4570024527
Contaminated Media: Soil
Action ID: 3
Operable Unit: 02
Action Name: ROD Amendment
Action Taken Date: 12/12/2016
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2017
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: 33.906389
Longitude: -117.255700

EPA ID: CA4570024527

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

Contaminated Media: Groundwater
Action ID: 1
Operable Unit: 01
Action Name: Record of Decision
Action Taken Date: 06/20/1996
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1996
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: 33.906389
Longitude: -117.255700

EPA ID: CA4570024527
Contaminated Media: Soil
Action ID: 1
Operable Unit: 01
Action Name: Record of Decision
Action Taken Date: 06/20/1996
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1996
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: 33.906389
Longitude: -117.255700

EPA ID: CA4570024527
Contaminated Media: Groundwater
Action ID: 1
Operable Unit: 01
Action Name: Record of Decision
Action Taken Date: 06/20/1996
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1996
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: 33.906389
Longitude: -117.255700

EPA ID: CA4570024527
Contaminated Media: Soil
Action ID: 1
Operable Unit: 01
Action Name: Record of Decision
Action Taken Date: 06/20/1996
Event Code: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1996
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: 33.906389
Longitude: -117.255700

EPA ID: CA4570024527
Contaminated Media: Groundwater
Action ID: 1
Operable Unit: 01
Action Name: Record of Decision
Action Taken Date: 06/20/1996
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1996
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: 33.906389
Longitude: -117.255700

EPA ID: CA4570024527
Contaminated Media: Soil
Action ID: 1
Operable Unit: 01
Action Name: Record of Decision
Action Taken Date: 06/20/1996
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1996
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: 33.906389
Longitude: -117.255700

EPA ID: CA4570024527
Contaminated Media: Free-phase NAPL
Action ID: 1
Operable Unit: 01
Action Name: Record of Decision
Action Taken Date: 06/20/1996
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1996
NPL Status: Currently on the Final NPL

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

Superfund Alternative Agreement:	N
Latitude:	33.906389
Longitude:	-117.255700
EPA ID:	CA4570024527
Contaminated Media:	Groundwater
Action ID:	1
Operable Unit:	01
Action Name:	Record of Decision
Action Taken Date:	06/20/1996
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	1996
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	33.906389
Longitude:	-117.255700
EPA ID:	CA4570024527
Contaminated Media:	Groundwater
Action ID:	1
Operable Unit:	01
Action Name:	Record of Decision
Action Taken Date:	06/20/1996
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	1996
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	33.906389
Longitude:	-117.255700
EPA ID:	CA4570024527
Contaminated Media:	Groundwater
Action ID:	1
Operable Unit:	01
Action Name:	Record of Decision
Action Taken Date:	06/20/1996
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	1996
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	33.906389
Longitude:	-117.255700
EPA ID:	CA4570024527
Contaminated Media:	Soil

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

Action ID: 1
Operable Unit: 01
Action Name: Record of Decision
Action Taken Date: 06/20/1996
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1996
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: 33.906389
Longitude: -117.255700

EPA ID: CA4570024527
Contaminated Media: Soil
Action ID: 1
Operable Unit: 01
Action Name: Record of Decision
Action Taken Date: 06/20/1996
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1996
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: 33.906389
Longitude: -117.255700

EPA ID: CA4570024527
Contaminated Media: Free-phase NAPL
Action ID: 1
Operable Unit: 01
Action Name: Record of Decision
Action Taken Date: 06/20/1996
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1996
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: 33.906389
Longitude: -117.255700

EPA ID: CA4570024527
Contaminated Media: Groundwater
Action ID: 1
Operable Unit: 01
Action Name: Record of Decision
Action Taken Date: 06/20/1996
Event Code: Not reported
Contact Name: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1996
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: 33.906389
Longitude: -117.255700

EPA ID: CA4570024527
Contaminated Media: Soil
Action ID: 1
Operable Unit: 01
Action Name: Record of Decision
Action Taken Date: 06/20/1996
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1996
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: 33.906389
Longitude: -117.255700

EPA ID: CA4570024527
Contaminated Media: Soil
Action ID: 3
Operable Unit: 04
Action Name: Record of Decision
Action Taken Date: 09/29/2005
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2005
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: 33.906389
Longitude: -117.255700

EPA ID: CA4570024527
Contaminated Media: Groundwater
Action ID: 3
Operable Unit: 04
Action Name: Record of Decision
Action Taken Date: 09/29/2005
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2005
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

Latitude: 33.906389
Longitude: -117.255700

EPA ID: CA4570024527
Contaminated Media: Soil
Action ID: 3
Operable Unit: 04
Action Name: Record of Decision
Action Taken Date: 09/29/2005
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2005
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: 33.906389
Longitude: -117.255700

EPA ID: CA4570024527
Contaminated Media: Free-phase NAPL
Action ID: 1
Operable Unit: 01
Action Name: Record of Decision
Action Taken Date: 06/20/1996
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1996
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: 33.906389
Longitude: -117.255700

EPA ID: CA4570024527
Contaminated Media: Soil
Action ID: 1
Operable Unit: 01
Action Name: Record of Decision
Action Taken Date: 06/20/1996
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1996
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: 33.906389
Longitude: -117.255700

EPA ID: CA4570024527
Contaminated Media: Soil
Action ID: 1

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

Operable Unit: 01
Action Name: Record of Decision
Action Taken Date: 06/20/1996
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1996
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: 33.906389
Longitude: -117.255700

US INST CONTROLS:

Name: MARCH AIR FORCE BASE
Address: 22 CSG/CC
Address 2: Not reported
City,State,Zip: RIVERSIDE, CA 92518
EPA ID: CA4570024527
Action Name: ROD Amendment
Action ID: 1
Operable Unit: 01
Actual Date: 08/01/2017
Contaminated Media: Soil Gas
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2017
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: 33.906389
Longitude: -117.255700

Name: MARCH AIR FORCE BASE
Address: 22 CSG/CC
Address 2: Not reported
City,State,Zip: RIVERSIDE, CA 92518
EPA ID: CA4570024527
Action Name: Record of Decision
Action ID: 3
Operable Unit: 04
Actual Date: 09/29/2005
Contaminated Media: Soil
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2005
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: 33.906389
Longitude: -117.255700

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

Name: MARCH AIR FORCE BASE
Address: 22 CSG/CC
Address 2: Not reported
City,State,Zip: RIVERSIDE, CA 92518
EPA ID: CA4570024527
Action Name: Record of Decision
Action ID: 4
Operable Unit: 02
Actual Date: 05/11/2004
Contaminated Media: Groundwater
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2004
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: 33.906389
Longitude: -117.255700

Name: MARCH AIR FORCE BASE
Address: 22 CSG/CC
Address 2: Not reported
City,State,Zip: RIVERSIDE, CA 92518
EPA ID: CA4570024527
Action Name: Record of Decision
Action ID: 4
Operable Unit: 02
Actual Date: 05/11/2004
Contaminated Media: Soil
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2004
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: 33.906389
Longitude: -117.255700

Name: MARCH AIR FORCE BASE
Address: 22 CSG/CC
Address 2: Not reported
City,State,Zip: RIVERSIDE, CA 92518
EPA ID: CA4570024527
Action Name: Record of Decision
Action ID: 5
Operable Unit: 02
Actual Date: 09/30/2005
Contaminated Media: Soil
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

Fiscal Year: 2005
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: 33.906389
Longitude: -117.255700

ROD:

Name: MARCH AIR FORCE BASE
Address: 22 CSG/CC
City,State,Zip: RIVERSIDE, CA 92518
EPA ID: CA4570024527
RG: 9
Site ID: 902761
Action: FF ESD
Operable Unit Number: EAST MARCH - SOILS/GW
SEQ ID: 1
Action Completion: 2000-08-24 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: MARCH AIR FORCE BASE
Address: 22 CSG/CC
City,State,Zip: RIVERSIDE, CA 92518
EPA ID: CA4570024527
RG: 9
Site ID: 902761
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: EAST MARCH - SOILS/GW
SEQ ID: 1
Action Completion: 1996-06-20 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: MARCH AIR FORCE BASE
Address: 22 CSG/CC
City,State,Zip: RIVERSIDE, CA 92518
EPA ID: CA4570024527
RG: 9
Site ID: 902761
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: BASEWIDE
SEQ ID: 3
Action Completion: 2005-09-29 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: MARCH AIR FORCE BASE
Address: 22 CSG/CC
City,State,Zip: RIVERSIDE, CA 92518
EPA ID: CA4570024527
RG: 9
Site ID: 902761
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: WEST MARCH - SOILS/GW
SEQ ID: 4
Action Completion: 2004-05-11 00:00:00
NPL Status: Final

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

Non NPL Status: Not reported

Name: MARCH AIR FORCE BASE
Address: 22 CSG/CC
City,State,Zip: RIVERSIDE, CA 92518
EPA ID: CA4570024527
RG: 9
Site ID: 902761
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: WEST MARCH - SOILS/GW
SEQ ID: 5
Action Completion: 2005-09-30 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: MARCH AIR FORCE BASE
Address: 22 CSG/CC
City,State,Zip: RIVERSIDE, CA 92518
EPA ID: CA4570024527
RG: 9
Site ID: 902761
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: SITEWIDE GW
SEQ ID: 6
Action Completion: 2019-04-22 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: MARCH AIR FORCE BASE
Address: 22 CSG/CC
City,State,Zip: RIVERSIDE, CA 92518
EPA ID: CA4570024527
RG: 9
Site ID: 902761
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: WEST MARCH - SOILS/GW
SEQ ID: 7
Action Completion: 2004-04-01 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: MARCH AIR FORCE BASE
Address: 22 CSG/CC
City,State,Zip: RIVERSIDE, CA 92518
EPA ID: CA4570024527
RG: 9
Site ID: 902761
Action: FF ROD Amendment
Operable Unit Number: EAST MARCH - SOILS/GW
SEQ ID: 1
Action Completion: 2017-08-01 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: MARCH AIR FORCE BASE
Address: 22 CSG/CC
City,State,Zip: RIVERSIDE, CA 92518

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

MARCH AIR FORCE BASE (Continued)

1000169261

EPA ID: CA4570024527
 RG: 9
 Site ID: 902761
 Action: FF ROD Amendment
 Operable Unit Number: EAST MARCH - SOILS/GW
 SEQ ID: 2
 Action Completion: 2019-02-25 00:00:00
 NPL Status: Final
 Non NPL Status: Not reported

Name: MARCH AIR FORCE BASE
 Address: 22 CSG/CC
 City,State,Zip: RIVERSIDE, CA 92518
 EPA ID: CA4570024527
 RG: 9
 Site ID: 902761
 Action: FF ROD Amendment
 Operable Unit Number: WEST MARCH - SOILS/GW
 SEQ ID: 3
 Action Completion: 2016-12-12 00:00:00
 NPL Status: Final
 Non NPL Status: Not reported

PRP:

PRP Name: STATE OF CALIFORNIA/DEPT. OF HEALTH SERVICES
 STATE OF CALIFORNIA/DEPT. OF WATER QUALITY
 U.S. AIR FORCE
 U.S. AIR FORCE

A1
West
< 1/8
0.092 mi.
485 ft.

EMPIRE TRACTOR CO
23130 NANDINA AVE
PERRIS, CA 92570

RCRA-SQG **1000261278**
FINDS **CAD981969959**
ECHO

Site 1 of 2 in cluster A

Relative:
Higher
Actual:
1490 ft.

RCRA-SQG:
 Date Form Received by Agency: 19870521
 Handler Name: EMPIRE TRACTOR CO
 Handler Address: 23130 NANDINA AVE
 Handler City,State,Zip: PERRIS, CA 92570
 EPA ID: CAD981969959
 Contact Name: ENVIRONMENTAL MANAGER
 Contact Address: 23130 NANDINA AVE
 Contact City,State,Zip: PERRIS, CA 92370
 Contact Telephone: 714-943-2921
 Contact Fax: Not reported
 Contact Email: Not reported
 Contact Title: Not reported
 EPA Region: 09
 Land Type: Other
 Federal Waste Generator Description: Small Quantity Generator
 Non-Notifier: Not reported
 Biennial Report Cycle: Not reported
 Accessibility: Not reported
 Active Site Indicator: Handler Activities
 State District Owner: CA
 State District: 4
 Mailing Address: 23130 NANDINA AVE

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

EMPIRE TRACTOR CO (Continued)

1000261278

Mailing City,State,Zip:	PERRIS, CA 92570
Owner Name:	GEORGE MORAI
Owner Type:	Private
Operator Name:	NOT REQUIRED
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20020627
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

EMPIRE TRACTOR CO (Continued)

1000261278

Recycler Activity Without Storage: Not reported
Manifest Broker: Not reported
Sub-Part P Indicator: No

Handler - Owner Operator:

Owner/Operator Indicator: Owner
Owner/Operator Name: GEORGE MORAI
Legal Status: Private
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: NOT REQUIRED
Owner/Operator City,State,Zip: NOT REQUIRED, ME 99999
Owner/Operator Telephone: 415-555-1212
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: NOT REQUIRED
Legal Status: Private
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: NOT REQUIRED
Owner/Operator City,State,Zip: NOT REQUIRED, ME 99999
Owner/Operator Telephone: 415-555-1212
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:

Receive Date: 19870521
Handler Name: EMPIRE TRACTOR CO
Federal Waste Generator Description: Small Quantity Generator
State District Owner: CA
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:

NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:

Violations: No Violations Found

Evaluation Action Summary:

Evaluations: No Evaluations Found

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

EMPIRE TRACTOR CO (Continued)

1000261278

FINDS:

Registry ID: 110006474948

Click Here:

Environmental Interest/Information System:

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1000261278
 Registry ID: 110006474948
 DFR URL: <http://echo.epa.gov/detailed-facility-report?fid=110006474948>
 Name: EMPIRE TRACTOR CO
 Address: 23130 NANDINA AVE
 City,State,Zip: PERRIS, CA 92570

A2
West
< 1/8
0.097 mi.
510 ft.

TRIWAY INDUSTRIES
23100 NANDINA
PERRIS, CA 92570
Site 2 of 2 in cluster A

RCRA-SQG 1000435864
FINDS CAD982503336
ECHO
EMI
HWTS

Relative:
Higher
Actual:
1491 ft.

RCRA-SQG:
 Date Form Received by Agency: 19890718
 Handler Name: TRIWAY INDUSTRIES
 Handler Address: 23100 NANDINA
 Handler City,State,Zip: PERRIS, CA 92570
 EPA ID: CAD982503336
 Contact Name: ENVIRONMENTAL MANAGER
 Contact Address: 23100 NANDINA
 Contact City,State,Zip: PERRIS, CA 92370
 Contact Telephone: Not reported
 Contact Fax: Not reported
 Contact Email: Not reported
 Contact Title: Not reported
 EPA Region: 09
 Land Type: Other
 Federal Waste Generator Description: Small Quantity Generator
 Non-Notifier: Not reported
 Biennial Report Cycle: Not reported
 Accessibility: Not reported
 Active Site Indicator: Handler Activities
 State District Owner: CA
 State District: 4
 Mailing Address: 23100 NANDINA
 Mailing City,State,Zip: PERRIS, CA 92570
 Owner Name: KILE GEORGE
 Owner Type: Private
 Operator Name: NOT REQUIRED
 Operator Type: Private

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

TRIWAY INDUSTRIES (Continued)

1000435864

Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20020627
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TRIWAY INDUSTRIES (Continued)

1000435864

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	KILE GEORGE
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	NOT REQUIRED
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	19890718
Handler Name:	TRIWAY INDUSTRIES
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	CA
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Codes:	No NAICS Codes Found
--------------	----------------------

Facility Has Received Notices of Violations:

Violations:	No Violations Found
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Evaluation Action Summary:

Evaluations:	No Evaluations Found
--------------	----------------------

FINDS:

Registry ID:	110006480209
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Click Here:

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TRIWAY INDUSTRIES (Continued)

1000435864

Environmental Interest/Information System:

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1000435864
Registry ID: 110006480209
DFR URL: <http://echo.epa.gov/detailed-facility-report?fid=110006480209>
Name: TRIWAY INDUSTRIES
Address: 23100 NANDINA
City,State,Zip: PERRIS, CA 92570

EMI:

Name: TRIWAY INDUSTRIES
Address: 23100 NANDINA
City,State,Zip: PERRIS, CA 92370
Year: 1987
County Code: 33
Air Basin: SC
Facility ID: 53601
Air District Name: SC
SIC Code: 2521
Air District Name: SOUTH COAST AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 13
Reactive Organic Gases Tons/Yr: 13
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smlr Tons/Yr:0

Name: TRIWAY INDUSTRIES INC
Address: 23100 NANDINA
City,State,Zip: PERRIS, CA 92370
Year: 1990
County Code: 33
Air Basin: SC
Facility ID: 53601
Air District Name: SC
SIC Code: 25
Air District Name: SOUTH COAST AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 2
Reactive Organic Gases Tons/Yr: 2
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

TRIWAY INDUSTRIES (Continued)

1000435864

Particulate Matter Tons/Yr: 2
 Part. Matter 10 Micrometers and Smllr Tons/Yr:2

HWTS:

Name: TRIWAY INDUSTRIES
 Address: 23100 NANDINA
 Address 2: Not reported
 City,State,Zip: PERRIS, CA 923700000
 EPA ID: CAD982503336
 Inactive Date: 01/01/1995
 Create Date: 06/29/1990
 Last Act Date: 08/10/2004
 Mailing Name: Not reported
 Mailing Address: 23100 NANDINA
 Mailing Address 2: Not reported
 Mailing City,State,Zip: PERRIS, CA 923700000
 Owner Name: --
 Owner Address: --
 Owner Address 2: Not reported
 Owner City,State,Zip: --, 99 --
 Contact Name: UNDELIVERABLE SURVEY 2-1-95 HJ
 Contact Address: --
 Contact Address 2: Not reported
 City,State,Zip: --, 99 --

B3
SSE
 1/8-1/4
 0.133 mi.
 702 ft.

LAWLER WOODCREST SERVICES INC DBA LAWLERS TRIPLE L
1090 HARLEY KNOX BLVD
PERRIS, CA 92571

RCRA NonGen / NLR **1026722366**
CAL000459431

Site 1 of 4 in cluster B

Relative:
Higher
Actual:
1488 ft.

RCRA NonGen / NLR:
 Date Form Received by Agency: 20210113
 Handler Name: LAWLER WOODCREST SERVICES INC DBA LAWLERS TRIPLE L TOWING
 Handler Address: 1090 HARLEY KNOX BLVD
 Handler City,State,Zip: PERRIS, CA 92571
 EPA ID: CAL000459431
 Contact Name: JESSICA PULCHEON
 Contact Address: 29122 CITATION AVE
 Contact City,State,Zip: MENIFEE, CA 92585
 Contact Telephone: 951-403-7389
 Contact Fax: 951-943-3365
 Contact Email: LAWLERSTOWING@GMAIL.COM
 Contact Title: Not reported
 EPA Region: 09
 Land Type: Not reported
 Federal Waste Generator Description: Not a generator, verified
 Non-Notifier: Not reported
 Biennial Report Cycle: Not reported
 Accessibility: Not reported
 Active Site Indicator: Not reported
 State District Owner: Not reported
 State District: Not reported
 Mailing Address: 18400 VAN BUREN BLVD
 Mailing City,State,Zip: RIVERSIDE, CA 92508
 Owner Name: LAWLER WOODCREST SERVICES INC
 Owner Type: Other

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

LAWLER WOODCREST SERVICES INC DBA LAWLERS TRIPLE L TOWING (Continued)

1026722366

Operator Name:	JESSICA PULCHEON
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRC Permit Baseline:	Not on the Baseline
2018 GPRC Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRC Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDs Where RCRA CA has Been Imposed Universe:	No
TSDs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20210226
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LAWLER WOODCREST SERVICES INC DBA LAWLERS TRIPLE L TOWING (Continued)

1026722366

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	LAWLER WOODCREST SERVICES INC
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	18400 VAN BUREN BLVD
Owner/Operator City,State,Zip:	RIVERSIDE, CA 92508
Owner/Operator Telephone:	951-780-8400
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	JESSICA PULCHEON
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	29122 CITATION AVE
Owner/Operator City,State,Zip:	MENIFEE, CA 92585
Owner/Operator Telephone:	951-403-7389
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20210113
Handler Name:	LAWLER WOODCREST SERVICES INC DBA LAWLERS TRIPLE L TOWING
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	No
Electronic Manifest Broker:	No

List of NAICS Codes and Descriptions:

NAICS Code:	811198
NAICS Description:	ALL OTHER AUTOMOTIVE REPAIR AND MAINTENANCE

Facility Has Received Notices of Violations:

Violations:	No Violations Found
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Evaluation Action Summary:

Evaluations:	No Evaluations Found
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Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

LAWLER WOODCREST SERVICES (Continued)

1026711973

Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20210226
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	MIKE PULCHEON
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1090 HARLEY KNOX BLVD
Owner/Operator City,State,Zip:	PERRIS, CA 92571
Owner/Operator Telephone:	951-830-0076
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	MIKE PULCHEON
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1090 HARLEY KNOX BLVD
Owner/Operator City,State,Zip:	PERRIS, CA 92571
Owner/Operator Telephone:	951-830-0076
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LAWLER WOODCREST SERVICES (Continued)

1026711973

Historic Generators:

Receive Date: 20210108
Handler Name: LAWLER WOODCREST SERVICES
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:

NAICS Code: 811198
NAICS Description: ALL OTHER AUTOMOTIVE REPAIR AND MAINTENANCE

Facility Has Received Notices of Violations:

Violations: No Violations Found

Evaluation Action Summary:

Evaluations: No Evaluations Found

5
SSW
1/8-1/4
0.134 mi.
710 ft.

L & R BUTLER AUTO DISMANTLER
5008 PATTERSON AVENUE
PERRIS, CA 92571

RCRA NonGen / NLR **1025865893**
CAL000114927

Relative:
Higher
Actual:
1490 ft.

RCRA NonGen / NLR:
Date Form Received by Agency: 19931130
Handler Name: L & R BUTLER AUTO DISMANTLER
Handler Address: 5008 PATTERSON AVENUE
Handler City,State,Zip: PERRIS, CA 92571-9754
EPA ID: CAL000114927
Contact Name: LAWRENCE BUTLER
Contact Address: 5008 PATTERSON AVENUE
Contact City,State,Zip: PERRIS, CA 92571-9754
Contact Telephone: 951-940-9281
Contact Fax: 000-000-0000
Contact Email: Not reported
Contact Title: Not reported
EPA Region: 09
Land Type: Not reported
Federal Waste Generator Description: Not a generator, verified
Non-Notifier: Not reported
Biennial Report Cycle: Not reported
Accessibility: Not reported
Active Site Indicator: Not reported
State District Owner: Not reported
State District: Not reported
Mailing Address: 5008 PATTERSON AVE
Mailing City,State,Zip: PERRIS, CA 92571-0000
Owner Name: LAWRENCE BUTLER/RODNEY BUTLER

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

L & R BUTLER AUTO DISMANTLER (Continued)

1025865893

Owner Type:	Other
Operator Name:	LAWRENCE BUTLER
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDs Where RCRA CA has Been Imposed Universe:	No
TSDs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSD Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20190910
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

L & R BUTLER AUTO DISMANTLER (Continued)

1025865893

Sub-Part P Indicator: No

Handler - Owner Operator:

Owner/Operator Indicator: Owner
Owner/Operator Name: LAWRENCE BUTLER/RODNEY BUTLER
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 5008 PATTERSON
Owner/Operator City,State,Zip: PERRIS, CA 92571-9754
Owner/Operator Telephone: 951-940-9281
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: LAWRENCE BUTLER
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 5008 PATTERSON AVENUE
Owner/Operator City,State,Zip: PERRIS, CA 92571-9754
Owner/Operator Telephone: 951-940-9281
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:

Receive Date: 19931130
Handler Name: L & R BUTLER AUTO DISMANTLER
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: Not reported
Recognized Trader Exporter: Not reported
Spent Lead Acid Battery Importer: Not reported
Spent Lead Acid Battery Exporter: Not reported
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:

NAICS Code: 4211
NAICS Description: MOTOR VEHICLE AND MOTOR VEHICLE PARTS AND SUPPLIES WHOLESALERS

NAICS Code: 42114
NAICS Description: MOTOR VEHICLE PARTS (USED) WHOLESALERS

Facility Has Received Notices of Violations:

Violations: No Violations Found

Evaluation Action Summary:

Evaluations: No Evaluations Found

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

B6
SSE
1/8-1/4
0.135 mi.
712 ft.

SUPREME TRUCK BODIE
1190 HARLEY KNOX
PERRIS, CA 92571

RCRA NonGen / NLR

1025873183
CAL000446309

Site 3 of 4 in cluster B

Relative:
Higher
Actual:
1488 ft.

RCRA NonGen / NLR:

Date Form Received by Agency:	20190528
Handler Name:	SUPREME TRUCK BODIE
Handler Address:	1190 HARLEY KNOX
Handler City,State,Zip:	PERRIS, CA 92571
EPA ID:	CAL000446309
Contact Name:	ARTURO ANDRADE
Contact Address:	22135 ALESSANDRO BLVD
Contact City,State,Zip:	MORENO VALLEY, CA 92553
Contact Telephone:	951-656-6101
Contact Fax:	Not reported
Contact Email:	ARTURO.ANDRADE@WABASHNATIONAL.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	22135 ALESSANDRO BLVD
Mailing City,State,Zip:	MORENO VALLEY, CA 92553
Owner Name:	WABASH NATIONAL
Owner Type:	Other
Operator Name:	ARTURO ANDRADE
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	Yes
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRR Permit Baseline:	Not on the Baseline
2018 GPRR Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

SUPREME TRUCK BODIE (Continued)

1025873183

Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20190628
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	WABASH NATIONAL
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1000 SAGAMORE PKWY
Owner/Operator City,State,Zip:	LAFAYETTE, IN 47905
Owner/Operator Telephone:	765-771-5300
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	ARTURO ANDRADE
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	22135 ALESSANDRO BLVD
Owner/Operator City,State,Zip:	MORENO VALLEY, CA 92553
Owner/Operator Telephone:	951-656-6101
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SUPREME TRUCK BODIE (Continued)

1025873183

Historic Generators:

Receive Date: 20190528
Handler Name: SUPREME TRUCK BODIE
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:

NAICS Code: 336211
NAICS Description: MOTOR VEHICLE BODY MANUFACTURING

Facility Has Received Notices of Violations:

Violations: No Violations Found

Evaluation Action Summary:

Evaluations: No Evaluations Found

B7
SSE
1/8-1/4
0.135 mi.
712 ft.

UNITED MATERIAL HANDLING, INC.
1190 HARLEY KNOX BLVD
PERRIS, CA 92571

RCRA NonGen / NLR

1024769896
CAC002989795

Site 4 of 4 in cluster B

Relative:
Higher
Actual:
1488 ft.

RCRA NonGen / NLR:
Date Form Received by Agency: 20181119
Handler Name: UNITED MATERIAL HANDLING, INC.
Handler Address: 1190 HARLEY KNOX BLVD
Handler City,State,Zip: PERRIS, CA 92571
EPA ID: CAC002989795
Contact Name: TRINIDAD DELUNA
Contact Address: 23900 BRODIAEA AVENUE
Contact City,State,Zip: MORENO VALLEY, CA 92553
Contact Telephone: 951-255-2259
Contact Fax: Not reported
Contact Email: TDELUNA@UNITEDMH.COM
Contact Title: Not reported
EPA Region: 09
Land Type: Not reported
Federal Waste Generator Description: Not a generator, verified
Non-Notifier: Not reported
Biennial Report Cycle: Not reported
Accessibility: Not reported
Active Site Indicator: Handler Activities
State District Owner: Not reported
State District: Not reported
Mailing Address: 23900 BRODIAEA AVENUE
Mailing City,State,Zip: MORENO VALLEY, CA 92553
Owner Name: RYAN BARTLETT

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

UNITED MATERIAL HANDLING, INC. (Continued)

1024769896

Owner Type:	Other
Operator Name:	TRINIDAD DELUNA
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDs Where RCRA CA has Been Imposed Universe:	No
TSDs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSD Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20181120
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

UNITED MATERIAL HANDLING, INC. (Continued)

1024769896

Sub-Part P Indicator: No

Handler - Owner Operator:
Owner/Operator Indicator: Owner
Owner/Operator Name: RYAN BARTLETT
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 23900 BRODIAEA AVENUE
Owner/Operator City,State,Zip: MORENO VALLEY, CA 92553
Owner/Operator Telephone: 951-657-4900
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: TRINIDAD DELUNA
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 23900 BRODIAEA AVENUE
Owner/Operator City,State,Zip: MORENO VALLEY, CA 92553
Owner/Operator Telephone: 951-255-2259
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20181119
Handler Name: UNITED MATERIAL HANDLING, INC.
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

8	INTEGRITY REBAR PLACERS	RCRA NonGen / NLR	1024866403
West	1345 NANDINA AVE		CAL000434988
1/8-1/4	PERRIS, CA 92571		

0.159 mi.
841 ft.

Relative:
Higher

RCRA NonGen / NLR:

Actual:
1495 ft.

Date Form Received by Agency:	20180417	
Handler Name:	INTEGRITY REBAR PLACERS	
Handler Address:	1345 NANDINA AVE	
Handler City,State,Zip:	PERRIS, CA 92571	
EPA ID:	CAL000434988	
Contact Name:	MARRICK SALAZAR	
Contact Address:	1345 NANDINA AVE	
Contact City,State,Zip:	PERRIS, CA 92571	
Contact Telephone:	951-696-6843	
Contact Fax:	Not reported	
Contact Email:	LANA@INTEGRITYREBARPLACERS.COM	
Contact Title:	Not reported	
EPA Region:	09	
Land Type:	Not reported	
Federal Waste Generator Description:	Not a generator, verified	
Non-Notifier:	Not reported	
Biennial Report Cycle:	Not reported	
Accessibility:	Not reported	
Active Site Indicator:	Handler Activities	
State District Owner:	Not reported	
State District:	Not reported	
Mailing Address:	1345 NANDINA AVE	
Mailing City,State,Zip:	PERRIS, CA 92571	
Owner Name:	KEN NEGRETE	
Owner Type:	Other	
Operator Name:	MARRICK SALAZAR	
Operator Type:	Other	
Short-Term Generator Activity:	No	
Importer Activity:	No	
Mixed Waste Generator:	No	
Transporter Activity:	No	
Transfer Facility Activity:	No	
Recycler Activity with Storage:	No	
Small Quantity On-Site Burner Exemption:	No	
Smelting Melting and Refining Furnace Exemption:	No	
Underground Injection Control:	No	
Off-Site Waste Receipt:	No	
Universal Waste Indicator:	Yes	
Universal Waste Destination Facility:	Yes	
Federal Universal Waste:	No	
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported	
Active Site Converter Treatment storage and Disposal Facility:	Not reported	
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported	
Active Site State-Reg Handler:	---	
Federal Facility Indicator:	Not reported	
Hazardous Secondary Material Indicator:	N	
Sub-Part K Indicator:	Not reported	
Commercial TSD Indicator:	No	
Treatment Storage and Disposal Type:	Not reported	
2018 GPRC Permit Baseline:	Not on the Baseline	
2018 GPRC Renewals Baseline:	Not on the Baseline	
Permit Renewals Workload Universe:	Not reported	

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

INTEGRITY REBAR PLACERS (Continued)

1024866403

Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20180907
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	MARRICK SALAZAR
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1345 NANDINA AVE
Owner/Operator City,State,Zip:	PERRIS, CA 92571
Owner/Operator Telephone:	951-696-6843
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	KEN NEGRETE
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1345 NANDINA AVE
Owner/Operator City,State,Zip:	PERRIS, CA 92571
Owner/Operator Telephone:	951-696-6843
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

INTEGRITY REBAR PLACERS (Continued)

1024866403

Historic Generators:

Receive Date: 20180417
 Handler Name: INTEGRITY REBAR PLACERS
 Federal Waste Generator Description: Not a generator, verified
 State District Owner: Not reported
 Large Quantity Handler of Universal Waste: No
 Recognized Trader Importer: No
 Recognized Trader Exporter: No
 Spent Lead Acid Battery Importer: No
 Spent Lead Acid Battery Exporter: No
 Current Record: Yes
 Non Storage Recycler Activity: Not reported
 Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:

NAICS Code: 238310
 NAICS Description: DRYWALL AND INSULATION CONTRACTORS

Facility Has Received Notices of Violations:

Violations: No Violations Found

Evaluation Action Summary:

Evaluations: No Evaluations Found

9
South
1/8-1/4
0.162 mi.
858 ft.

AMAZON.COM SERVICES LLC PCA2
4501 PATTERSON AVE
PERRIS, CA 92571

CERS HAZ WASTE
NPDES
CIWQS
CERS
HWTS

S126397351
N/A

Relative:
Higher
Actual:
1489 ft.

CERS HAZ WASTE:
 Name: AMAZON.COM SERVICES LLC - KRB4
 Address: 4501 PATTERSON AVE
 City,State,Zip: PERRIS, CA 92571
 Site ID: 568835
 CERS ID: 10853353
 CERS Description: Hazardous Waste Generator

NPDES:

Name: AMAZON COM SERVICES LLC KRB4
 Address: 4501 PATTERSON AVENUE
 City,State,Zip: PERRIS, CA 92571
 Facility Status: Not reported
 NPDES Number: Not reported
 Region: Not reported
 Agency Number: Not reported
 Regulatory Measure ID: Not reported
 Place ID: Not reported
 Order Number: Not reported
 WDID: 8 33I028901
 Regulatory Measure Type: Industrial
 Program Type: Not reported
 Adoption Date Of Regulatory Measure: Not reported
 Effective Date Of Regulatory Measure: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AMAZON.COM SERVICES LLC PCA2 (Continued)

S126397351

Termination Date Of Regulatory Measure: Not reported
Expiration Date Of Regulatory Measure: Not reported
Discharge Address: Not reported
Discharge Name: Not reported
Discharge City: Not reported
Discharge State: Not reported
Discharge Zip: Not reported
Status: Active
Status Date: 10/07/2020
Operator Name: Amazon com Services LLC
Operator Address: NA Environmental Dept
Operator City: Seattle
Operator State: Washington
Operator Zip: 98108

Name: AMAZON COM SERVICES LLC KRB4
Address: 4501 PATTERSON AVENUE
City,State,Zip: PERRIS, CA 92571
Facility Status: Active
NPDES Number: CAS000001
Region: 8
Agency Number: 0
Regulatory Measure ID: 526837
Place ID: Not reported
Order Number: 97-03-DWQ
WDID: 8 331028901
Regulatory Measure Type: Enrollee
Program Type: Industrial
Adoption Date Of Regulatory Measure: Not reported
Effective Date Of Regulatory Measure: 10/07/2020
Termination Date Of Regulatory Measure: Not reported
Expiration Date Of Regulatory Measure: Not reported
Discharge Address: NA Environmental Dept
Discharge Name: Amazon com Services LLC
Discharge City: Seattle
Discharge State: Washington
Discharge Zip: 98108
Status: Not reported
Status Date: Not reported
Operator Name: Not reported
Operator Address: Not reported
Operator City: Not reported
Operator State: Not reported
Operator Zip: Not reported

CIWQS:

Name: AMAZON COM SERVICES LLC KRB4
Address: 4501 PATTERSON AVENUE
City,State,Zip: PERRIS, CA 92571
Agency: Amazon com Services LLC
Agency Address: NA Environmental Dept PO Box 80842, Seattle, WA 98108
Place/Project Type: Industrial - General Warehousing and Storage
SIC/NAICS: 4225
Region: 8
Program: INDSTW
Regulatory Measure Status: Active
Regulatory Measure Type: Storm water industrial

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AMAZON.COM SERVICES LLC PCA2 (Continued)

S126397351

Order Number: 2014-0057-DWQ
WDID: 8 33I028901
NPDES Number: CAS000001
Adoption Date: Not reported
Effective Date: 10/07/2020
Termination Date: Not reported
Expiration/Review Date: Not reported
Design Flow: Not reported
Major/Minor: Not reported
Complexity: Not reported
TTWQ: Not reported
Enforcement Actions within 5 years: 0
Violations within 5 years: 0
Latitude: 33.84956
Longitude: -117.250421

CERS:
Name: AMAZON.COM SERVICES LLC - KRB4
Address: 4501 PATTERSON AVE
City,State,Zip: PERRIS, CA 92571
Site ID: 568835
CERS ID: 10853353
CERS Description: Chemical Storage Facilities

Affiliation:
Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: PO Box 80842
Affiliation City: Seattle
Affiliation State: WA
Affiliation Country: Not reported
Affiliation Zip: 98108
Affiliation Phone: Not reported

Affiliation Type Desc: Operator
Entity Name: Amazon.com Services LLC
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (951) 445-7785

Affiliation Type Desc: Legal Owner
Entity Name: Amazon.com Services LLC
Entity Title: Not reported
Affiliation Address: PO Box 80842
Affiliation City: Seattle
Affiliation State: WA
Affiliation Country: United States
Affiliation Zip: 98108
Affiliation Phone: (951) 445-7785

Affiliation Type Desc: Identification Signer
Entity Name: Hunter Gowans

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AMAZON.COM SERVICES LLC PCA2 (Continued)

S126397351

Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Parent Corporation
Entity Name: Amazon.com Services LLC
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District
Entity Name: Riverside Cnty Env Health
Entity Title: Not reported
Affiliation Address: 4065 County Circle Drive, Room 104
Affiliation City: Riverside
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92503
Affiliation Phone: (951) 358-5055

Affiliation Type Desc: Document Preparer
Entity Name: Hunter Gowans
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact
Entity Name: Paul Wilson
Entity Title: Not reported
Affiliation Address: PO Box 80842
Affiliation City: Seattle
Affiliation State: WA
Affiliation Country: Not reported
Affiliation Zip: 98108
Affiliation Phone: Not reported

HWTS:

Name: AMAZON.COM SERVICES LLC PCA2
Address: 4501 PATTERSON AVE
Address 2: Not reported
City,State,Zip: PERRIS, CA 92571
EPA ID: CAR000311415
Inactive Date: Not reported
Create Date: 09/04/2020

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

AMAZON.COM SERVICES LLC PCA2 (Continued)

S126397351

Last Act Date: 09/04/2020
 Mailing Name: Not reported
 Mailing Address: PO BOX 80842
 Mailing Address 2: Not reported
 Mailing City,State,Zip: SEATTLE, WA 98108
 Owner Name: AMAZON.COM SERVICES LLC PCA2
 Owner Address: PO BOX 80842
 Owner Address 2: Not reported
 Owner City,State,Zip: SEATTLE, WA 98108
 Contact Name: NATALIE WAID
 Contact Address: PO BOX 80842
 Contact Address 2: Not reported
 City,State,Zip: SEATTLE, WA 98108

NAICS:

EPA ID: CAR000311415
 Create Date: 2020-09-04 10:50:06.477
 NAICS Code: 493110
 NAICS Description: General Warehousing and Storage
 Issued EPA ID Date: 2020-09-04 10:50:06.47700
 Inactive Date: Not reported
 Facility Name: AMAZON.COM SERVICES LLC PCA2
 Facility Address: 4501 PATTERSON AVE
 Facility Address 2: Not reported
 Facility City: PERRIS
 Facility County: Not reported
 Facility State: CA
 Facility Zip: 92571

10
WSW
1/8-1/4
0.177 mi.
933 ft.

CLEAN TIDE CONTAINER
1440 AIRPORT WAY
PERRIS, CA 92223

RCRA-LQG 1017785661
FINDS CAL000328179

Relative:
Higher
Actual:
1494 ft.

RCRA-LQG:
 Date Form Received by Agency: 20141027
 Handler Name: CLEAN TIDE CONTAINER
 Handler Address: 1440 AIRPORT WAY
 Handler City,State,Zip: PERRIS, CA 92223
 EPA ID: CAL000328179
 Contact Name: SHAWN MAYNE
 Contact Address: AIRPORT WAY
 Contact City,State,Zip: PERRIS, CA 92223
 Contact Telephone: 770-905-9853
 Contact Fax: Not reported
 Contact Email: Not reported
 Contact Title: PLANT MANAGER
 EPA Region: 09
 Land Type: Private
 Federal Waste Generator Description: Large Quantity Generator
 Non-Notifier: Not reported
 Biennial Report Cycle: 2013
 Accessibility: Not reported
 Active Site Indicator: Handler Activities
 State District Owner: Not reported
 State District: Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

CLEAN TIDE CONTAINER (Continued)

1017785661

Mailing Address:	AIRPORT WAY
Mailing City,State,Zip:	PERRIS, CA 92223
Owner Name:	CLEAN TIDE CONTAINER
Owner Type:	Private
Operator Name:	MIKE HARDING
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20150401
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CLEAN TIDE CONTAINER (Continued)

1017785661

Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	No

Biennial: List of Years
Year: 2013

[Click Here for Biennial Reporting System Data:](#)

Hazardous Waste Summary:

Waste Code:	D001
Waste Description:	IGNITABLE WASTE
Waste Code:	D002
Waste Description:	CORROSIVE WASTE
Waste Code:	D003
Waste Description:	REACTIVE WASTE

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	CLEAN TIDE CONTAINER
Legal Status:	Private
Date Became Current:	20070701
Date Ended Current:	Not reported
Owner/Operator Address:	17270 RESNIK DR
Owner/Operator City,State,Zip:	ROBERTSDALE, AL 36567
Owner/Operator Telephone:	251-947-2350
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	MIKE HARDING
Legal Status:	Private
Date Became Current:	20070701
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20141027
Handler Name:	CLEAN TIDE CONTAINER
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CLEAN TIDE CONTAINER (Continued)

1017785661

Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:

NAICS Code: 562991
NAICS Description: SEPTIC TANK AND RELATED SERVICES

Facility Has Received Notices of Violations:

Violations: No Violations Found

Evaluation Action Summary:

Evaluations: No Evaluations Found

FINDS:

Registry ID: 110063996234

Click Here:

Environmental Interest/Information System:

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

STATE MASTER

Registry ID: 110070737686

Click Here:

Environmental Interest/Information System:

HAZARDOUS WASTE BIENNIAL REPORTER

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

11
South
1/8-1/4
0.216 mi.
1141 ft.

INLAND PLASTERING
1153 W OLEANDER AVE
PERRIS, CA 92571

UST U003782738
N/A

Relative:
Higher
Actual:
1492 ft.

UST:
Name: INLAND PLASTERING
Address: 1153 W OLEANDER AVE
City,State,Zip: PERRIS, CA 92571
Facility ID: 410
Permitting Agency: RIVERSIDE COUNTY
CERSID: Not reported
Latitude: 33.85901
Longitude: -117.25138

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

C12
WSW
1/8-1/4
0.230 mi.
1216 ft.

GOLD STAR
1354 JETWAY
PERRIS, CA 92572

Site 1 of 2 in cluster C

CERS HAZ WASTE
CERS TANKS
CERS

S123515595
N/A

Relative:
Higher

Actual:
1497 ft.

CERS HAZ WASTE:
Name: GOLD STAR
Address: 1354 JETWAY
City,State,Zip: PERRIS, CA 92572
Site ID: 393945
CERS ID: 10321297
CERS Description: Hazardous Waste Generator

CERS TANKS:
Name: GOLD STAR
Address: 1354 JETWAY
City,State,Zip: PERRIS, CA 92572
Site ID: 393945
CERS ID: 10321297
CERS Description: Aboveground Petroleum Storage

CERS:
Name: GOLD STAR
Address: 1354 JETWAY
City,State,Zip: PERRIS, CA 92572
Site ID: 393945
CERS ID: 10321297
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 393945
Site Name: Gold Star
Violation Date: 05-05-2015
Citation: HSC 6.95 25508(d) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(d)
Violation Description: Failure to complete and/or electronically submit a business plan when storing/handling a hazardous material at or above reportable quantities.
Violation Notes: Returned to compliance on 08/11/2015.
Violation Division: Riverside County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 393945
Site Name: Gold Star
Violation Date: 02-25-2015
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit a site map with all required content.
Violation Notes: Returned to compliance on 08/11/2015.
Violation Division: Riverside County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 393945
Site Name: Gold Star
Violation Date: 05-05-2015

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

GOLD STAR (Continued)

S123515595

Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes: Returned to compliance on 08/11/2015.
Violation Division: Riverside County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 393945
Site Name: Gold Star
Violation Date: 02-25-2015
Citation: HSC 6.95 25508(d) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(d)
Violation Description: Failure to complete and/or electronically submit a business plan when storing/handling a hazardous material at or above reportable quantities.
Violation Notes: Returned to compliance on 08/11/2015.
Violation Division: Riverside County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 393945
Site Name: Gold Star
Violation Date: 09-25-2018
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)
Violation Description: Failure to provide the following training to all oil-handling personnel: 1. Operation and maintenance of equipment to prevent discharges. 2. Discharge procedure protocols. 3. Applicable pollution control laws, rules, and regulations. 4. General facility operations. 5. Contents of the SPCC Plan.
Violation Notes: Returned to compliance on 11/07/2018.
Violation Division: Riverside County Department of Env Health
Violation Program: APSA
Violation Source: CERS

Site ID: 393945
Site Name: Gold Star
Violation Date: 09-25-2018
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description: Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes: Returned to compliance on 11/07/2018.
Violation Division: Riverside County Department of Env Health
Violation Program: HW
Violation Source: CERS

Site ID: 393945
Site Name: Gold Star
Violation Date: 09-25-2018
Citation: HSC 6.11 25404.1 - California Health and Safety Code, Chapter 6.11,

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

GOLD STAR (Continued)

S123515595

Section(s) 25404.1
Violation Description: Failure to maintain a valid permit.
Violation Notes: Returned to compliance on 11/07/2018.
Violation Division: Riverside County Department of Env Health
Violation Program: APSA
Violation Source: CERS

Site ID: 393945
Site Name: Gold Star
Violation Date: 08-29-2018
Citation: Un-Specified
Violation Description: Business Plan Program - Operations/Maintenance - General Local Ordinance
Violation Notes: Returned to compliance on 11/07/2018. OBSERVATION: Observed three Propane cylinders by the large Propane tank that we not secured. CORRECTIVE ACTION: Owner/operator shall store all hazardous materials in a manner which will prevent unauthorized fire, explosion, or release. All Propane cylinders shall be stored secured to a stationary object.
Violation Division: Riverside County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 393945
Site Name: Gold Star
Violation Date: 02-25-2015
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple
Violation Description: Business Plan Program - Administration/Documentation - General
Violation Notes: Returned to compliance on 08/11/2015. BEP not on site
Violation Division: Riverside County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 393945
Site Name: Gold Star
Violation Date: 08-29-2018
Citation: HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)
Violation Description: Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.
Violation Notes: Returned to compliance on 11/07/2018. OBSERVATION: No training records observed/provided during inspection. CORRECTIVE ACTION: Owner/operator shall provide training to all employees. Documentation shall be retained and be made available for inspection for a minimum period of 3 years from the date of the training. Please email a copy of the training program as well as the dated signatures of all the personnel who received the training.
Violation Division: Riverside County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 393945
Site Name: Gold Star
Violation Date: 09-25-2018

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

GOLD STAR (Continued)

S123515595

Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)
Violation Description: Failure to comply with one or more of the following requirements: 1. Have record of inspections and integrity tests signed by the appropriate supervisor or inspector. 2. Keep written procedures and records of inspections and integrity tests for at least three years. 3. Keep comparison records.
Violation Notes: Returned to compliance on 11/07/2018.
Violation Division: Riverside County Department of Env Health
Violation Program: APSA
Violation Source: CERS

Site ID: 393945
Site Name: Gold Star
Violation Date: 09-25-2018
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)
Violation Description: Failure to maintain a complete copy of the SPCC Plan at the facility if the facility is normally attended at least four hours per day, or at the nearest field office if the facility is not so attended.
Violation Notes: Returned to compliance on 11/07/2018.
Violation Division: Riverside County Department of Env Health
Violation Program: APSA
Violation Source: CERS

Site ID: 393945
Site Name: Gold Star
Violation Date: 02-25-2015
Citation: 19 CCR 6.95 25508(a)(1) - California Code of Regulations, Title 19, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit the Business Activities Page and/or Business Owner Operator Identification Page.
Violation Notes: Returned to compliance on 08/11/2015.
Violation Division: Riverside County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 393945
Site Name: Gold Star
Violation Date: 08-29-2018
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.
Violation Notes: Returned to compliance on 11/07/2018. OBSERVATION: No annual business plan certification was observed in the statewide information management system. CORRECTIVE ACTION: Owner/Operator shall submit an updated business plan in the statewide information management system at <http://cers.calepa.ca.gov>. Business plans shall be reviewed and certified on at least an annual basis.
Violation Division: Riverside County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 393945
Site Name: Gold Star

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

GOLD STAR (Continued)

S123515595

Violation Date: 09-25-2018
Citation: HSC 6.67 25270.6(a)(1), 25270.6(a)(2) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.6(a)(1), 25270.6(a)(2)
Violation Description: Failure to submit a tank facility statement on or before January 1 annually unless a current Business Plan has been submitted.
Violation Notes: Returned to compliance on 01/24/2019.
Violation Division: Riverside County Department of Env Health
Violation Program: APSA
Violation Source: CERS

Site ID: 393945
Site Name: Gold Star
Violation Date: 09-25-2018
Citation: HSC 6.67 25270.4.5 (a) - California Health and Safety Code, Chapter 6.67 , Section(s) 25270.4.5 (a)
Violation Description: Failure to have management or a professional engineer certify the SPCC Plan and comply with certification requirements at a qualified facility.
Violation Notes: Returned to compliance on 11/07/2018.
Violation Division: Riverside County Department of Env Health
Violation Program: APSA
Violation Source: CERS

Site ID: 393945
Site Name: Gold Star
Violation Date: 05-05-2015
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit a site map with all required content.
Violation Notes: Returned to compliance on 08/11/2015.
Violation Division: Riverside County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 393945
Site Name: Gold Star
Violation Date: 09-25-2018
Citation: 40 CFR 1 265.173 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.173
Violation Description: Failure to meet the following container management requirements: (a) A container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste. (b) A container holding hazardous waste must not be opened, handled, or stored in a manner which may rupture the container or cause it to leak.
Violation Notes: Returned to compliance on 11/07/2018.
Violation Division: Riverside County Department of Env Health
Violation Program: HW
Violation Source: CERS

Site ID: 393945
Site Name: Gold Star
Violation Date: 09-25-2018
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)
Violation Description: Failure to prepare a Spill Prevention, Control, and Countermeasures

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

GOLD STAR (Continued)

S123515595

(SPCC) Plan.
Violation Notes: Returned to compliance on 11/07/2018.
Violation Division: Riverside County Department of Env Health
Violation Program: APSA
Violation Source: CERS

Site ID: 393945
Site Name: Gold Star
Violation Date: 11-07-2018
Citation: HSC 6.67 25270.6(a)(1), 25270.6(a)(2) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.6(a)(1), 25270.6(a)(2)
Violation Description: Failure to submit a tank facility statement on or before January 1 annually unless a current Business Plan has been submitted.

Violation Notes: Returned to compliance on 01/24/2019.
Violation Division: Riverside County Department of Env Health
Violation Program: APSA
Violation Source: CERS

Site ID: 393945
Site Name: Gold Star
Violation Date: 08-29-2018
Citation: Un-Specified
Violation Description: Business Plan Program - Operations/Maintenance - General Local Ordinance

Violation Notes: Returned to compliance on 11/07/2018. OBSERVATION: Observed faded NFPA-704 signs located at the entrance to the facility and the emulsion tanks. CORRECTIVE ACTION: Owner/operator shall replace all faded or otherwise unrecognizable NFPA-704 signs. Submit photos to this department.

Violation Division: Riverside County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 393945
Site Name: Gold Star
Violation Date: 05-05-2015
Citation: 19 CCR 6.95 25508(a)(1) - California Code of Regulations, Title 19, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit the Business Activities Page and/or Business Owner Operator Identification Page.

Violation Notes: Returned to compliance on 08/11/2015.
Violation Division: Riverside County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 393945
Site Name: Gold Star
Violation Date: 02-25-2015
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.

Violation Notes: Returned to compliance on 08/11/2015.
Violation Division: Riverside County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

GOLD STAR (Continued)

S123515595

Site ID: 393945
Site Name: Gold Star
Violation Date: 05-05-2015
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple
Violation Description: Business Plan Program - Administration/Documentation - General
Violation Notes: Returned to compliance on 08/11/2015. BEP not on site.
Violation Division: Riverside County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 393945
Site Name: Gold Star
Violation Date: 02-25-2015
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to establish and electronically submit an adequate emergency response plan and procedures for a release or threatened release of a hazardous material.
Violation Notes: Returned to compliance on 08/11/2015.
Violation Division: Riverside County Department of Env Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 393945
Site Name: Gold Star
Violation Date: 09-25-2018
Citation: HSC 6.67 25270.6(b) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.6(b)
Violation Description: Failure to pay the APSA Program fee.
Violation Notes: Returned to compliance on 11/07/2018.
Violation Division: Riverside County Department of Env Health
Violation Program: APSA
Violation Source: CERS

Site ID: 393945
Site Name: Gold Star
Violation Date: 09-25-2018
Citation: Un-Specified
Violation Description: Hazardous Waste Generator Program - Administration/Documentation - General Local Ordinance
Violation Notes: Returned to compliance on 11/07/2018.
Violation Division: Riverside County Department of Env Health
Violation Program: HW
Violation Source: CERS

Site ID: 393945
Site Name: Gold Star
Violation Date: 05-05-2015
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to establish and electronically submit an adequate emergency response plan and procedures for a release or threatened release of a hazardous material.
Violation Notes: Returned to compliance on 08/11/2015.
Violation Division: Riverside County Department of Env Health
Violation Program: HMRRP

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

GOLD STAR (Continued)

S123515595

Violation Source: CERS

Evaluation:

Eval General Type: Other/Unknown
Eval Date: 08-11-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 11-07-2018
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 02-25-2015
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-25-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 05-05-2015
Violations Found: Yes
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-29-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: This inspection only covers the hazardous materials at the north facility. NPG is located across the street and the facility will be inspected at a later date.
Eval Division: Riverside County Department of Env Health
Eval Program: HMRRP

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

GOLD STAR (Continued)

S123515595

Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-25-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: APSA
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 11-07-2018
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 11-07-2018
Violations Found: Yes
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Riverside County Department of Env Health
Eval Program: APSA
Eval Source: CERS

Enforcement Action:
Site ID: 393945
Site Name: Gold Star
Site Address: 1354 JETWAY
Site City: PERRIS
Site Zip: 92572
Enf Action Date: 02-25-2015
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Riverside County Department of Env Health
Enf Action Program: HMRRP
Enf Action Source: CERS

Site ID: 393945
Site Name: Gold Star
Site Address: 1354 JETWAY
Site City: PERRIS
Site Zip: 92572
Enf Action Date: 05-05-2015
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Riverside County Department of Env Health
Enf Action Program: HMRRP
Enf Action Source: CERS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

GOLD STAR (Continued)

S123515595

Affiliation:

Affiliation Type Desc: Document Preparer
Entity Name: Charles Howard
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer
Entity Name: Jeff S. Nelson
Entity Title: President
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Property Owner
Entity Name: Jeff S. Nelson
Entity Title: Not reported
Affiliation Address: PO Box 1515
Affiliation City: Perris
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 92572
Affiliation Phone: (951) 940-1610

Affiliation Type Desc: CUPA District
Entity Name: Riverside Cnty Env Health
Entity Title: Not reported
Affiliation Address: 4065 County Circle Drive, Room 104
Affiliation City: Riverside
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92503
Affiliation Phone: (951) 358-5055

Affiliation Type Desc: Environmental Contact
Entity Name: Jeff Nelson
Entity Title: Not reported
Affiliation Address: PO Box 1515
Affiliation City: Perris
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92572
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: PO Box 1515
Affiliation City: Perris
Affiliation State: CA

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

GOLD STAR (Continued)

S123515595

Affiliation Country: Not reported
 Affiliation Zip: 92572
 Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner
 Entity Name: Jeff Nelson
 Entity Title: Not reported
 Affiliation Address: PO Box 1515
 Affiliation City: Perris
 Affiliation State: CA
 Affiliation Country: United States
 Affiliation Zip: 92572
 Affiliation Phone: (909) 928-1676

Affiliation Type Desc: Operator
 Entity Name: Jeff S. Nelson
 Entity Title: Not reported
 Affiliation Address: Not reported
 Affiliation City: Not reported
 Affiliation State: Not reported
 Affiliation Country: Not reported
 Affiliation Zip: Not reported
 Affiliation Phone: (951) 940-1610

Affiliation Type Desc: Parent Corporation
 Entity Name: Gold Star
 Entity Title: Not reported
 Affiliation Address: Not reported
 Affiliation City: Not reported
 Affiliation State: Not reported
 Affiliation Country: Not reported
 Affiliation Zip: Not reported
 Affiliation Phone: Not reported

C13
WSW
1/8-1/4
0.239 mi.
1260 ft.

GOLDSTAR ASPHALT PRODUCTS
1354 JET WAY
PERRIS, CA 92571

RCRA NonGen / NLR

1024819323
CAL000329049

Site 2 of 2 in cluster C

Relative:
Higher
Actual:
1497 ft.

RCRA NonGen / NLR: 20080124
 Date Form Received by Agency: 20080124
 Handler Name: GOLDSTAR ASPHALT PRODUCTS
 Handler Address: 1354 JET WAY
 Handler City,State,Zip: PERRIS, CA 92571-7466
 EPA ID: CAL000329049
 Contact Name: SHARON NELSON
 Contact Address: 1354 JET WAY
 Contact City,State,Zip: PERRIS, CA 92571
 Contact Telephone: 951-940-1610
 Contact Fax: 951-940-9192
 Contact Email: SNELSON@NPGASPHALT.COM
 Contact Title: Not reported
 EPA Region: 09
 Land Type: Not reported
 Federal Waste Generator Description: Not a generator, verified
 Non-Notifier: Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

GOLDSTAR ASPHALT PRODUCTS (Continued)

1024819323

Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	PO BOX 1515
Mailing City, State, Zip:	PERRIS, CA 92572-1515
Owner Name:	JEFF NELSON
Owner Type:	Other
Operator Name:	SHARON NELSON
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDs Where RCRA CA has Been Imposed Universe:	No
TSDs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSD Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

GOLDSTAR ASPHALT PRODUCTS (Continued)

1024819323

Financial Assurance Required:	Not reported
Handler Date of Last Change:	20180905
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	SHARON NELSON
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1354 JET WAY
Owner/Operator City,State,Zip:	PERRIS, CA 92571
Owner/Operator Telephone:	951-940-1610
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	JEFF NELSON
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1354 JET WAY
Owner/Operator City,State,Zip:	PERRIS, CA 92571-7466
Owner/Operator Telephone:	951-940-0200
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20080124
Handler Name:	GOLDSTAR ASPHALT PRODUCTS
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	23411
NAICS Description:	HIGHWAY AND STREET CONSTRUCTION

Facility Has Received Notices of Violations:

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

GOLDSTAR ASPHALT PRODUCTS (Continued)

1024819323

Violations: No Violations Found

Evaluation Action Summary:
 Evaluations: No Evaluations Found

D14
West
1/4-1/2
0.287 mi.
1517 ft.

EMPIRE TRACTOR
1480 NANDINA AVE
PERRIS, CA 92571
Site 1 of 2 in cluster D

LUST
Cortese
HIST CORTESE
CERS

S104753651
N/A

Relative:
Higher
Actual:
1508 ft.

LUST REG 8:

Name: EMPIRE TRACTOR
 Address: 1480 NANDINA AVE
 City: PERRIS
 Region: 8
 County: Riverside
 Regional Board: Santa Ana Region
 Facility Status: Leak being confirmed
 Case Number: 083303385T
 Local Case Num: 9914949
 Case Type: Soil only
 Substance: Waste Oil
 Qty Leaked: Not reported
 Abate Method: Not reported
 Cross Street: NALINI
 Enf Type: Not reported
 Funding: Not reported
 How Discovered: Tank Closure
 How Stopped: Not reported
 Leak Cause: UNK
 Leak Source: UNK
 Global ID: T0606500575
 How Stopped Date: 2/28/1999
 Enter Date: 3/22/1999
 Date Confirmation of Leak Began: 1/1/1965
 Date Preliminary Assessment Began: Not reported
 Discover Date: 2/23/1999
 Enforcement Date: Not reported
 Close Date: Not reported
 Date Prelim Assessment Workplan Submitted: Not reported
 Date Pollution Characterization Began: Not reported
 Date Remediation Plan Submitted: Not reported
 Date Remedial Action Underway: Not reported
 Date Post Remedial Action Monitoring: Not reported
 Enter Date: 3/22/1999
 GW Qualifies: Not reported
 Soil Qualifies: Not reported
 Operator: Not reported
 Facility Contact: Not reported
 Interim: Not reported
 Oversight Program: LUST
 Latitude: 33.8444924
 Longitude: -117.2222335
 MTBE Date: Not reported
 Max MTBE GW: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

EMPIRE TRACTOR (Continued)

S104753651

MTBE Concentration: 0
Max MTBE Soil: Not reported
MTBE Fuel: 0
MTBE Tested: Not Required to be Tested.
MTBE Class: *
Staff: TME
Staff Initials: UNK
Lead Agency: Local Agency
Local Agency: 33000L
Hydr Basin #: SAN JACINTO (8-5)
Beneficial: Not reported
Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Summary: Not reported

CORTESE:

Name: EMPIRE TRACTOR
Address: 1480 NANDINA AVE
City,State,Zip: PERRIS, CA 92571
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0606500575
Site/Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Status Date: Not reported
Site Code: Not reported
Latitude: Not reported
Longitude: Not reported
Owner: Not reported
Enf Type: Not reported
Swat R: Not reported
Flag: active
Order No: Not reported
Waste Discharge System No: Not reported
Effective Date: Not reported
Region 2: Not reported
WID Id: Not reported
Solid Waste Id No: Not reported
Waste Management Uit Name: Not reported
File Name: Active Open

HIST CORTESE:

edr_fname: EMPIRE TRACTOR
edr_fadd1: 1480
City,State,Zip: PERRIS, CA 92571
Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 083303385T

CERS:

Name: EMPIRE TRACTOR
Address: 1480 NANDINA AVE
City,State,Zip: PERRIS, CA 92571
Site ID: 260312

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

EMPIRE TRACTOR (Continued)

S104753651

CERS ID: T0606500575
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc: Regional Board Caseworker
Entity Name: MIGUEL OVIEDO - SANTA ANA RWQCB (REGION 8)
Entity Title: Not reported
Affiliation Address: 3737 Main Street, Suite 500
Affiliation City: RIVERSIDE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 9517823238

Affiliation Type Desc: Local Agency Caseworker
Entity Name: SHARON BOLTINGHOUSE - RIVERSIDE COUNTY LOP
Entity Title: Not reported
Affiliation Address: 3880 LEMON ST SUITE 200
Affiliation City: RIVERSIDE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 9519558980

D15
West
1/4-1/2
0.287 mi.
1517 ft.

EMPIRE TRACTOR CO
1480 NANDINA AVE
PERRIS, CA 92571
Site 2 of 2 in cluster D

LUST S104164590
HWTS N/A

Relative:
Higher
Actual:
1508 ft.

LUST:
Name: EMPIRE TRACTOR
Address: 1480 NANDINA AVE
City,State,Zip: PERRIS, CA 92571
Lead Agency: RIVERSIDE COUNTY LOP
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606500575
Global Id: T0606500575
Latitude: 33.8671188104111
Longitude: -117.258709195107
Status: Completed - Case Closed
Status Date: 01/09/2002
Case Worker: SCB
RB Case Number: 083303385T
Local Agency: RIVERSIDE COUNTY LOP
File Location: Local Agency Warehouse
Local Case Number: 9914949
Potential Media Affect: Soil
Potential Contaminants of Concern: Waste Oil / Motor / Hydraulic / Lubricating
Site History: Not reported

LUST:
Global Id: T0606500575
Contact Type: Local Agency Caseworker
Contact Name: SHARON BOLTINGHOUSE
Organization Name: RIVERSIDE COUNTY LOP
Address: 3880 LEMON ST SUITE 200
City: RIVERSIDE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

EMPIRE TRACTOR CO (Continued)

S104164590

Email: sbolting@rivco.org
Phone Number: 9519558980

Global Id: T0606500575
Contact Type: Regional Board Caseworker
Contact Name: MIGUEL OVIEDO
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 Main Street, Suite 500
City: RIVERSIDE
Email: miguel.oviedo@waterboards.ca.gov
Phone Number: 9517823238

LUST:

Global Id: T0606500575
Action Type: Other
Date: 02/23/1999
Action: Leak Reported

Global Id: T0606500575
Action Type: ENFORCEMENT
Date: 04/02/2009
Action: Closure/No Further Action Letter - #Site Closure

Global Id: T0606500575
Action Type: Other
Date: 02/28/1999
Action: Leak Stopped

Global Id: T0606500575
Action Type: ENFORCEMENT
Date: 04/01/2009
Action: File review - #RCDEH Upload Site File 3/11/2015

Global Id: T0606500575
Action Type: Other
Date: 02/23/1999
Action: Leak Discovery

LUST:

Global Id: T0606500575
Status: Open - Case Begin Date
Status Date: 02/23/1999

Global Id: T0606500575
Status: Completed - Case Closed
Status Date: 01/09/2002

RIVERSIDE CO. LUST:

Name: EMPIRE TRACTOR CO
Address: 1480 NANDINA AVE
City,State,Zip: PERRIS, CA
Region: RIVERSIDE
Facility ID: 9914949
Employee: Boltinghous-LOP
Site Closed: Yes

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

EMPIRE TRACTOR CO (Continued)

S104164590

Case Type: Soil only
Facility Status: closed/action completed
Casetype Decode: Soil only is impacted
Fstatus Decode: Closed/Action completed

HWTS:

Name: EMPIRE TRACTOR CO
Address: 1480 NANDINA AVE
Address 2: Not reported
City,State,Zip: PERRIS, CA 925710000
EPA ID: CA0000137596
Inactive Date: 06/30/1998
Create Date: 12/08/1995
Last Act Date: 07/06/2010
Mailing Name: Not reported
Mailing Address: 1480 NANDINA AVE
Mailing Address 2: Not reported
Mailing City,State,Zip: PERRIS, CA 925710000
Owner Name: EMPIRE TRACTOR CO
Owner Address: 1480 NANDINA AVE
Owner Address 2: Not reported
Owner City,State,Zip: PERRIS, CA 925710000
Contact Name: --
Contact Address: INACTIVE PER VQ98 - BMI
Contact Address 2: Not reported
City,State,Zip: PERRIS, CA 925710000

E16
West
1/4-1/2
0.370 mi.
1952 ft.

PULLIAM FAMILY TRUST
1569 NANDINA AVE
PERRIS, CA 92571

LUST S105850475
N/A

Site 1 of 2 in cluster E

Relative:
Higher
Actual:
1516 ft.

LUST REG 8:
Name: PULLIAM FAMILY TRUST
Address: 1569 NANDINA AVE
City: PERRIS
Region: 8
County: Riverside
Regional Board: Santa Ana Region
Facility Status: Preliminary site assessment workplan submitted
Case Number: 083302212T
Local Case Num: 93025
Case Type: Soil only
Substance: Diesel
Qty Leaked: Not reported
Abate Method: Excavate and Treat - remove contaminated soil and treat (includes spreading or land farming)

Cross Street: HWY 215
Enf Type: Not reported
Funding: Not reported
How Discovered: Tank Closure
How Stopped: Not reported
Leak Cause: UNK
Leak Source: UNK
Global ID: T0606500307
How Stopped Date: 12/21/1992

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

PULLIAM FAMILY TRUST (Continued)

S105850475

Enter Date: 3/17/1993
 Date Confirmation of Leak Began: 1/4/1993
 Date Preliminary Assessment Began: Not reported
 Discover Date: 1/4/1993
 Enforcement Date: Not reported
 Close Date: Not reported
 Date Prelim Assessment Workplan Submitted: 1/1/1965
 Date Pollution Characterization Began: Not reported
 Date Remediation Plan Submitted: Not reported
 Date Remedial Action Underway: Not reported
 Date Post Remedial Action Monitoring: Not reported
 Enter Date: 3/17/1993
 GW Qualifies: Not reported
 Soil Qualifies: Not reported
 Operator: Not reported
 Facility Contact: Not reported
 Interim: Not reported
 Oversight Program: LUST
 Latitude: 33.8444924
 Longitude: -117.2222335
 MTBE Date: Not reported
 Max MTBE GW: Not reported
 MTBE Concentration: 0
 Max MTBE Soil: Not reported
 MTBE Fuel: 0
 MTBE Tested: Not Required to be Tested.
 MTBE Class: *
 Staff: CAB
 Staff Initials: UNK
 Lead Agency: Local Agency
 Local Agency: 33000L
 Hydr Basin #: SAN JACINTO (8-5)
 Beneficial: Not reported
 Priority: Not reported
 Cleanup Fund Id: Not reported
 Work Suspended: Not reported
 Summary: Not reported

E17
West
1/4-1/2
0.370 mi.
1952 ft.

NANDINA LIQUOR
1569 NANDINA AVE
PERRIS, CA 92571
Site 2 of 2 in cluster E

LUST S101631120
SWEEPS UST N/A
CA FID UST
Cortese
HIST CORTESE
CERS

Relative:
Higher
Actual:
1516 ft.

LUST:
 Name: NANDINA LIQUOR
 Address: 1569 NANDINA AVE
 City,State,Zip: PERRIS, CA 92571
 Lead Agency: SANTA ANA RWQCB (REGION 8)
 Case Type: LUST Cleanup Site
 Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606500307
 Global Id: T0606500307
 Latitude: 33.8659398114501
 Longitude: -117.260492552057
 Status: Completed - Case Closed
 Status Date: 03/19/2018
 Case Worker: CAB

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NANDINA LIQUOR (Continued)

S101631120

RB Case Number: 083302212T
Local Agency: Not reported
File Location: Local Agency
Local Case Number: 93025
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: Diesel
Site History: ***Data prior to 2005 does not appear in GeoTracker. Consult agency file for all site data*** In December, 1992, one 4000 gallon UST was removed from the site. Elevated hydrocarbon levels were detected in the soil. One additional 600 gallon UST was removed January 11, 1993. In July, 1994, hand augured soil samples were taken beneath the 600 gallon UST. Contamination increased with depth. Deeper augur samples, to 21 feet, were taken in November, 1994. TPHg increased from 100 ppm at 5 to 480 ppm at 8 to 820 ppm at 21. In September 1998, five underground storage tanks (USTs) were removed from the Site. Four of the five tanks contained gasoline and diesel fuel. The fifth tank was for storage of used oil. Confirmation soil samples collected following removal of the USTs revealed that discharges of petroleum hydrocarbons had occurred to subsurface soils. Neither product piping nor dispenser islands were removed during UST closure activities. The UST excavations were backfilled with the excavated soils. In February 1999, six exploratory soil borings were drilled and sampled in the vicinity of the former five USTs. Groundwater was encountered at 29. In October 1999, three groundwater wells, MW-1, MW-2 and MW-3, were installed in the area of the former gasoline and diesel fuel USTs. The remaining product piping, former dispenser islands, and dispenser canopy were removed in May 2001. In May 2001 ten additional exploratory borings were drilled and sampled. The northern end of the center dispenser island detected contaminants which increased with depth. In October and November 2002, further assessment was conducted at the Site. Five 2-inch diameter groundwater monitoring wells were installed on the Site. Significant soil contamination was not encountered within any of the five boreholes. Free product was encountered in MW-2 in December 2003. MW-2 was hand bailed on March 1, 2004, March 9, 2004, and March 12, 2004, as part of free-product removal remedial action. Additionally, a vacuum extraction truck was utilized for five (5) of the eleven (11) onsite monitoring wells on March 25, 2004, April 8, 2004, and April 23, 2004. Approximately 0.25 gallons of free product was removed from well MW-2 during the hand bailing operations and approximately 415 gallons of petroleum hydrocarbon-impacted groundwater was removed from the five wells during the three vacuum truck extraction events. In March 2004, three additional groundwater wells were installed. Significant soil contamination was not encountered within any of the three boreholes. A Dual-Phase Extraction pilot test was conducted during an approximately 80-hour event from November 15-November 19, 2004. A discharge permit was obtained from the Regional Water Quality Control Board (RWQCB) Santa Ana Region to discharge the treated groundwater to an underground trench. On May 10-12, 2006 a second pilot test was completed. On June 9, 2008 the groundwater pump and treat (GPT) and soil vapor extraction (SVE) systems were activated for preliminary testing purposes only. The systems were operated intermittently and necessary adjustments were made over a period of approximately six weeks. On July 23, 2008 the GPT and SVE systems became fully operational. The system operated until October 1, 2008 when it was shut down due to lack of funds. The SVE system was restarted April 11, 2011 and limited testing using dual-phase extraction was

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NANDINA LIQUOR (Continued)

S101631120

completed May 5 and 20, 2011. On April 11, 2011, a dual-phase extraction system was started and continued through the second quarter 2011. A total of 399 lbs of TPHg were recovered. Third and fourth events were conducted in July through December 2011. A total of 512 lbs of TPHg and 138757 gallon of groundwater were removed during the third event and 33 lbs of TPHg and 25256 gallon of groundwater were removed during the fourth event. Seven soil borings were advanced to 35.5 feet on January 23 and 24, 2012 and were converted to one monitoring well (MW13) and 6 dual-phase extraction wells (DPE1 through DPE6). . The newly installed DPE wells (DPE-1 through DPE-6) were added to the DPE system. Up to 19700 ppmV TPHg was detected in the vapors in DPE4. Up to 14.4 ppmV benzene was detected in the vapors from DPE3. The DPE system was shut down due to Fund budgeting in April 2012. 285716 gallons of groundwater had been removed, treated and discharged. 1503 lbs of TPHg were recovered. The DPE system was restarted in July 2012. Influent TPHg vapors showed up to 262 ppmV. The system was operated until November 2012 when the DPE system was shut down for rebounding. Influent TPHg at shutdown was 103 ppmV, benzene was 0.4 ppmV, toluene was 3.56 ppmV, ethylbenzene was 1.33 ppmV and xylenes were 13.1 ppmV. A total of 8 dual-phase extraction treatment events had been conducted. 1855 lbs of hydrocarbons and 357916 gallons of groundwater have been removed during the 8 events. Rebound testing was completed in January and February 2016. The groundwater monitoring wells have been sampled quarterly since October 2001 until September 2008 when sampling was discontinued due to lack of Funds. Sampling was restarted November 2009. Up to 75,000 ppb TPHd, 3,200,000 ppb TPHg, 1,300,000 ppb benzene, 3,900,000 ppb toluene, 850,000 ppb ethylbenzene, 5,900,000 ppb xylenes, 6,500 ppb MTBE, 48000 ppb Naphthalene, and 2300 ppb TAME was detected in all wells. Free product was encountered in MW-2 in December 2003. Up to 0.32 of free product was detected in MW-2 and 0.02 in MW-1. MW-2 was hand bailed on March 1, 2004, March 9, 2004, and March 12, 2004, as part of free-product removal remedial action. Additionally, a vacuum extraction truck was utilized for five (5) of the eleven (11) onsite monitoring wells on March 25, 2004, April 8, 2004, and April 23, 2004. Approximately 0.25 gallons of free product was removed from well MW-2 during the hand bailing operations and approximately 415 gallons of petroleum hydrocarbon-impacted groundwater was removed from the five wells during the three vacuum truck extraction events.

LUST:

Global Id: T0606500307
Contact Type: Regional Board Caseworker
Contact Name: CARL BERNHARDT
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: carl.bernhardt@waterboards.ca.gov
Phone Number: 9517824495

LUST:

Global Id: T0606500307
Action Type: ENFORCEMENT
Date: 10/11/2006
Action: Staff Letter - #101106

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NANDINA LIQUOR (Continued)

S101631120

Global Id:	T0606500307
Action Type:	ENFORCEMENT
Date:	02/08/2008
Action:	File review
Global Id:	T0606500307
Action Type:	ENFORCEMENT
Date:	10/24/2008
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0606500307
Action Type:	ENFORCEMENT
Date:	07/07/2011
Action:	Staff Letter - #RCDEH 070711
Global Id:	T0606500307
Action Type:	Other
Date:	01/05/1993
Action:	Leak Reported
Global Id:	T0606500307
Action Type:	RESPONSE
Date:	10/15/2012
Action:	Monitoring Report - Quarterly
Global Id:	T0606500307
Action Type:	RESPONSE
Date:	01/15/2013
Action:	Monitoring Report - Quarterly
Global Id:	T0606500307
Action Type:	RESPONSE
Date:	02/26/2018
Action:	Well Destruction Report
Global Id:	T0606500307
Action Type:	RESPONSE
Date:	04/22/2014
Action:	Correspondence
Global Id:	T0606500307
Action Type:	RESPONSE
Date:	10/03/2017
Action:	Monitoring Report - Semi-Annually
Global Id:	T0606500307
Action Type:	ENFORCEMENT
Date:	07/01/2017
Action:	File review - #RCDEH site summary
Global Id:	T0606500307
Action Type:	ENFORCEMENT
Date:	02/09/2017
Action:	Staff Letter
Global Id:	T0606500307
Action Type:	ENFORCEMENT

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NANDINA LIQUOR (Continued)

S101631120

Date: 05/23/2016
Action: Clean Up Fund - Letter to RP

Global Id: T0606500307
Action Type: ENFORCEMENT
Date: 08/12/2016
Action: File review - #RCDEH uploaded site file 8/12/2016

Global Id: T0606500307
Action Type: ENFORCEMENT
Date: 04/23/2012
Action: Clean Up Fund - Case Closure Review Summary Report (RSR)

Global Id: T0606500307
Action Type: RESPONSE
Date: 01/15/2011
Action: Monitoring Report - Quarterly

Global Id: T0606500307
Action Type: RESPONSE
Date: 04/15/2012
Action: Monitoring Report - Quarterly

Global Id: T0606500307
Action Type: RESPONSE
Date: 07/05/2017
Action: Monitoring Report - Other

Global Id: T0606500307
Action Type: ENFORCEMENT
Date: 08/19/2008
Action: File review

Global Id: T0606500307
Action Type: ENFORCEMENT
Date: 07/19/2011
Action: Technical Correspondence / Assistance / Other - #RCDEH 071911

Global Id: T0606500307
Action Type: ENFORCEMENT
Date: 01/05/2016
Action: Site Visit / Inspection / Sampling

Global Id: T0606500307
Action Type: ENFORCEMENT
Date: 07/01/2017
Action: Referral to Regional Board - #RCDEH notification letters

Global Id: T0606500307
Action Type: ENFORCEMENT
Date: 11/01/2017
Action: Notification - Public Notice of Case Closure

Global Id: T0606500307
Action Type: ENFORCEMENT
Date: 03/19/2018
Action: Closure/No Further Action Letter

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NANDINA LIQUOR (Continued)

S101631120

Global Id: T0606500307
Action Type: ENFORCEMENT
Date: 08/15/2017
Action: Staff Letter

Global Id: T0606500307
Action Type: ENFORCEMENT
Date: 08/09/2017
Action: Clean Up Fund - Case Closure Review Summary Report (RSR)

Global Id: T0606500307
Action Type: Other
Date: 12/21/1992
Action: Leak Stopped

Global Id: T0606500307
Action Type: RESPONSE
Date: 10/15/2009
Action: Monitoring Report - Quarterly

Global Id: T0606500307
Action Type: RESPONSE
Date: 01/15/2010
Action: Monitoring Report - Quarterly

Global Id: T0606500307
Action Type: RESPONSE
Date: 04/15/2011
Action: Monitoring Report - Annually

Global Id: T0606500307
Action Type: RESPONSE
Date: 01/16/2012
Action: Other Report / Document

Global Id: T0606500307
Action Type: RESPONSE
Date: 10/15/2011
Action: Monitoring Report - Quarterly

Global Id: T0606500307
Action Type: RESPONSE
Date: 07/15/2011
Action: Monitoring Report - Quarterly

Global Id: T0606500307
Action Type: RESPONSE
Date: 01/15/2012
Action: Monitoring Report - Quarterly

Global Id: T0606500307
Action Type: RESPONSE
Date: 02/17/2012
Action: Well Installation Report

Global Id: T0606500307
Action Type: RESPONSE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NANDINA LIQUOR (Continued)

S101631120

Date: 04/15/2012
Action: Monitoring Report - Annually

Global Id: T0606500307
Action Type: ENFORCEMENT
Date: 04/25/2014
Action: Technical Correspondence / Assistance / Other

Global Id: T0606500307
Action Type: ENFORCEMENT
Date: 07/19/2017
Action: Verbal Communication

Global Id: T0606500307
Action Type: ENFORCEMENT
Date: 01/02/2018
Action: Staff Letter

Global Id: T0606500307
Action Type: Other
Date: 01/04/1993
Action: Leak Discovery

Global Id: T0606500307
Action Type: RESPONSE
Date: 04/15/2011
Action: Monitoring Report - Quarterly

Global Id: T0606500307
Action Type: RESPONSE
Date: 10/15/2013
Action: Monitoring Report - Quarterly

Global Id: T0606500307
Action Type: ENFORCEMENT
Date: 06/03/2008
Action: File review

Global Id: T0606500307
Action Type: ENFORCEMENT
Date: 06/06/2007
Action: File review

Global Id: T0606500307
Action Type: ENFORCEMENT
Date: 07/31/2007
Action: File review

Global Id: T0606500307
Action Type: ENFORCEMENT
Date: 11/28/2007
Action: File review

Global Id: T0606500307
Action Type: ENFORCEMENT
Date: 07/31/2009
Action: Staff Letter - #RCDEH073109

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NANDINA LIQUOR (Continued)

S101631120

Global Id:	T0606500307
Action Type:	ENFORCEMENT
Date:	11/30/2011
Action:	Staff Letter - #RCDEH 113011
Global Id:	T0606500307
Action Type:	ENFORCEMENT
Date:	01/08/2014
Action:	Clean Up Fund - Case Closure Review Summary Report (RSR)
Global Id:	T0606500307
Action Type:	RESPONSE
Date:	11/26/2006
Action:	Other Report / Document
Global Id:	T0606500307
Action Type:	RESPONSE
Date:	07/15/2013
Action:	Monitoring Report - Quarterly
Global Id:	T0606500307
Action Type:	RESPONSE
Date:	07/02/2013
Action:	Soil and Water Investigation Workplan - Regulator Responded
Global Id:	T0606500307
Action Type:	RESPONSE
Date:	04/15/2013
Action:	Request for Closure - Regulator Responded
Global Id:	T0606500307
Action Type:	RESPONSE
Date:	01/04/2013
Action:	Interim Remedial Action Plan - Regulator Responded
Global Id:	T0606500307
Action Type:	RESPONSE
Date:	04/04/2013
Action:	Request for Closure - Regulator Responded
Global Id:	T0606500307
Action Type:	RESPONSE
Date:	12/20/2013
Action:	Other Report / Document - Regulator Responded
Global Id:	T0606500307
Action Type:	RESPONSE
Date:	09/12/2013
Action:	Other Workplan - Regulator Responded
Global Id:	T0606500307
Action Type:	RESPONSE
Date:	07/30/2017
Action:	Soil Vapor Intrusion Investigation Workplan - Regulator Responded
Global Id:	T0606500307
Action Type:	RESPONSE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NANDINA LIQUOR (Continued)

S101631120

Date: 10/15/2017
Action: Request for Closure - Regulator Responded

Global Id: T0606500307
Action Type: REMEDIATION
Date: 03/01/2004
Action: Free Product Removal

Global Id: T0606500307
Action Type: REMEDIATION
Date: 12/21/2000
Action: Excavation

Global Id: T0606500307
Action Type: REMEDIATION
Date: 07/23/2008
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0606500307
Action Type: REMEDIATION
Date: 03/31/2011
Action: Other (Use Description Field)

LUST:

Global Id: T0606500307
Status: Open - Case Begin Date
Status Date: 12/21/1992

Global Id: T0606500307
Status: Open - Remediation
Status Date: 12/21/1992

Global Id: T0606500307
Status: Open - Site Assessment
Status Date: 01/04/1993

Global Id: T0606500307
Status: Open - Site Assessment
Status Date: 01/22/1999

Global Id: T0606500307
Status: Open - Remediation
Status Date: 06/20/2005

Global Id: T0606500307
Status: Open - Verification Monitoring
Status Date: 06/20/2005

Global Id: T0606500307
Status: Completed - Case Closed
Status Date: 03/19/2018

RIVERSIDE CO. LUST:

Name: NANDINA LIQUOR
Address: 1569 NANDINA AVE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NANDINA LIQUOR (Continued)

S101631120

City,State,Zip: PERRIS, CA
Region: RIVERSIDE
Facility ID: 93025
Employee: Shurlow-LOP
Site Closed: Referred to Water Board
Case Type: Drinking Water Aquifer affected
Facility Status: closed/action completed
Casetype Decode: An Aquifer used for Drinking Water supply has been contaminated.
Fstatus Decode: Closed/Action completed

SWEEPS UST:

Name: NANDINA LIQUOR/TEXACO
Address: 1569 NANDINA AVE
City: PERRIS
Status: Active
Comp Number: 58511
Number: 1
Board Of Equalization: 44-018401
Referral Date: 06-14-90
Action Date: 06-14-90
Created Date: 03-28-89
Owner Tank Id: 001600
SWRCB Tank Id: 33-000-058511-000001
Tank Status: A
Capacity: 100
Active Date: 06-14-90
Tank Use: UNKNOWN
STG: P
Content: UNKNOWN
Number Of Tanks: 7

Name: NANDINA LIQUOR/TEXACO
Address: 1569 NANDINA AVE
City: PERRIS
Status: Active
Comp Number: 58511
Number: 1
Board Of Equalization: 44-018401
Referral Date: 06-14-90
Action Date: 06-14-90
Created Date: 03-28-89
Owner Tank Id: 001600
SWRCB Tank Id: 33-000-058511-000002
Tank Status: A
Capacity: 100
Active Date: 06-14-90
Tank Use: UNKNOWN
STG: P
Content: UNKNOWN
Number Of Tanks: Not reported

Name: NANDINA LIQUOR/TEXACO
Address: 1569 NANDINA AVE
City: PERRIS
Status: Active
Comp Number: 58511
Number: 1

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NANDINA LIQUOR (Continued)

S101631120

Board Of Equalization: 44-018401
Referral Date: 06-14-90
Action Date: 06-14-90
Created Date: 03-28-89
Owner Tank Id: 001600
SWRCB Tank Id: 33-000-058511-000003
Tank Status: A
Capacity: 100
Active Date: 06-14-90
Tank Use: UNKNOWN
STG: P
Content: UNKNOWN
Number Of Tanks: Not reported

Name: NANDINA LIQUOR/TEXACO
Address: 1569 NANDINA AVE
City: PERRIS
Status: Active
Comp Number: 58511
Number: 1
Board Of Equalization: 44-018401
Referral Date: 06-14-90
Action Date: 06-14-90
Created Date: 03-28-89
Owner Tank Id: 001600
SWRCB Tank Id: 33-000-058511-000004
Tank Status: A
Capacity: 100
Active Date: 06-14-90
Tank Use: UNKNOWN
STG: P
Content: UNKNOWN
Number Of Tanks: Not reported

Name: NANDINA LIQUOR/TEXACO
Address: 1569 NANDINA AVE
City: PERRIS
Status: Active
Comp Number: 58511
Number: 1
Board Of Equalization: 44-018401
Referral Date: 06-14-90
Action Date: 06-14-90
Created Date: 03-28-89
Owner Tank Id: 001600
SWRCB Tank Id: 33-000-058511-000005
Tank Status: A
Capacity: 100
Active Date: 06-14-90
Tank Use: UNKNOWN
STG: P
Content: UNKNOWN
Number Of Tanks: Not reported

Name: NANDINA LIQUOR/TEXACO
Address: 1569 NANDINA AVE
City: PERRIS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NANDINA LIQUOR (Continued)

S101631120

Status: Active
Comp Number: 58511
Number: 1
Board Of Equalization: 44-018401
Referral Date: 06-14-90
Action Date: 06-14-90
Created Date: 03-28-89
Owner Tank Id: 001600
SWRCB Tank Id: 33-000-058511-000006
Tank Status: A
Capacity: 100
Active Date: 06-14-90
Tank Use: UNKNOWN
STG: P
Content: UNKNOWN
Number Of Tanks: Not reported

Name: NANDINA LIQUOR/TEXACO
Address: 1569 NANDINA AVE
City: PERRIS
Status: Active
Comp Number: 58511
Number: 1
Board Of Equalization: 44-018401
Referral Date: 06-14-90
Action Date: 06-14-90
Created Date: 03-28-89
Owner Tank Id: 001600
SWRCB Tank Id: 33-000-058511-000007
Tank Status: A
Capacity: 100
Active Date: 06-14-90
Tank Use: UNKNOWN
STG: P
Content: UNKNOWN
Number Of Tanks: Not reported

CA FID UST:

Facility ID: 33000360
Regulated By: UTNKA
Regulated ID: Not reported
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 7149437075
Mail To: Not reported
Mailing Address: 1569 NANDINA AVE
Mailing Address 2: Not reported
Mailing City,St,Zip: PERRIS 92370
Contact: Not reported
Contact Phone: Not reported
DUNS Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NANDINA LIQUOR (Continued)

S101631120

CORTESE:

Name: NANDINA LIQUOR
Address: 1569 NANDINA AVE
City,State,Zip: PERRIS, CA 92571
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0606500307
Site/Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Status Date: Not reported
Site Code: Not reported
Latitude: Not reported
Longitude: Not reported
Owner: Not reported
Enf Type: Not reported
Swat R: Not reported
Flag: active
Order No: Not reported
Waste Discharge System No: Not reported
Effective Date: Not reported
Region 2: Not reported
WID Id: Not reported
Solid Waste Id No: Not reported
Waste Management Uit Name: Not reported
File Name: Active Open

HIST CORTESE:

edr_fname: NANDINA LIQUOR
edr_fadd1: 1569
City,State,Zip: PERRIS, CA 92571
Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 083302212T

CERS:

Name: NANDINA LIQUOR
Address: 1569 NANDINA AVE
City,State,Zip: PERRIS, CA 92571
Site ID: 209420
CERS ID: T0606500307
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc: Regional Board Caseworker
Entity Name: CARL BERNHARDT - SANTA ANA RWQCB (REGION 8)
Entity Title: Not reported
Affiliation Address: 3737 MAIN STREET, SUITE 500
Affiliation City: RIVERSIDE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 9517824495

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

F18 ENE 1/4-1/2 0.416 mi. 2194 ft. Relative: Lower Actual: 1483 ft.	US AIR FORCE, MARCH AIR RESERVE BASE - OU-1 - SITE RIVERSIDE, CA 92518 Site 1 of 28 in cluster F LUST REG 8: Name: US Air Force, March Air Reserve Base - OU-1 - SITE 10 Flightline Drainage Channel Address: Not reported City: Riverside Region: 8 County: Riverside Regional Board: Santa Ana Region Facility Status: Not reported Case Number: Not reported Local Case Num: 400689 -- 19 Case Type: Not reported Substance: Not reported Qty Leaked: Not reported Abate Method: Not reported Cross Street: 3,545 Acres; E. of Riverside Enf Type: Not reported Funding: Not reported How Discovered: Not reported How Stopped: Not reported Leak Cause: Not reported Leak Source: Not reported Global ID: DOD100281800 How Stopped Date: Not reported Enter Date: Not reported Date Confirmation of Leak Began: Not reported Date Preliminary Assessment Began: Not reported Discover Date: Not reported Enforcement Date: Not reported Close Date: Not reported Date Prelim Assessment Workplan Submitted: Not reported Date Pollution Characterization Began: Not reported Date Remediation Plan Submitted: Not reported Date Remedial Action Underway: Not reported Date Post Remedial Action Monitoring: Not reported Enter Date: Not reported GW Qualifies: Not reported Soil Qualifies: Not reported Operator: Not reported Facility Contact: Not reported Interim: Not reported Oversight Program: DODNUST Latitude: Not reported Longitude: Not reported MTBE Date: Not reported Max MTBE GW: Not reported MTBE Concentration: 0 Max MTBE Soil: Not reported MTBE Fuel: 0 MTBE Tested: Not Required to be Tested. MTBE Class: * Staff: JCB Staff Initials: Not reported Lead Agency: Regional Board	LUST S106784642 N/A
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Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

US AIR FORCE, MARCH AIR RESERVE BASE - OU-1 - SITE 10 FLIGHT (Continued)

S106784642

Local Agency:	Not reported
Hydr Basin #:	Not reported
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

F19
ENE
1/4-1/2
0.416 mi.
2194 ft.
Relative:
Lower
Actual:
1483 ft.

US AIR FORCE, MARCH AIR RESERVE BASE - OU-1 - SITE
RIVERSIDE, CA 92518
Site 2 of 28 in cluster F

LUST S106784644
N/A

LUSTR REG 8:	
Name:	US Air Force, March Air Reserve Base - OU-1 - SITE 9 Main Oil/Water Separator
Address:	Not reported
City:	Riverside
Region:	8
County:	Riverside
Regional Board:	Santa Ana Region
Facility Status:	Not reported
Case Number:	Not reported
Local Case Num:	400689 -- 9
Case Type:	Not reported
Substance:	Not reported
Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	3,545 Acres; E. of Riverside
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Not reported
How Stopped:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Global ID:	DOD100290000
How Stopped Date:	Not reported
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	Not reported
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	DODNUST
Latitude:	Not reported
Longitude:	Not reported
MTBE Date:	Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

US AIR FORCE, MARCH AIR RESERVE BASE - OU-1 - SITE 9 MAIN OI (Continued)

S106784644

Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	Not Required to be Tested.
MTBE Class:	*
Staff:	JCB
Staff Initials:	Not reported
Lead Agency:	Regional Board
Local Agency:	Not reported
Hydr Basin #:	Not reported
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

F20
ENE
1/4-1/2
0.416 mi.
2194 ft.

US AIR FORCE, MARCH AIR RESERVE BASE - OU-1 - SITE

LUST S106784643
N/A

RIVERSIDE, CA 92518

Site 3 of 28 in cluster F

Relative:
Lower
Actual:
1483 ft.

LUST REG 8:	
Name:	US Air Force, March Air Reserve Base - OU-1 - SITE 15 Fire Protection Training Area N
Address:	Not reported
City:	Riverside
Region:	8
County:	Riverside
Regional Board:	Santa Ana Region
Facility Status:	Not reported
Case Number:	Not reported
Local Case Num:	400689 -- 16
Case Type:	Not reported
Substance:	Not reported
Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	3,545 Acres; E. of Riverside
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Not reported
How Stopped:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Global ID:	DOD100282100
How Stopped Date:	Not reported
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	Not reported
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

US AIR FORCE, MARCH AIR RESERVE BASE - OU-1 - SITE 15 FIRE P (Continued)

S106784643

GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	DODNUST
Latitude:	Not reported
Longitude:	Not reported
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	Not Required to be Tested.
MTBE Class:	*
Staff:	JCB
Staff Initials:	Not reported
Lead Agency:	Regional Board
Local Agency:	Not reported
Hydr Basin #:	Not reported
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

F21
ENE
1/4-1/2
0.416 mi.
2194 ft.
Relative:
Lower
Actual:
1483 ft.

US AIR FORCE, MARCH AIR RESERVE BASE - OU-1 - SITE
RIVERSIDE, CA 92518
Site 4 of 28 in cluster F

LUST S106784685
N/A

LUST REG 8:	
Name:	US Air Force, March Air Reserve Base - OU-1 - SITE 13 Tank Truck Spill site
Address:	Not reported
City:	Riverside
Region:	8
County:	Riverside
Regional Board:	Santa Ana Region
Facility Status:	Not reported
Case Number:	Not reported
Local Case Num:	400689 -- 18
Case Type:	Not reported
Substance:	Not reported
Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	3,545 Acres; E. of Riverside
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Not reported
How Stopped:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Global ID:	DOD100281900
How Stopped Date:	Not reported
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

US AIR FORCE, MARCH AIR RESERVE BASE - OU-1 - SITE 13 TANK T (Continued)

S106784685

Discover Date:	Not reported
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	DODNUST
Latitude:	Not reported
Longitude:	Not reported
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	Not Required to be Tested.
MTBE Class:	*
Staff:	JCB
Staff Initials:	Not reported
Lead Agency:	Regional Board
Local Agency:	Not reported
Hydr Basin #:	Not reported
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

F22
ENE
1/4-1/2
0.416 mi.
2194 ft.

MARCH AIR FORCE BASE (FORMER)
BLDG 550 GRAHAM (RIVERSIDE DR)
MORENO VALLEY, CA 92518

LUST S105624618
N/A

Site 5 of 28 in cluster F

Relative:
Lower
Actual:
1483 ft.

LUST REG 8:	
Name:	March Air Force Base (former)
Address:	Bldg 550 Graham (Riverside Dr)
City:	Moreno Valley
Region:	8
County:	Riverside
Regional Board:	Santa Ana Region
Facility Status:	Remedial action (cleanup) Underway
Case Number:	083302549T
Local Case Num:	Not reported
Case Type:	Aquifer affected
Substance:	Gasoline
Qty Leaked:	Not reported
Abate Method:	ve
Cross Street:	Castle St.
Enf Type:	Not reported
Funding:	Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

MARCH AIR FORCE BASE (FORMER) (Continued)

S105624618

How Discovered:	Tank Test
How Stopped:	Not reported
Leak Cause:	UNK
Leak Source:	UNK
Global ID:	T0606500401
How Stopped Date:	6/21/1994
Enter Date:	12/13/1994
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	2/2/1996
Discover Date:	11/15/1990
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	6/6/1996
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	3/1/2002
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	12/13/1994
GW Qualifies:	=
Soil Qualifies:	=
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	DOD
Latitude:	33.906133
Longitude:	-117.2526974
MTBE Date:	7/31/2001
Max MTBE GW:	4400
MTBE Concentration:	2
Max MTBE Soil:	45
MTBE Fuel:	1
MTBE Tested:	MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class:	*
Staff:	JCB
Staff Initials:	UNK
Lead Agency:	Regional Board
Local Agency:	33000L
Hydr Basin #:	SAN JACINTO (8-5)
Beneficial:	MS_I
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	former BX gas station, replaced four 10,000 gal gasoline USTs, 1 500 gal waste oil tank, installed in 1965 and removed 6/30/1994, 4 - 10,000 gal. double wall fiberglass replacement tanks installed 7/1994 and removed 4/1/2000, leakage was from original lines and tanks

F23
ENE
 1/4-1/2
 0.416 mi.
 2194 ft.

MARCH AIR RESERVE BASE
BLDG 480 PANERO S-33 AIRCRAFT PARKING APRON
MARCH ARB, CA 92518
Site 6 of 28 in cluster F

LUST S105624603
N/A

Relative:
Lower
Actual:
1483 ft.

LUST REG 8:
 Name: March Air Reserve Base
 Address: Bldg 480 Panero S-33 Aircraft Parking Apron
 City: MARCH ARB
 Region: 8

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR RESERVE BASE (Continued)

S105624603

County:	Riverside
Regional Board:	Santa Ana Region
Facility Status:	Remedial action (cleanup) Underway
Case Number:	083301290T
Local Case Num:	Not reported
Case Type:	Aquifer affected
Substance:	Jet Fuel
Qty Leaked:	Not reported
Abate Method:	EDFP
Cross Street:	Taxiway
Enf Type:	EF
Funding:	Not reported
How Discovered:	OM
How Stopped:	Not reported
Leak Cause:	UNK
Leak Source:	Tank
Global ID:	T0606500146
How Stopped Date:	5/12/1989
Enter Date:	9/7/1989
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	8/2/1989
Discover Date:	5/12/1989
Enforcement Date:	9/18/1990
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	3/3/1994
Date Remediation Plan Submitted:	10/17/1994
Date Remedial Action Underway:	11/15/1996
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	9/7/1989
GW Qualifies:	<
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Yes
Oversite Program:	DOD
Latitude:	33.9870823
Longitude:	-117.34598
MTBE Date:	9/5/2001
Max MTBE GW:	50
MTBE Concentration:	1
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class:	C
Staff:	JCB
Staff Initials:	UNK
Lead Agency:	Regional Board
Local Agency:	33000L
Hydr Basin #:	UPPER SANTA ANA VALL
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	JP-4. OU3, IRP SITE 33, 1991 CONTAMINATED SOIL IN TANK FARM (DOWN TO 20FT.) EXCAVATED, TREATED WITH THERMAL TRTMT & RETURNED TO EXCAVATION. 1996 EST. AREAL EXTENT OF FREE PRODUCT ON WATER, 21 ACRES. FREE PRODUCT RECOVERY

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

MARCH AIR RESERVE BASE (Continued)

S105624603

INITIATED 1990.

F24
ENE
 1/4-1/2
 0.416 mi.
 2194 ft.

US AIR FORCE, MARCH AIR RESERVE BASE - OU2-B - SIT
RIVERSIDE, CA 92518
Site 7 of 28 in cluster F

LUST S106784692
N/A

Relative:
Lower
Actual:
1483 ft.

LUST REG 8:
 Name: US Air Force, March Air Reserve Base - OU2-B - SITE 8 Flightline Shop Zone
 Address: Not reported
 City: Riverside
 Region: 8
 County: Riverside
 Regional Board: Santa Ana Region
 Facility Status: Not reported
 Case Number: Not reported
 Local Case Num: 400689 -- 4
 Case Type: Not reported
 Substance: Not reported
 Qty Leaked: Not reported
 Abate Method: Not reported
 Cross Street: 3,545 Acres; E. of Riverside
 Enf Type: Not reported
 Funding: Not reported
 How Discovered: Not reported
 How Stopped: Not reported
 Leak Cause: Not reported
 Leak Source: Not reported
 Global ID: DOD100321100
 How Stopped Date: Not reported
 Enter Date: Not reported
 Date Confirmation of Leak Began: Not reported
 Date Preliminary Assessment Began: Not reported
 Discover Date: Not reported
 Enforcement Date: Not reported
 Close Date: Not reported
 Date Prelim Assessment Workplan Submitted: Not reported
 Date Pollution Characterization Began: Not reported
 Date Remediation Plan Submitted: Not reported
 Date Remedial Action Underway: Not reported
 Date Post Remedial Action Monitoring: Not reported
 Enter Date: Not reported
 GW Qualifies: Not reported
 Soil Qualifies: Not reported
 Operator: Not reported
 Facility Contact: Not reported
 Interim: Not reported
 Oversight Program: DODNUST
 Latitude: Not reported
 Longitude: Not reported
 MTBE Date: Not reported
 Max MTBE GW: Not reported
 MTBE Concentration: 0
 Max MTBE Soil: Not reported
 MTBE Fuel: 0
 MTBE Tested: Not Required to be Tested.
 MTBE Class: *

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

US AIR FORCE, MARCH AIR RESERVE BASE - OU2-B - SITE 8 FLIGHT (Continued)

S106784692

Staff:	JCB
Staff Initials:	Not reported
Lead Agency:	Regional Board
Local Agency:	Not reported
Hydr Basin #:	Not reported
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

F25
ENE
1/4-1/2
0.416 mi.
2194 ft.

US AIR FORCE, MARCH AIR RESERVE BASE - OU2-A - SIT

LUST S106784761
N/A

RIVERSIDE, CA 92518

Site 8 of 28 in cluster F

Relative:
Lower
Actual:
1483 ft.

LUST REG 8:	
Name:	US Air Force, March Air Reserve Base - OU2-A - SITE 1 Aircraft Isolation Project
Address:	Not reported
City:	Riverside
Region:	8
County:	Riverside
Regional Board:	Santa Ana Region
Facility Status:	Not reported
Case Number:	Not reported
Local Case Num:	400689 -- 7
Case Type:	Not reported
Substance:	Not reported
Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	3,545 Acres; E. of Riverside
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Not reported
How Stopped:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Global ID:	DOD100319500
How Stopped Date:	Not reported
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	Not reported
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	DODNUST

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

US AIR FORCE, MARCH AIR RESERVE BASE - OU2-A - SITE 1 AIRCRA (Continued)

S106784761

Latitude:	Not reported
Longitude:	Not reported
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	Not Required to be Tested.
MTBE Class:	*
Staff:	JCB
Staff Initials:	Not reported
Lead Agency:	Regional Board
Local Agency:	Not reported
Hydr Basin #:	Not reported
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

F26
ENE
1/4-1/2
0.416 mi.
2194 ft.
Relative:
Lower
Actual:
1483 ft.

US AIR FORCE, MARCH AIR RESERVE BASE - OU-1 - SITE

LUST S106784700
N/A

RIVERSIDE, CA 92518

Site 9 of 28 in cluster F

LUSTR REG 8:	
Name:	US Air Force, March Air Reserve Base - OU-1 - SITE 5 Landfill No. 3
Address:	Not reported
City:	Riverside
Region:	8
County:	Riverside
Regional Board:	Santa Ana Region
Facility Status:	Not reported
Case Number:	Not reported
Local Case Num:	400689 -- 10
Case Type:	Not reported
Substance:	Not reported
Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	3,545 Acres; E. of Riverside
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Not reported
How Stopped:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Global ID:	DOD100289900
How Stopped Date:	Not reported
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	Not reported
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

US AIR FORCE, MARCH AIR RESERVE BASE - OU-1 - SITE 5 LANDFIL (Continued)

S106784700

Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	DODNUST
Latitude:	Not reported
Longitude:	Not reported
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	Not Required to be Tested.
MTBE Class:	*
Staff:	JCB
Staff Initials:	Not reported
Lead Agency:	Regional Board
Local Agency:	Not reported
Hydr Basin #:	Not reported
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

F27
ENE
1/4-1/2
0.416 mi.
2194 ft.

US AIR FORCE, MARCH AIR RESERVE BASE - OU2-B - SIT

LUST S106784694
N/A

RIVERSIDE, CA 92518

Site 10 of 28 in cluster F

Relative:
Lower
Actual:
1483 ft.

Relative:	LUST REG 8:	
Lower	Name:	US Air Force, March Air Reserve Base - OU2-B - SITE 36 BLDG 458 Leach Pit
Actual:	Address:	Not reported
1483 ft.	City:	Riverside
	Region:	8
	County:	Riverside
	Regional Board:	Santa Ana Region
	Facility Status:	Not reported
	Case Number:	Not reported
	Local Case Num:	400689 -- 3
	Case Type:	Not reported
	Substance:	Not reported
	Qty Leaked:	Not reported
	Abate Method:	Not reported
	Cross Street:	3,545 Acres; E. of Riverside
	Enf Type:	Not reported
	Funding:	Not reported
	How Discovered:	Not reported
	How Stopped:	Not reported
	Leak Cause:	Not reported
	Leak Source:	Not reported
	Global ID:	DOD100321200
	How Stopped Date:	Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

US AIR FORCE, MARCH AIR RESERVE BASE - OU2-B - SITE 36 BLDG (Continued)

S106784694

Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	Not reported
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	DODNUST
Latitude:	Not reported
Longitude:	Not reported
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	Not Required to be Tested.
MTBE Class:	*
Staff:	JCB
Staff Initials:	Not reported
Lead Agency:	Regional Board
Local Agency:	Not reported
Hydr Basin #:	Not reported
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

F28
ENE
1/4-1/2
0.416 mi.
2194 ft.
Relative:
Lower
Actual:
1483 ft.

US AIR FORCE, MARCH AIR RESERVE BASE - OU-1 - SITE
RIVERSIDE, CA 92518
Site 11 of 28 in cluster F

LUST S106784690
N/A

LUST REG 8:	
Name:	US Air Force, March Air Reserve Base - OU-1 - SITE 16 East March Sludge Drying Bed
Address:	Not reported
City:	Riverside
Region:	8
County:	Riverside
Regional Board:	Santa Ana Region
Facility Status:	Not reported
Case Number:	Not reported
Local Case Num:	400689 -- 15
Case Type:	Not reported
Substance:	Not reported
Qty Leaked:	Not reported
Abate Method:	Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

US AIR FORCE, MARCH AIR RESERVE BASE - OU-1 - SITE 16 EAST M (Continued)

S106784690

Cross Street:	3,545 Acres; E. of Riverside
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Not reported
How Stopped:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Global ID:	DOD100286600
How Stopped Date:	Not reported
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	Not reported
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	DODNUST
Latitude:	Not reported
Longitude:	Not reported
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	Not Required to be Tested.
MTBE Class:	*
Staff:	JCB
Staff Initials:	Not reported
Lead Agency:	Regional Board
Local Agency:	Not reported
Hydr Basin #:	Not reported
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

F29 **MARCH AIR RESERVE BASE**
ENE
1/4-1/2 **RIVERSIDE, CA 92518**
0.416 mi.
2194 ft. **Site 12 of 28 in cluster F**

LUST **S106784660**
N/A

Relative:	LUST REG 8:	
Lower	Name:	March Air Reserve Base
Actual:	Address:	Not reported
1483 ft.	City:	Riverside
	Region:	8

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR RESERVE BASE (Continued)

S106784660

County:	Riverside
Regional Board:	Santa Ana Region
Facility Status:	Not reported
Case Number:	Not reported
Local Case Num:	400689
Case Type:	Not reported
Substance:	Not reported
Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	3,545 Acres; E. of Riverside
Enf Type:	None Taken
Funding:	Not reported
How Discovered:	Not reported
How Stopped:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Global ID:	T0606531112
How Stopped Date:	Not reported
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	Not reported
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	DOD
Latitude:	Not reported
Longitude:	Not reported
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	Not Required to be Tested.
MTBE Class:	*
Staff:	JCB
Staff Initials:	Not reported
Lead Agency:	Regional Board
Local Agency:	Not reported
Hydr Basin #:	Not reported
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

F30 **US AIR FORCE, MARCH AIR RESERVE BASE - OU-1 - SITE**
ENE
1/4-1/2 **RIVERSIDE, CA 92518**
0.416 mi.
2194 ft. **Site 13 of 28 in cluster F**

LUST **S106784725**
N/A

Relative:
Lower
Actual:
1483 ft.

LUST REG 8:
 Name: US Air Force, March Air Reserve Base - OU-1 - SITE 31 Solvent Disposal
 Address: Not reported
 City: Riverside
 Region: 8
 County: Riverside
 Regional Board: Santa Ana Region
 Facility Status: Not reported
 Case Number: Not reported
 Local Case Num: 400689 -- 13
 Case Type: Not reported
 Substance: Not reported
 Qty Leaked: Not reported
 Abate Method: Not reported
 Cross Street: 3,545 Acres; E. of Riverside
 Enf Type: Not reported
 Funding: Not reported
 How Discovered: Not reported
 How Stopped: Not reported
 Leak Cause: Not reported
 Leak Source: Not reported
 Global ID: DOD100286800
 How Stopped Date: Not reported
 Enter Date: Not reported
 Date Confirmation of Leak Began: Not reported
 Date Preliminary Assessment Began: Not reported
 Discover Date: Not reported
 Enforcement Date: Not reported
 Close Date: Not reported
 Date Prelim Assessment Workplan Submitted: Not reported
 Date Pollution Characterization Began: Not reported
 Date Remediation Plan Submitted: Not reported
 Date Remedial Action Underway: Not reported
 Date Post Remedial Action Monitoring: Not reported
 Enter Date: Not reported
 GW Qualifies: Not reported
 Soil Qualifies: Not reported
 Operator: Not reported
 Facility Contact: Not reported
 Interim: Not reported
 Oversight Program: DODNUST
 Latitude: Not reported
 Longitude: Not reported
 MTBE Date: Not reported
 Max MTBE GW: Not reported
 MTBE Concentration: 0
 Max MTBE Soil: Not reported
 MTBE Fuel: 0
 MTBE Tested: Not Required to be Tested.
 MTBE Class: *
 Staff: JCB
 Staff Initials: Not reported
 Lead Agency: Regional Board

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

US AIR FORCE, MARCH AIR RESERVE BASE - OU-1 - SITE 31 SOLVEN (Continued)

S106784725

Local Agency:	Not reported
Hydr Basin #:	Not reported
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

F31
ENE
1/4-1/2
0.416 mi.
2194 ft.
Relative:
Lower
Actual:
1483 ft.

US AIR FORCE, MARCH AIR RESERVE BASE - SITE 18 ENG

LUST S106784646
N/A

RIVERSIDE, CA 92518

Site 14 of 28 in cluster F

LUSTR REG 8:	
Name:	US Air Force, March Air Reserve Base - SITE 18 Engine Test Cell (petroleum release)
Address:	Not reported
City:	Riverside
Region:	8
County:	Riverside
Regional Board:	Santa Ana Region
Facility Status:	Not reported
Case Number:	Not reported
Local Case Num:	400689 -- 1
Case Type:	Not reported
Substance:	Not reported
Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	3,545 Acres; E. of Riverside
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Not reported
How Stopped:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Global ID:	DOD100321400
How Stopped Date:	Not reported
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	Not reported
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	DODNUST
Latitude:	Not reported
Longitude:	Not reported
MTBE Date:	Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

US AIR FORCE, MARCH AIR RESERVE BASE - SITE 18 ENGINE TEST C (Continued)

S106784646

Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	Not Required to be Tested.
MTBE Class:	*
Staff:	JCB
Staff Initials:	Not reported
Lead Agency:	Regional Board
Local Agency:	Not reported
Hydr Basin #:	Not reported
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

F32
ENE
1/4-1/2
0.416 mi.
2194 ft.

MARCH AIR RESERVE BASE
3,545 ACRES; EAST OF RIVERSIDE
RIVERSIDE, CA 92518

ENVIROSTOR **S104241831**
HIST Cal-Sites **N/A**

Site 15 of 28 in cluster F

Relative:
Lower
Actual:
1483 ft.

ENVIROSTOR:

Name:	MARCH AIR RESERVE BASE
Address:	3,545 ACRES; EAST OF RIVERSIDE
City,State,Zip:	RIVERSIDE, CA 92518
Facility ID:	33970004
Status:	Active
Status Date:	07/13/1998
Site Code:	400689
Site Type:	Federal Superfund
Site Type Detailed:	Open Base
Acres:	2500
NPL:	YES
Regulatory Agencies:	SMBRP, RWQCB 8 - Santa Ana, US EPA
Lead Agency:	US EPA
Program Manager:	Stephen Niou
Supervisor:	Eileen Mananian
Division Branch:	Cleanup Cypress
Assembly:	61
Senate:	31
Special Program:	DSMOA
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	DERA
Latitude:	33.89608
Longitude:	-117.2552
APN:	NONE SPECIFIED
Past Use:	AIRCRAFT MAINTENANCE, AIRFIELD OPERATIONS, DEGREASING FACILITY, DRY CLEANING, ENGINE TESTING/REPAIR, FIRE TRAINING AREAS, FUEL - AIRCRAFT STORAGE/ REFUELING, FUEL - VEHICLE STORAGE/ REFUELING, LANDFILL - DOMESTIC, MACHINE SHOP, OFFICE BUILDING, OIL/WATER SEPARATORS, PAINT/DEPAINT FACILITY
Potential COC:	Lead Polychlorinated biphenyls (PCBs Polynuclear aromatic hydrocarbons (PAHs Tetrachloroethylene (PCE TPH-diesel TPH-JET FUEL 1,1,1-Trichloroethane (TCA Trichloroethylene (TCE Carbon tetrachloride Chloroform

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR RESERVE BASE (Continued)

S104241831

Confirmed COC: 30013-NO 30018-NO Polynuclear aromatic hydrocarbons (PAHs
Tetrachloroethylene (PCE TPH-diesel 1,1,1-Trichloroethane (TCA
Trichloroethylene (TCE Chloroform Carbon tetrachloride TPH-JET FUEL
OTH, SOIL

Potential Description: OTH, SOIL

Alias Name: ALESSANDRO ARMY AIR FIELD
Alias Type: Alternate Name
Alias Name: |
Alias Type: Alternate Name
Alias Name: 110033608665
Alias Type: EPA (FRS #)
Alias Name: DOD100285300
Alias Type: GeoTracker Global ID
Alias Name: T10000005654
Alias Type: GeoTracker Global ID
Alias Name: T10000005916
Alias Type: GeoTracker Global ID
Alias Name: 16985
Alias Type: RB-PCA
Alias Name: 400689
Alias Type: Project Code (Site Code)
Alias Name: 33970004
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Federal Facility Agreement
Completed Date: 06/28/2017
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 08/16/2017
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: PANER
Completed Document Type: Operation and Maintenance Report
Completed Date: 06/17/1996
Comments: O&M Site 33(PANERO): The Site 33 Pump and Treat System (PTS) consists of flow equalization tanks, an oil-water separator, air stripping, thermal oxidation of air stripper off-gas, and granular activated carbon polishing of the air stripper effluent. An internal combustion engine is used to treat vapors recovered by vapor extraction of the pumping wells. The PTS is designed to sustain continuous operation without direct operator control. Periodic surveillance and maintenance will be required to ensure reliable operation and compliance with regulatory requirements. Process performing monitoring of the vapor and water treatment systems will be conducted. This includes on-site sampling and tests of the influent streams, intermittent treatment points and the effluent streams to verify satisfactory operation, and timely change-out of the GAC treatment units to maintain regulatory discharge limits and cost effectiveness. Preventive equipment maintenance tasks, in accordance with the manufacturers recommend -ations, will be performed along with routine maintenance and record keeping activities. Normally, one field technician will be required to perform the routine O&M tasks,

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
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MARCH AIR RESERVE BASE (Continued)

S104241831

including well inspections and maintenance, pump overhauls, process instrument calibrations, equipment repairs and replacements. The manufacturer shall have local service representatives capable of responding to equipment failures or problems within 3 hours of initial contact.

Completed Area Name: OU 1
Completed Sub Area Name: SIT31
Completed Document Type: Operation and Maintenance Plan
Completed Date: 05/08/1996
Comments: Not reported

Completed Area Name: OU 1
Completed Sub Area Name: SIT31
Completed Document Type: * Remedial or Removal Design
Completed Date: 05/08/1996
Comments: DES - SITE 31: This is part of OU #1. The practice of discharging solvents on the ground reportedly occurred from about the mid-1950s to the mid-1970s. In addition, floor drains from maintenance shops may have leaked solvents to the subsurface. The primary contaminants of concern at Site 31 are Trichloro-ethylene (PCE), and traces of other chlorinated solvents. The contaminants are contained within the soils and the groundwater and will require remediation to prevent further contamination of the OU#1 groundwater. Extensive studies to identify source locations, determine site characteristics and evaluate cost effective remedial alternatives have been performed. A dual phase extraction technology coupled with granular activated carbon treatment of extracted groundwater and soil vapor has been selected based on a pilot scale system shown to be a cost-effective method for remediation of this Site. The treatment system shall discharge treated water that will have a daily average concentration of 0.5 ppb TCE or less, and never will exceed a concentration of 5 ppb TCE. Treated groundwater will be reinjected into the aquifer combined with discharge of excess water to the Heacock Storm drain and/or the base sanitary sewer system, as required. Installation of process equipment, surface piping and electrical facilities is planned for the end of April, and startup of the system July 1996. This remedial action complies with the statutory preference for remedies as specified in the Record of Decision (ROD) for OU#1. O&M SITE 31: The Site 31 dual phase extraction and treatment system is designed to sustain continuous operation without direct operator control. Periodic surveillance and maintenance will be required to ensure reliable operation and compliance with regulatory requirement. Process performing monitoring of the vapor and water treatment systems will be conducted. This includes on-site sampling and tests of the influent streams, intermittent treatment points and the effluent streams to verify satisfactory operation, and timely change-out of the GAC treatment units to maintain regulatory discharge limits and cost effectiveness. Preventive equipment maintenance tasks, in accordance with the manufacturers recommendations, will be performed along with routine maintenance and record keeping activities. It is expected that the carbon change-out frequency will gradually decrease as the soil and groundwater contaminant levels decline with ongoing treatment. Initially the change-outs may occur once every 1-2 months and subsequently may decrease to once or twice a year for the groundwater treatment system. Normally, one field technician will be required to perform

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR RESERVE BASE (Continued)

S104241831

the routine O&M tasks, including wells inspections and maintenance, pump overhauls, process instrument calibrations, equipment repairs and replacements. Status reports along with analytical results and discharge records will be prepared and submitted as required for satisfactory operating control and regulatory compliance requirements. Qualified supervisory personnel will oversee execution of the O&M tasks to minimize costs, and ensure timely and accurate operating reports.

Completed Area Name: OU2
Completed Sub Area Name: SIT11
Completed Document Type: Removal Action Completion Report
Completed Date: 05/01/1996
Comments: RA - SITE 11: Site 11 is part of OU#2. It includes an area designated as the Liquid Fuels Management, Bulk Storage Facility. The leaking fuel line section was between the tank car unloading dock (Fuel Pump Station Building 2202 and Building 2340. These fuel lines transport fuels from the fuel storage tanks to the flight line to enable refueling of aircraft. Leakage of the fuel line was discovered when March AFB personnel noticed a loss in line pressure during an integrity test of a section of the line between the fuel pump station and the flight line. Visual indications of a fuel leak were also observed in and around the concrete vault located adjacent to the fuel pump station. The objective of the Immediate Response Action was to remove and replace the leaking section of the sub-surface JP-8 fuel line. This was accomplished within a very tight schedule (approx. seven days) to prevent the use of outside trucks for delivery of fuels to the aircrafts. The removal action consisted of trenching to expose the sub-surface fuel lines and associated vault area including the demolishing and removal of overlying asphalt and concrete, the removal of a 230 foot of JP-8 fuel line and a 210 foot section of an inactive JP-8 line was also removed, the placement of a new 8 inch steel JP-8 fuel line and a 12 inch steel road crossing sleeve and reconstruction of demolished concrete vault. Approximately, 380 cubic yards of contaminated soil was removed and stockpiled at Site 15 for remediation. Upon getting the new pipe section on-line the general site area was landscaped and restored to the original condition to the extent possible. This included the backfilling maximum dry density of the soil, and the replacement of the overlying asphalt.

Completed Area Name: OU2
Completed Sub Area Name: STE 1
Completed Document Type: Feasibility Study Report
Completed Date: 03/25/1996
Comments: Not reported

Completed Area Name: OU 1
Completed Sub Area Name: STE 9
Completed Document Type: Feasibility Study Report
Completed Date: 03/25/1996
Comments: RIFS - SITE 9: The removal of the OW/S will eliminate a potential source area for groundwater contamination in the future. This Site Specific Action Memorandum was prepared to evaluate and identify the most effective remedial alternative to remove the OW/S and dispose of the expected 100 cubic yards of oil contaminated soil. On-base consolidation with Site 6 lined waste cell provides the maximum level

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR RESERVE BASE (Continued)

S104241831

of regulatory compliance within the lowest cost level and is compatible with land use. Site 9 is recommended for military reuse under the Joint Power Authority preferred alternative. Site 9 vicinity may potentially have Beechy's Squirrel and Burrowing Owl, but excavation activities will be focused on the OW/S. No potential wetlands are located in Site 9 vicinity. ' RIFS - SITE 1: Soil sampling at Site 1 detected polycyclic aromatic hydrocarbons (PAHs) as contaminant of concerns. Ground- water samples detected metals; however, only manganese was detected above US Environmental Protection Agency Preliminary remediation Goals (PRGs). Soil from Site 1 was excavated during construction of the Air National Guard Alert Facility. Approximately, 3,100 cubic yards of PAH contaminated soil has been stockpiled on-site under plastic sheeting pending disposal. The risk assessment for Site 1 determined that no human health risk was present at the site because the exposure pathway was limited. Now that the soil has been disturbed, the soil stockpiled at Site 1 needs to be removed to preclude further exposure. This Site Specific Action Memorandum was prepared to evaluate and identify the most effective disposal alternative. The site is planned for Air National Guard use and will remain in military use. Site 1 is not a habitat for any endangered species and no perennial wetlands are located in its vicinity.

Completed Area Name: OU 1
Completed Sub Area Name: STE10
Completed Document Type: * Remedial or Removal Design
Completed Date: 02/02/1996
Comments: Not reported

Completed Area Name: OU 1
Completed Sub Area Name: STE15
Completed Document Type: * Remedial or Removal Design
Completed Date: 02/02/1996
Comments: DES - SITE 10: This is part of OU#1. The drainage channel, which was installed prior to 1940, has reportedly received various oils , hydraulic fluids, diesel fuel, jet fuel, waste paints, paint strippers, paint thinners, battery acids and solvents. The drainage channel is concretelined (since the 1960s) up to the eastern boundary of the base where it discharges to the Perris Valley storm drain. The objectives of this remediation of contaminated sediment from Site 10, pursuant to the cleanup criteria set forth in the final OU#1 Record of Decision (ROD). Approximately 15 cubic yards of sediment material will be removed from the concrete-lined channel and transported off-site to Candelaria Environmental for bioremediation. ' DES - SITE 15: This is also part of OU#1. The Fire Training Area (FTA), Site 15, was developed in 1978 and was reportedly constructed by placing an underdrain system and gravel over a clay liner. Firefighting water, solutions of Aqueous Film Forming Form (AFFF) and residual fuel used during training exercises were drained to a formerly unlined water holding pond located adjacent to the FTA. Approximately 6000 gallons per year of contaminated JP-4 have been burned in training exercises since the facility was constructed in 1978. The primary contaminants of concern are Benzene, Naphthalene, 2-Methylnaphthalene and Phenanthrene. The remedial actions for Site 15 will require the handling of two streams; the evaporation pond water and soils contaminated with PAHs. Approximately 4,500 gallons of water, from the evaporation pond, will be transferred to a base sewer inlet

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR RESERVE BASE (Continued)

S104241831

located one-half mile from Site 15 using a 5,000-gallon vacuum truck supplied by Environmental Dynamic. Approximately 8,950 tons of contaminated soil will be transported off-site to Candelaria Environmental for bioremediation. The objectives of this remedial action were set forth in the final OU# 1 Record of Decision (ROD).

Completed Area Name: OU-3
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Plan
Completed Date: 09/14/1995
Comments: RAP OU#3: This ROD/RAP presents the remedial alternative selected to remediate soil and groundwater that is contaminated with petroleum hydrocarbons and solvent beneath Operable Unit #3 (OU#3). OU#3, which encompasses the former Panero Fueling facility, is located on the aircraft apron, between the flightline shops and the taxiway. The major components of the selected alternative include: 1. Institutional control, including fencing, site use restriction, and deed restriction of groundwater use. 2. Quarterly groundwater monitoring. 3. Continued free product recovery. 4. Soil remediation using soil vapor extracion and bioventing. 5. Groundwater source remediation using surfactant and in-situ bioremediation. 6. Groundwater dissolved plume treatment using groundwater pump and treat (Air Strippers) system. The remedy is estimated to achieve cleanup goals within 30 years. Approximate cost: \$22,251,655.00

Completed Area Name: OU 1
Completed Sub Area Name: STE34
Completed Document Type: Removal Action Completion Report
Completed Date: 07/11/1996
Comments: Not reported

Completed Area Name: OU 1
Completed Sub Area Name: STE34
Completed Document Type: Operation and Maintenance Report
Completed Date: 07/11/1996
Comments: O&M - SITE 34: An area near the oil/water separator, which was improperly installed and is adjacent to Site 34, has been identified as a potential source of the mainly hydrocarbon contamination further to the northwest. In March 1994 the AF installed and began the operation of a bioventing treatability study project at Site 34 to determine the effectiveness of bioventing at this site. This study was completed in July 1996 and successfully demonstrated the effectiveness of bioventing for this site. The Operation and Maintenance (O&M) phase will consist of monthly checks of the bioventing system, completion of operation/maintenance/repair manuals and respiration tests every 6 months of operation. In addition, oxygen, carbon dioxide and hydrocarbon concentrations from the vapor monitoring wells will be monitored on a monthly basis. The O&M of the bioventing system will be performed for a duration of one year after installation and start-up. Data collected from the monthly monitoring is evaluated and used as the basis for adjusting the air flow into the subsurface. Preventive equipment maintenance tasks, in accordance with the manufacturers recommendations, will be performed along with routing maintenance and record keeping activities. Status reports will be prepared and submitted as required for satisfactory operating control and regulatory compliance requirements. Qualified supervisory personnel will oversee execution of the O&M tasks to minimize costs,

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR RESERVE BASE (Continued)

S104241831

and ensure timely and accurate operating reports. ' DES -SITE 34: The design of the bioventing system was included in the treatability study document. A Remedial Action Workplan was submitted in July 1996 that considered bioventing the final remedial alternative at Site 34. This is consistent with the Operable Unit #1 (OU#1) signed Record of Decision (ROD). The primary advantage in using bioventing is the low cost to install, operate, maintain and monitor the system as compared to other remediation technology. The treatability study has demonstrated that the bioventing at Site 34 of the hydrocarbon contamination is cost effective, has minimal environmental impact and will achieve the cleanup standards set in the OU#1 ROD. Bioventing is the process of delivering oxygen by forced air into the soil to stimulate or enhance the natural biodegradation process of petroleum hydrocarbon contaminants within the soil. The existing bioventing system at Site 34 was designed with excess air injection capacity, therefore, it may be possible to tap into this system for use at the adjacent sites. ' RA - SITE 34: Soil contaminants detected during the RI/FS conducted at Site 34 include VOCs, SVOCs, Pesticides/PCBs, Oil and Grease, JP-4 and Diesel Fuel. The Air Force (AF) will characterize the newly discovered contamination at Site 34 using a soil gas survey which will provide potential locations for soil borings based on contaminant concentrations. The AF installed and successfully demonstrated the effectiveness of a bioventing system at this Site. The objectives of this remedial action is to determine the extent of the new hydrocarbon contamination at the oil/water separator, to evaluate and select the best approach to biovent the site, and to monitor that the bioremedial approach is achieving groundwater protection standards as established in the OU#1 Record of Decision (ROD).

Completed Area Name: OU-3
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Plan
Completed Date: 11/13/1996
Comments: RAP - OU#3(SITE 33): This Decision Document (DD), which is equivalent to a Remedial Action Plan (RAP), presents the selected Removal Action upgrade for March Air Reserve Base (MARB) Operable Unit #3 pump and Treat System. This removal action upgrade is selected to increase jet fuel (JP-4) free product recovery rates at OU#3. The State of California, both DTSC and the Santa Ana Regional Water Quality Control Board (RWQCB), signed a Record of Decision (ROD) for OU#3 in September 1995. However, the US Environmental Protection Agency(USEPA) and the Air Force Reserves (AFRs) declined to sign the ROD at the last minute; the USEPA invoking the petroleum exclusion section of CERCLA and the AFRs stating that the preferred alternative in the ROD is too expensive. Therefore, after considerable efforts, all parties agreed to expand and upgrade the existing free product recovery system as an interim remedy for the JP-4 free product beneath OU#3. This action addresses only JP-4 free product and does not address all contamination remaining at the site. the DD went through the RAP requirement of public review and comment.

Completed Area Name: PCAS
Completed Sub Area Name: STE18
Completed Document Type: Removal Action Completion Report
Completed Date: 04/07/1999
Comments: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR RESERVE BASE (Continued)

S104241831

Completed Area Name: OU2
Completed Sub Area Name: STE39
Completed Document Type: Removal Action Completion Report
Completed Date: 03/12/1999
Comments: Not reported

Completed Area Name: OU2
Completed Sub Area Name: STE39
Completed Document Type: * Remedial or Removal Design
Completed Date: 02/23/1999
Comments: Not reported

Completed Area Name: OU2
Completed Sub Area Name: STE36
Completed Document Type: Operation and Maintenance Report
Completed Date: 02/07/2000
Comments: Site 36 - OM: A dual phase extraction system, which combines soil vapor extraction with groundwater extraction, is in operation at site 36. This document contains the Operation and Maintenance (O&M) procedures relating to operation and maintenance activities to be conducted at Site 36.

Completed Area Name: OU2
Completed Sub Area Name: STE36
Completed Document Type: Removal Action Completion Report
Completed Date: 05/26/1999
Comments: Not reported

Completed Area Name: PCAS
Completed Sub Area Name: STE18
Completed Document Type: * Remedial or Removal Design
Completed Date: 07/21/1998
Comments: Not reported

Completed Area Name: OU2
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 08/26/2005
Comments: Although there are unresolved issues, DTSC agrees the finalization of the work plan and leaves comments on fate and transport of VOCs and on off-base migration of VOC plumes to be discussed/disputed when the RI report becomes available.

Completed Area Name: OU 1
Completed Sub Area Name: EGETS
Completed Document Type: Operation and Maintenance Report
Completed Date: 10/04/2006
Comments: The 1st Quarter 2006 OU1 Process Monitoring report is finalized

Completed Area Name: OU 1
Completed Sub Area Name: EGETS
Completed Document Type: Operation and Maintenance Report
Completed Date: 12/27/2007
Comments: As a secondary document, no comment letter is required.

Completed Area Name: PCAS
Completed Sub Area Name: SITE2

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR RESERVE BASE (Continued)

S104241831

Completed Document Type: Operation and Maintenance Report
Completed Date: 02/05/2007
Comments: routine monitoring report

Completed Area Name: PCAS
Completed Sub Area Name: STE18
Completed Document Type: Operation and Maintenance Report
Completed Date: 02/05/2007
Comments: routine monitoring report

Completed Area Name: PCAS
Completed Sub Area Name: STE27
Completed Document Type: Operation and Maintenance Report
Completed Date: 02/05/2007
Comments: routine monitoring report

Completed Area Name: PCAS
Completed Sub Area Name: STE33
Completed Document Type: Operation and Maintenance Report
Completed Date: 02/05/2007
Comments: Routine monitoring report reviewed by RWQCB

Completed Area Name: OU2
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Plan
Completed Date: 09/29/2005
Comments: DTSC has concurred with the OU2A ROD of March Air Reserve Base. The OU2A ROD addresses Sites 1, 11, 37, and 39. The key provisions of this ROD include institutional controls for Sites 1 and 11 where residual PAHs exist in the soil that are incompatible with unrestricted land use. The Air Force agreed to incorporate institutional control provisions into the base master plan. In case of base closure, the AF will require the purchasers to enter into State land Use Covenants with DTSC as a condition of land transfer. Sites 37 and 39 require no further actions.

Completed Area Name: OU 1
Completed Sub Area Name: STE34
Completed Document Type: * Remedial or Removal Design
Completed Date: 07/11/1996
Comments: Not reported

Completed Area Name: PCAS
Completed Sub Area Name: STE33
Completed Document Type: * Remedial or Removal Design
Completed Date: 07/08/1996
Comments: Not reported

Completed Area Name: OU 1
Completed Sub Area Name: Not reported
Completed Document Type: Application
Completed Date: 10/30/2007
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: 5 Year Review Reports

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR RESERVE BASE (Continued)

S104241831

Completed Date: 09/02/2009
Comments: 5 year review report accepted

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/08/2010
Comments: The report may be finalized

Completed Area Name: OU 1
Completed Sub Area Name: EGETS
Completed Document Type: Operations and Maintenance Plan Amendment
Completed Date: 01/06/2011
Comments: DTSC sent a no-comment letter.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/19/2011
Comments: Secondary document, no approval required.

Completed Area Name: OU2
Completed Sub Area Name: SITE8
Completed Document Type: Pilot/Treatability Study Report
Completed Date: 03/29/2012
Comments: Data to be used in Sites 8 & 36 FFS

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/08/2014
Comments: secondary document for groundwater monitoring data

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 08/01/2004
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 08/01/2003
Comments: Not reported

Completed Area Name: OU 1
Completed Sub Area Name: Not reported
Completed Document Type: Record of Decision w/ESD
Completed Date: 01/29/2014
Comments: The remedy for site soil has been changed to excavation and disposal

Completed Area Name: OU 1
Completed Sub Area Name: FT29
Completed Document Type: Remedial Investigation Report
Completed Date: 08/20/2013
Comments: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR RESERVE BASE (Continued)

S104241831

Completed Area Name: OU 1
Completed Sub Area Name: Not reported
Completed Document Type: Operation and Maintenance Plan
Completed Date: 08/19/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Plan
Completed Date: 08/19/2013
Comments: Not reported

Completed Area Name: * BASEWIDE
Completed Sub Area Name: Not reported
Completed Document Type: Quality Assurance Workplan
Completed Date: 08/08/2013
Comments: Accepted on Aug 8, 2013

Completed Area Name: * BASEWIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operation and Maintenance Report
Completed Date: 07/16/2013
Comments: Not reported

Completed Area Name: * BASEWIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/18/2013
Comments: Not reported

Completed Area Name: OU 5
Completed Sub Area Name: Site 49
Completed Document Type: Monitoring Report
Completed Date: 08/21/2014
Comments: Not reported

Completed Area Name: OU 5
Completed Sub Area Name: Site 49
Completed Document Type: Monitoring Report
Completed Date: 08/05/2015
Comments: Not reported

Completed Area Name: OU 5
Completed Sub Area Name: Site 49
Completed Document Type: Monitoring Report
Completed Date: 04/27/2017
Comments: Not reported

Completed Area Name: OU 5
Completed Sub Area Name: Site 49
Completed Document Type: Record of Decision
Completed Date: 05/30/2019
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction Monitoring Report

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR RESERVE BASE (Continued)

S104241831

Completed Date: 03/12/2014
Comments: Not reported

Completed Area Name: OU 5
Completed Sub Area Name: Site 49
Completed Document Type: Site Characterization Workplan
Completed Date: 01/06/2016
Comments: Not reported

Completed Area Name: OU 1
Completed Sub Area Name: EGETS
Completed Document Type: Operation and Maintenance Report
Completed Date: 06/10/2015
Comments: Not reported

Completed Area Name: OU2
Completed Sub Area Name: SITE8
Completed Document Type: Pilot Study/Treatability Workplan
Completed Date: 11/12/2015
Comments: Not reported

Completed Area Name: OU 5
Completed Sub Area Name: Site 49
Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 09/21/2017
Comments: Not reported

Completed Area Name: OU 1
Completed Sub Area Name: SIT31
Completed Document Type: Record of Decision
Completed Date: 05/30/2019
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Record of Decision - Amendment
Completed Date: 06/22/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment Work Plan
Completed Date: 11/10/2016
Comments: Not reported

Completed Area Name: OU 1
Completed Sub Area Name: FT29
Completed Document Type: Remedial Investigation Report
Completed Date: 07/13/2017
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 08/03/2017
Comments: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR RESERVE BASE (Continued)

S104241831

Completed Area Name: OU 1
Completed Sub Area Name: EGETS
Completed Document Type: Quality Assurance Workplan
Completed Date: 01/03/2018
Comments: Not reported

Completed Area Name: OU2
Completed Sub Area Name: STE 1
Completed Document Type: Remedial Action Completion Report
Completed Date: 04/24/2018
Comments: Not reported

Completed Area Name: OU 1
Completed Sub Area Name: FT29
Completed Document Type: Remedial Action Completion Report
Completed Date: 04/23/2018
Comments: Not reported

Completed Area Name: OU 5
Completed Sub Area Name: Site 49
Completed Document Type: Proposed Plan
Completed Date: 07/05/2018
Comments: Not reported

Completed Area Name: OU 1
Completed Sub Area Name: STE34
Completed Document Type: Proposed Plan
Completed Date: 06/07/2018
Comments: Not reported

Completed Area Name: * BASEWIDE
Completed Sub Area Name: Not reported
Completed Document Type: 5 Year Review Reports
Completed Date: 11/27/2019
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Workplan
Completed Date: 02/15/2018
Comments: Not reported

Completed Area Name: OU 5
Completed Sub Area Name: Site 49
Completed Document Type: Removal Action Completion Report
Completed Date: 03/30/2021
Comments: Not reported

Completed Area Name: OU 5
Completed Sub Area Name: Site 49
Completed Document Type: Monitoring Report
Completed Date: 08/05/2020
Comments: Not reported

Completed Area Name: OU 5
Completed Sub Area Name: Site 49
Completed Document Type: Monitoring Plan

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR RESERVE BASE (Continued)

S104241831

Completed Date: 03/30/2021
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 07/12/2006
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

Calsite:

Name: March Air Reserve Base
Address: 3,545 ACRES; EAST OF RIVERSIDE
City: RIVERSIDE
Region: GLENDALE
Facility ID: 33970004
Facility Type: OPEN
Type: OPEN MILITARY BASE
Branch: SO
Branch Name: OMF-SOUTHERN CALIF
File Name: Not reported
State Senate District: 07131998
Status: ANNUAL WORKPLAN (AWP) - ACTIVE SITE
Status Name: ANNUAL WORKPLAN - ACTIVE SITE
Lead Agency: ENVIRONMENTAL PROTECTION AGENCY
NPL: Listed
SIC Code: 97
SIC Name: NATIONAL SECURITY/INTERNATIONAL AFFAIRS
Access: Not reported
Cortese: Not reported
Hazardous Ranking Score: Not reported
Date Site Hazard Ranked: Not reported
Groundwater Contamination: Confirmed
Staff Member Responsible for Site: SNIOW
Supervisor Responsible for Site: Not reported
Region Water Control Board: SA
Region Water Control Board Name: SANTA ANA
Lat/Long Direction: Not reported
Lat/Long (dms): 0 0 0 / 0 0 0
Lat/long Method: Not reported
Lat/Long Description: Not reported
State Assembly District Code: 62
State Senate District Code: 32
Facility ID: 33970004
Activity: RAP
Activity Name: REMEDIAL ACTION PLAN / RECORD OF DECISION
AWP Code: OU2
Proposed Budget: 0

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR RESERVE BASE (Continued)

S104241831

AWP Completion Date: 12312004
Revised Due Date: 06302006
Comments Date: Not reported
Est Person-Yrs to complete: 0
Estimated Size: Not reported
Request to Delete Activity: Not reported
Activity Status: AWP
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals): 0
Liquids Treated (Gals): 0
Action Included Capping: Not reported
Well Decommissioned: Not reported
Action Included Fencing: Not reported
Removal Action Certification: Not reported
Activity Comments: Not reported
For Commercial Reuse: 0
For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0
Facility ID: 33970004
Activity: DES
Activity Name: DESIGN
AWP Code: STE34
Proposed Budget: 0
AWP Completion Date: 07111996
Revised Due Date: Not reported
Comments Date: 07111996
Est Person-Yrs to complete: 0
Estimated Size: Not reported
Request to Delete Activity: Not reported
Activity Status: AWP
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals): 0
Liquids Treated (Gals): 0
Action Included Capping: Not reported
Well Decommissioned: Not reported
Action Included Fencing: Not reported
Removal Action Certification: Not reported
Activity Comments: Not reported
For Commercial Reuse: 0
For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0
Facility ID: 33970004
Activity: DES
Activity Name: DESIGN
AWP Code: STE33
Proposed Budget: 0
AWP Completion Date: 07081996
Revised Due Date: Not reported
Comments Date: 07081996
Est Person-Yrs to complete: 0
Estimated Size: Not reported
Request to Delete Activity: Not reported
Activity Status: AWP
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals): 0

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR RESERVE BASE (Continued)

S104241831

Liquids Treated (Gals): 0
Action Included Capping: Not reported
Well Decommissioned: Not reported
Action Included Fencing: Not reported
Removal Action Certification: Not reported
Activity Comments: Not reported
For Commercial Reuse: 0
For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0
Facility ID: 33970004
Activity: OM
Activity Name: OPERATION & MAINTENANCE
AWP Code: PANER
Proposed Budget: 0
AWP Completion Date: 06171996
Revised Due Date: Not reported
Comments Date: 06171996
Est Person-Yrs to complete: 0
Estimated Size: Not reported
Request to Delete Activity: Not reported
Activity Status: AWP
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals): 0
Liquids Treated (Gals): 0
Action Included Capping: Not reported
Well Decommissioned: Not reported
Action Included Fencing: Not reported
Removal Action Certification: Not reported
Activity Comments: Not reported
For Commercial Reuse: 0
For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0
Facility ID: 33970004
Activity: OM
Activity Name: OPERATION & MAINTENANCE
AWP Code: SIT31
Proposed Budget: 0
AWP Completion Date: 05081996
Revised Due Date: Not reported
Comments Date: 05081996
Est Person-Yrs to complete: 0
Estimated Size: Not reported
Request to Delete Activity: Not reported
Activity Status: AWP
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals): 0
Liquids Treated (Gals): 0
Action Included Capping: Not reported
Well Decommissioned: Not reported
Action Included Fencing: Not reported
Removal Action Certification: Not reported
Activity Comments: Not reported
For Commercial Reuse: 0
For Industrial Reuse: 0
For Residential Reuse: 0

Map ID
Direction
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Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR RESERVE BASE (Continued)

S104241831

Unknown Type:	0
Facility ID:	33970004
Activity:	DES
Activity Name:	DESIGN
AWP Code:	SIT31
Proposed Budget:	0
AWP Completion Date:	05081996
Revised Due Date:	Not reported
Comments Date:	05081996
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	33970004
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	SIT11
Proposed Budget:	0
AWP Completion Date:	05011996
Revised Due Date:	Not reported
Comments Date:	05011996
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	380
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	CONTAMINATED SOIL REMOVED AND STOCKPILED AT SITE 15 FOR REMEDIATION
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	33970004
Activity:	RIFS
Activity Name:	REMEDIATION INVESTIGATION / FEASIBILITY STUDY
AWP Code:	STE 1
Proposed Budget:	0
AWP Completion Date:	03251996
Revised Due Date:	Not reported
Comments Date:	03251996

Map ID
Direction
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Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR RESERVE BASE (Continued)

S104241831

Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	33970004
Activity:	RIFS
Activity Name:	REMEDIAL INVESTIGATION / FEASIBILITY STUDY
AWP Code:	STE 9
Proposed Budget:	0
AWP Completion Date:	03251996
Revised Due Date:	Not reported
Comments Date:	03251996
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	33970004
Activity:	DES
Activity Name:	DESIGN
AWP Code:	STE10
Proposed Budget:	0
AWP Completion Date:	02021996
Revised Due Date:	Not reported
Comments Date:	02021996
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported

Map ID
Direction
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Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR RESERVE BASE (Continued)

S104241831

Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	33970004
Activity:	DES
Activity Name:	DESIGN
AWP Code:	STE15
Proposed Budget:	0
AWP Completion Date:	02021996
Revised Due Date:	Not reported
Comments Date:	02021996
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	33970004
Activity:	RAP
Activity Name:	REMEDIAL ACTION PLAN / RECORD OF DECISION
AWP Code:	OU-3
Proposed Budget:	0
AWP Completion Date:	09141995
Revised Due Date:	Not reported
Comments Date:	09141995
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	33970004
Activity:	RA

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR RESERVE BASE (Continued)

S104241831

Activity Name: REMOVAL ACTION
AWP Code: STE34
Proposed Budget: 0
AWP Completion Date: 07111996
Revised Due Date: Not reported
Comments Date: 07111996
Est Person-Yrs to complete: 0
Estimated Size: Not reported
Request to Delete Activity: Not reported
Activity Status: AWP
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals): 0
Liquids Treated (Gals): 0
Action Included Capping: Not reported
Well Decommissioned: Not reported
Action Included Fencing: Not reported
Removal Action Certification: Not reported
Activity Comments: Not reported
For Commercial Reuse: 0
For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0
Facility ID: 33970004
Activity: OM
Activity Name: OPERATION & MAINTENANCE
AWP Code: STE34
Proposed Budget: 0
AWP Completion Date: 07111996
Revised Due Date: Not reported
Comments Date: 07111996
Est Person-Yrs to complete: 0
Estimated Size: Not reported
Request to Delete Activity: Not reported
Activity Status: AWP
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals): 0
Liquids Treated (Gals): 0
Action Included Capping: Not reported
Well Decommissioned: Not reported
Action Included Fencing: Not reported
Removal Action Certification: Not reported
Activity Comments: Not reported
For Commercial Reuse: 0
For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0
Facility ID: 33970004
Activity: RAP
Activity Name: REMEDIAL ACTION PLAN / RECORD OF DECISION
AWP Code: OU-3
Proposed Budget: 0
AWP Completion Date: 11131996
Revised Due Date: Not reported
Comments Date: 11131996
Est Person-Yrs to complete: 0
Estimated Size: Not reported
Request to Delete Activity: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR RESERVE BASE (Continued)

S104241831

Activity Status: AWP
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals): 0
Liquids Treated (Gals): 0
Action Included Capping: Not reported
Well Decommissioned: Not reported
Action Included Fencing: Not reported
Removal Action Certification: Not reported
Activity Comments: Not reported
For Commercial Reuse: 0
For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0
Facility ID: 33970004
Activity: RA
Activity Name: REMOVAL ACTION
AWP Code: SITEB
Proposed Budget: 0
AWP Completion Date: 04102000
Revised Due Date: Not reported
Comments Date: 04102000
Est Person-Yrs to complete: 0
Estimated Size: Not reported
Request to Delete Activity: Not reported
Activity Status: AWP
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals): 0
Liquids Treated (Gals): 0
Action Included Capping: Not reported
Well Decommissioned: Not reported
Action Included Fencing: Not reported
Removal Action Certification: Not reported
Activity Comments: Not reported
For Commercial Reuse: 0
For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0
Facility ID: 33970004
Activity: RA
Activity Name: REMOVAL ACTION
AWP Code: SITE8
Proposed Budget: 0
AWP Completion Date: 12312006
Revised Due Date: Not reported
Comments Date: Not reported
Est Person-Yrs to complete: 0
Estimated Size: Not reported
Request to Delete Activity: Not reported
Activity Status: AWP
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals): 0
Liquids Treated (Gals): 0
Action Included Capping: Not reported
Well Decommissioned: Not reported
Action Included Fencing: Not reported
Removal Action Certification: Not reported
Activity Comments: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR RESERVE BASE (Continued)

S104241831

For Commercial Reuse: 0
For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0
Facility ID: 33970004
Activity: RA
Activity Name: REMOVAL ACTION
AWP Code: STE18
Proposed Budget: 0
AWP Completion Date: 04071999
Revised Due Date: Not reported
Comments Date: 04071999
Est Person-Yrs to complete: 0
Estimated Size: Not reported
Request to Delete Activity: Not reported
Activity Status: AWP
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals): 0
Liquids Treated (Gals): 0
Action Included Capping: Not reported
Well Decommissioned: Not reported
Action Included Fencing: Not reported
Removal Action Certification: N
Activity Comments: GROUNDWATER LEVELS ARE DEPRESSED TO EXPOSE CONTAMINATED SATURATED SOIL FOR CLEANUP BY COMBINED SOIL VAPOR EXTRACTION, AND SOIL AERATION/BIO-VENTING. SVE = 137 SCFM

For Commercial Reuse: 0
For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0
Facility ID: 33970004
Activity: OM
Activity Name: OPERATION & MAINTENANCE
AWP Code: SITE8
Proposed Budget: 0
AWP Completion Date: 12312005
Revised Due Date: 06302007
Comments Date: Not reported
Est Person-Yrs to complete: 0
Estimated Size: Not reported
Request to Delete Activity: Not reported
Activity Status: AWP
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals): 0
Liquids Treated (Gals): 0
Action Included Capping: Not reported
Well Decommissioned: Not reported
Action Included Fencing: Not reported
Removal Action Certification: Not reported
Activity Comments: Not reported

For Commercial Reuse: 0
For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0
Facility ID: 33970004
Activity: RA
Activity Name: REMOVAL ACTION

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR RESERVE BASE (Continued)

S104241831

AWP Code:	STE39
Proposed Budget:	0
AWP Completion Date:	03121999
Revised Due Date:	Not reported
Comments Date:	03121999
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	3000
Liquids Treated (Gals):	3000
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	A BIOVENTING (AIR INJECTION) WELL, TWO BIOVENTING MONITORING PROBES, CONVEYANCE PIPING, AN AIR BLOWER, AND MECHANICAL AND ELECTRICAL APPURTENANCES.
For Commercial Reuse:	1
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	33970004
Activity:	DES
Activity Name:	DESIGN
AWP Code:	STE39
Proposed Budget:	0
AWP Completion Date:	02231999
Revised Due Date:	Not reported
Comments Date:	02231999
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	33970004
Activity:	DES
Activity Name:	DESIGN
AWP Code:	SITE8
Proposed Budget:	0
AWP Completion Date:	12312004
Revised Due Date:	12312006
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported

Map ID
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MAP FINDINGS

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MARCH AIR RESERVE BASE (Continued)

S104241831

Request to Delete Activity: Not reported
Activity Status: AWP
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals): 0
Liquids Treated (Gals): 0
Action Included Capping: Not reported
Well Decommissioned: Not reported
Action Included Fencing: Not reported
Removal Action Certification: Not reported
Activity Comments: Not reported
For Commercial Reuse: 0
For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0
Facility ID: 33970004
Activity: OM
Activity Name: OPERATION & MAINTENANCE
AWP Code: STE36
Proposed Budget: 0
AWP Completion Date: 02072000
Revised Due Date: Not reported
Comments Date: 02072000
Est Person-Yrs to complete: 0
Estimated Size: Not reported
Request to Delete Activity: Not reported
Activity Status: AWP
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals): 0
Liquids Treated (Gals): 0
Action Included Capping: Not reported
Well Decommissioned: Not reported
Action Included Fencing: Not reported
Removal Action Certification: Not reported
Activity Comments: Not reported
For Commercial Reuse: 0
For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0
Facility ID: 33970004
Activity: RA
Activity Name: REMOVAL ACTION
AWP Code: STE36
Proposed Budget: 0
AWP Completion Date: 05261999
Revised Due Date: Not reported
Comments Date: 05261999
Est Person-Yrs to complete: 0
Estimated Size: Not reported
Request to Delete Activity: Not reported
Activity Status: AWP
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals): 0
Liquids Treated (Gals): 0
Action Included Capping: Not reported
Well Decommissioned: Not reported
Action Included Fencing: Not reported
Removal Action Certification: N

Map ID
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MARCH AIR RESERVE BASE (Continued)

S104241831

Activity Comments: INSTALLATION OF A GROUNDWATER EXTRACTION AND TREATMENT SYSTEM IN COMBINATION WITH A SYSTEM FOR SOIL VAPOR EXTRACTION(SVE).
For Commercial Reuse: 0
For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0
Facility ID: 33970004
Activity: DES
Activity Name: DESIGN
AWP Code: STE18
Proposed Budget: 0
AWP Completion Date: 07211998
Revised Due Date: Not reported
Comments Date: 07211998
Est Person-Yrs to complete: 0
Estimated Size: Not reported
Request to Delete Activity: Not reported
Activity Status: AWP
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals): 0
Liquids Treated (Gals): 0
Action Included Capping: Not reported
Well Decommissioned: Not reported
Action Included Fencing: Not reported
Removal Action Certification: Not reported
Activity Comments: Not reported
For Commercial Reuse: 0
For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0
Facility ID: 33970004
Activity: CERT
Activity Name: CERTIFICATION
AWP Code: STE33
Proposed Budget: 0
AWP Completion Date: 12312007
Revised Due Date: Not reported
Comments Date: Not reported
Est Person-Yrs to complete: 0
Estimated Size: Not reported
Request to Delete Activity: Not reported
Activity Status: AWP
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals): 0
Liquids Treated (Gals): 0
Action Included Capping: Not reported
Well Decommissioned: Not reported
Action Included Fencing: Not reported
Removal Action Certification: Not reported
Activity Comments: Not reported
For Commercial Reuse: 0
For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0
Facility ID: 33970004
Activity: CERT
Activity Name: CERTIFICATION

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MAP FINDINGS

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Database(s)

EDR ID Number
EPA ID Number

MARCH AIR RESERVE BASE (Continued)

S104241831

AWP Code: STE27
Proposed Budget: 0
AWP Completion Date: 12312006
Revised Due Date: Not reported
Comments Date: Not reported
Est Person-Yrs to complete: 0
Estimated Size: Not reported
Request to Delete Activity: Not reported
Activity Status: AWP
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals): 0
Liquids Treated (Gals): 0
Action Included Capping: Not reported
Well Decommissioned: Not reported
Action Included Fencing: Not reported
Removal Action Certification: Not reported
Activity Comments: Not reported
For Commercial Reuse: 0
For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0
Facility ID: 33970004
Activity: CERT
Activity Name: CERTIFICATION
AWP Code: SITE8
Proposed Budget: 0
AWP Completion Date: 12312006
Revised Due Date: Not reported
Comments Date: Not reported
Est Person-Yrs to complete: 0
Estimated Size: Not reported
Request to Delete Activity: Not reported
Activity Status: AWP
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals): 0
Liquids Treated (Gals): 0
Action Included Capping: Not reported
Well Decommissioned: Not reported
Action Included Fencing: Not reported
Removal Action Certification: Not reported
Activity Comments: Not reported
For Commercial Reuse: 0
For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0
Facility ID: 33970004
Activity: CERT
Activity Name: CERTIFICATION
AWP Code: SITE2
Proposed Budget: 0
AWP Completion Date: 12312006
Revised Due Date: Not reported
Comments Date: Not reported
Est Person-Yrs to complete: 0
Estimated Size: Not reported
Request to Delete Activity: Not reported
Activity Status: AWP

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MARCH AIR RESERVE BASE (Continued)

S104241831

Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	33970004
Activity:	CERT
Activity Name:	CERTIFICATION
AWP Code:	B2307
Proposed Budget:	0
AWP Completion Date:	06302007
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	33970004
Activity:	CERT
Activity Name:	CERTIFICATION
AWP Code:	STE18
Proposed Budget:	0
AWP Completion Date:	12312007
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0

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MARCH AIR RESERVE BASE (Continued)

S104241831

For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0
Alternate Address: 2374 ACRES; EAST OF RIVERSIDE
Alternate City,St,Zip: RIVERSIDE, CA 92518
Alternate Address: 2990 GRAEBER STREET
Alternate City,St,Zip: MORENO VALLEY, CA 92518
Alternate Address: 3,545 ACRES; EAST OF RIVERSIDE
Alternate City,St,Zip: RIVERSIDE, CA 92518
Background Info: This facility is an active U.S. Air Reserve Base part of the the Air Mobility Command (AMC). The Base's mission is to maintain an effective air to air refueling operation capability. Operations at the Base include: maintenance and repair of air- craft, vehicles and equipment; operation of a photo lab and printing plant; and fuel management. March AFB has historically generated the following hazardous wastes: petroleum, oil and lubricants (POLs), chlorinated and nonchlorinated solvents, corrosives, antifreeze, paint and paint strippers, carbon removers and photographic chemicals. Past activities which have resulted in contamination at the base include burning waste in fire fighting training exercises and discharges to sanitary sewers and storm drains. Groundwater has been contaminated with trichloroethylene (TCE). Groundwater is the primary source of potable water in this area. There is a potential for contamination of soils and surface water. This base was included on the NPL in 1989. A Federal Facilities Agreement (FFA) was signed between EPA, DHS, the Santa Ana RWQCB and the Air Force in September 1990, to provide for the remediation of the Base. The Base has been divided into three groups, or operable units, which are similar to the State's removal actions, for remediation. These groups are: 1) groundwater and soil for areas along the east boundary and off base plume, 2) groundwater and soil for areas not included in units 1 & 3, and 3) groundwater and soil in area 33.
Comments Date: 02021996
Comments: the final OU#1 Record of Decision (ROD). Approximately 15 cubic yards of sediment material will be removed from the concrete-lined channel and transported off-site to Candelaria Environmental for bioremediation. DES - SITE 15: This is also part of OU#1. The Comments Date: 07241998
Comments: DES - SITE18: The remediation technology for Site 18 is based on depressing the groundwater levels to expose contaminated saturated soils for cleanup by combined soil vapor extraction, (Fuel Pump Station Building 2202 and Building 2340. These fuel lines transport fuels from the fuel storage tanks to the flight line to enable refueling of aircraft. Leakage of the fuel line was five extraction wells, 2) Constructing a small concrete pad to support process equipment. 3) Installing groundwater and vapor

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MARCH AIR RESERVE BASE (Continued)

S104241831

Comments Date: 06011999
Comments: conveyance piping and other necessary equipment to convey soil
Comments Date: 01311996
Comments: RIFS - SITE L: This EE/CA has been prepared to address a removal
Comments Date: 01311996
Comments: action proposed for Site L. The swimming pool was converted to a
Comments Date: 01311996
Comments: waste disposal area for various base wastes including wastes oils
Comments Date: 01311996
Comments: , solvents, asbestos-containing material, and polychlorinated
Comments Date: 01311996
Comments: biphenyls (PCBs). The primary sources of contamination are the
Comments Date: 01311996
Comments: drums, transformers, or other bulk containers which may have been
Comments Date: 01311996
Comments: disposed of into the former swimming pool, the secondary source
Comments Date: 01311996
Comments: of contamination is soil or debris saturated with or containing
Comments Date: 01311996
Comments: high concentrations of contaminants in the immediate areas
Comments Date: 01311996
Comments: surrounding the primary source, and the concrete containment of
Comments Date: 01311996
Comments: the swimming pool area is also considered as a possible secondary
Comments Date: 01311996
Comments: source. The actual type and quantity of wastes in the pool are
Comments Date: 01311996
Comments: unknown at this time. If the wastes are not currently adequately
Comments Date: 01311996
Comments: contained, there is a likelihood that both the subsurface soils
Comments Date: 01311996
Comments: and/or groundwater may continue to be impacted by the wastes. Due
Comments Date: 01311996
Comments: to the variety of wastes which may be encountered and the
Comments Date: 01311996
Comments: differences in treating or disposing of those wastes, a
Comments Date: 01311996
Comments: combination of alternatives is proposed.
Comments Date: 02021996
Comments: DES - SITE 10: This is part of OU#1. The drainage channel, which
Comments Date: 02021996
Comments: was installed prior to 1940, has reportedly received various oils
Comments Date: 02021996
Comments: , hydraulic fluids, diesel fuel, jet fuel, waste paints, paint s
Comments Date: 02021996
Comments: trippers, paint thinners, battery acids and solvents. The draina
Comments Date: 02021996
Comments: ge channel is concretelined (since the 1960s) up to the eastern b
Comments Date: 02021996
Comments: oundary of the base where it discharges to the Perris Valley stor
Comments Date: 02021996
Comments: m drain. The objectives of this remediation of contaminated sedi
Comments Date: 02021996
Comments: ment from Site 10, pursuant to the cleanup criteria set forth in
Comments Date: 02021996
Comments: Fire Training Area (FTA), Site 15, was developed in 1978 and was
Comments Date: 02021996

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MARCH AIR RESERVE BASE (Continued)

S104241831

Comments: reportedly constructed by placing an underdrain system and grave
Comments Date: 02021996
Comments: l over a clay liner. Firefighting water, solutions of Aqueous Fill
Comments Date: 02021996
Comments: m Forming Form (AFFF) and residual fuel used during training exer
Comments Date: 02021996
Comments: cises were drained to a formerly unlined water holding pond locate
Comments Date: 02021996
Comments: d adjacent to the FTA. Approximately 6000 gallons per year of co
Comments Date: 02021996
Comments: ntaminated JP-4 have been burned in training exercises since the
Comments Date: 02021996
Comments: facility was constructed in 1978. The primary contaminants of co
Comments Date: 02021996
Comments: ncern are Benzene, Naphthalene, 2-Methylnaphthalene and Phenanthr
Comments Date: 02021996
Comments: ene. The remedial actions for Site 15 will require the handling
Comments Date: 02021996
Comments: of two streams; the evaporation pond water and soils contaminated
Comments Date: 02021996
Comments: with PAHs. Approximately 4,500 gallons of water, from the evapo
Comments Date: 02021996
Comments: ration pond, will be transferred to a base sewer inlet located on
Comments Date: 02021996
Comments: e-half mile from Site 15 using a 5,000-gallon vacuum truck suppli
Comments Date: 02021996
Comments: ed by Environmental Dynamic. Approximately 8,950 tons of contami
Comments Date: 02021996
Comments: nated soil will be transported off-site to Candelaria Environment
Comments Date: 02021996
Comments: al for bioremediation. The objectives of this remedial action we
Comments Date: 02021996
Comments: re set forth in the final OU# 1 Record of Decision (ROD).
Comments Date: 02072000
Comments: to be conducted at Site 36.
Comments Date: 02072000
Comments: Site 36 - OM: A dual phase extraction system, which combines soi
Comments Date: 02072000
Comments: l vapor extraction with groundwater extraction, is in operation a
Comments Date: 02072000
Comments: t site 36. This document contains the Operation and Maintenance
Comments Date: 02072000
Comments: (O&M) procedures relating to operation and maintenance activities
Comments Date: 02241999
Comments: DES - Site 39: The remedial design objective for Site 39 is to
Comments Date: 02241999
Comments: reduce the contaminant concentrations in the subsurface soil and
Comments Date: 02241999
Comments: prevent further degradation of groundwater through contaminant
Comments Date: 02241999
Comments: migration. The remedial system will include the installation of
Comments Date: 02241999
Comments: a soil bioventing system. The system will be comprised of a
Comments Date: 02241999
Comments: bioventing (air injection) well, two bioventing monitoring
Comments Date: 02241999
Comments: proves, conveyance piping, an air blower, and mechanical and

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MARCH AIR RESERVE BASE (Continued)

S104241831

Comments Date: 02241999
Comments: mechanical and electrical appurtenances. The estimated remedial
Comments Date: 02241999
Comments: time is 2 years and the volume of soil to be treated is approx.
Comments Date: 02241999
Comments: 3000 cubic yards.
Comments Date: 03251996
Comments: RIFS - SITE 9: The removal of the OW/S will eliminate a potential
Comments Date: 03251996
Comments: source area for groundwater contamination in the future. This S
Comments Date: 03251996
Comments: ite Specific Action Memorandum was prepared to evaluate and ident
Comments Date: 03251996
Comments: ify the most effective remedial alternative to remove the OW/S an
Comments Date: 03251996
Comments: d dispose of the expected 100 cubic yards of oil contaminated soi
Comments Date: 03251996
Comments: l. On-base consolidation with Site 6 lined waste cell provides t
Comments Date: 03251996
Comments: he maximum level of regulatory compliance within the lowest cost
Comments Date: 03251996
Comments: level and is compatible with land use. Site 9 is recommended for
Comments Date: 03251996
Comments: military reuse under the Joint Power Authority preferred alterna
Comments Date: 03251996
Comments: tive. Site 9 vicinity may potentially have Beechy's Squirrel and
Comments Date: 03251996
Comments: Burrowing Owl, but excavation activities will be focused on the
Comments Date: 03251996
Comments: OW/S. No potential wetlands are located in Site 9 vicinity. RIF
Comments Date: 03251996
Comments: S - SITE 1: Soil sampling at Site 1 detected polycyclic aromatic
Comments Date: 03251996
Comments: hydrocarbons (PAHs) as contaminant of concerns. Ground- water sam
Comments Date: 03251996
Comments: ples detected metals; however, only manganese was detected above
Comments Date: 03251996
Comments: US Environmental Protection Agency Preliminary remediation Goals
Comments Date: 03251996
Comments: (PRGs). Soil from Site 1 was excavated during construction of th
Comments Date: 03251996
Comments: e Air National Guard Alert Facility. Approximately, 3,100 cubic y
Comments Date: 03251996
Comments: ards of PAH contaminated soil has been stockpiled on-site under p
Comments Date: 03251996
Comments: lastic sheeting pending disposal. The risk assessment for Site 1
Comments Date: 03251996
Comments: determined that no human health risk was present at the site beca
Comments Date: 03251996
Comments: use the exposure pathway was limited. Now that the soil has been
Comments Date: 03251996
Comments: disturbed, the soil stockpiled at Site 1 needs to be removed to p
Comments Date: 03251996
Comments: reclude further exposure. This Site Specific Action Memorandum w
Comments Date: 03251996
Comments: as prepared to evaluate and identify the most effective disposal
Comments Date: 03251996

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MARCH AIR RESERVE BASE (Continued)

S104241831

Comments: alternative. The site is planned for Air National Guard use and w
Comments Date: 03251996
Comments: ill remain in military use. Site 1 is not a habitat for any enda
Comments Date: 03251996
Comments: ngered species and no perennial wetlands are located in its vicin
Comments Date: 03251996
Comments: ity.
Comments Date: 04081999
Comments: RA - SITE 18: The construction of the remedial action for Site 18
Comments Date: 04081999
Comments: was completed on February 23, 1999 and the system started on
Comments Date: 04081999
Comments: Friday 26, 1999. The remediation technology for Site 18 is based
Comments Date: 04081999
Comments: on depressing the groundwater levels to expose contaminated
Comments Date: 04081999
Comments: saturated soils for cleanup by combined soil vapor extraction, and
Comments Date: 04081999
Comments: soil aeration/bioventing, free product removal by vaporization
Comments Date: 04081999
Comments: and phase separation as necessary, and dissolved through the
Comments Date: 04081999
Comments: groundwater pump and treat and by natural attenuation/biochemical
Comments Date: 04081999
Comments: degradation mechanisms. The extracted groundwater is pre-treated
Comments Date: 04081999
Comments: to remove any free product before transfer by pipeline to the Site
Comments Date: 04081999
Comments: 31 treatment facility for treatment by granular activated carbon.
Comments Date: 04081999
Comments: Any free product is collected via skimmer pump and contained for
Comments Date: 04081999
Comments: disposal. A soil vapor extraction and treatment system (thermal
Comments Date: 04081999
Comments: oxidizer) unit was installed at site 18 to treat the recovered
Comments Date: 04081999
Comments: hydrocarbon vapors locally, before discharging to the atmosphere.
Comments Date: 05011996
Comments: RA - SITE 11: Site 11 is part of OU#2. It includes an area design
Comments Date: 05011996
Comments: ated as the Liquid Fuels Management, Bulk Storage Facility. The l
Comments Date: 05011996
Comments: eaking fuel line section was between the tank car unloading dock
Comments Date: 06011999
Comments: vapor and groundwater to the treatment pad. 4)Installing process
Comments Date: 06011999
Comments: equipment for treating contaminated soil vapor and groundwater.
Comments Date: 06011999
Comments: 5) Performing system startup including sampling of vapor and
Comments Date: 06011999
Comments: groundwater, and system optimization.
Comments Date: 06171996
Comments: O&M Site 33(PANERO): The Site 33 Pump and Treat System (PTS) cons
Comments Date: 06171996
Comments: ists of flow equalization tanks, an oil-water separator, air stri
Comments Date: 06171996
Comments: pping, thermal oxidation of air stripper off-gas, and granular ac

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EDR ID Number
EPA ID Number

MARCH AIR RESERVE BASE (Continued)

S104241831

Comments Date: 06171996
Comments: tivated carbon polishing of the air stripper effluent. An interna
Comments Date: 06171996
Comments: l combustion engine is used to treat vapors recovered by vapor ex
Comments Date: 06171996
Comments: traction of the pumping wells. The PTS is designed to sustain co
Comments Date: 06171996
Comments: ntinuous operation without direct operator control. Periodic surv
Comments Date: 06171996
Comments: eillance and maintenance will be required to ensure reliable oper
Comments Date: 06171996
Comments: ation and compliance with regulatory requirements. Process perfor
Comments Date: 06171996
Comments: ming monitoring of the vapor and water treatment systems will be
Comments Date: 06171996
Comments: conducted. This includes on-site sampling and tests of the influ
Comments Date: 06171996
Comments: ent streams, intermittent treatment points and the effluent strea
Comments Date: 06171996
Comments: ms to verify satisfactory operation, and timely change-out of the
Comments Date: 06171996
Comments: GAC treatment units to maintain regulatory discharge limits and
Comments Date: 06171996
Comments: cost effectiveness. Preventive equipment maintenance tasks, in a
Comments Date: 06171996
Comments: ccordance with the manufacturers recommend -ations, will be perfo
Comments Date: 06171996
Comments: rmed along with routine maintenance and record keeping activities
Comments Date: 06171996
Comments: . Normally, one field technician will be required to perform the
Comments Date: 06171996
Comments: routine O&M tasks, including well inspections and maintenance, p
Comments Date: 06171996
Comments: ump overhauls, process instrument calibrations, equipment repairs
Comments Date: 06171996
Comments: and replacements. The manufacturer shall have local service rep
Comments Date: 06171996
Comments: resentatives capable of responding to equipment failures or probl
Comments Date: 06171996
Comments: ems within 3 hours of initial contact.
Comments Date: 07111996
Comments: O&M - SITE 34: An area near the oil/water separator, which was im
Comments Date: 07111996
Comments: properly installed and is adjacent to Site 34, has been identifie
Comments Date: 07111996
Comments: d as a potential source of the mainly hydrocarbon contamination f
Comments Date: 07111996
Comments: urther to the northwest. In March 1994 the AF installed and bega
Comments Date: 07111996
Comments: n the operation of a bioventing treatability study project at Sit
Comments Date: 07111996
Comments: e 34 to determine the effectiveness of bioventing at this site.
Comments Date: 07111996
Comments: This study was completed in July 1996 and successfully demonstrat
Comments Date: 07111996
Comments: ed the effectiveness of bioventing for this site. The Operation a
Comments Date: 07111996

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EPA ID Number

MARCH AIR RESERVE BASE (Continued)

S104241831

Comments: nd Maintenance (O&M) phase will consist of monthly checks of the
Comments Date: 07111996
Comments: bioventing system, completion of operation/maintenance/repair man
Comments Date: 07111996
Comments: uals and respiration tests every 6 months of operation. In addit
Comments Date: 07111996
Comments: ion, oxygen, carbon dioxide and hydrocarbon concentrations from t
Comments Date: 07111996
Comments: he vapor monitoring wells will be monitored on a monthly basis. T
Comments Date: 07111996
Comments: he O&M of the bioventing system will be performed for a duration
Comments Date: 07111996
Comments: of one year after installation and start-up. Data collected from
Comments Date: 07111996
Comments: the monthly monitoring is evaluated and used as the basis for ad
Comments Date: 07111996
Comments: justing the air flow into the subsurface. Preventive equipment m
Comments Date: 07111996
Comments: aintenance tasks, in accordance with the manufacturers recommenda
Comments Date: 07111996
Comments: tions, will be performed along with routing maintenance and recor
Comments Date: 07111996
Comments: d keeping activities. Status reports will be prepared and submit
Comments Date: 07111996
Comments: ted as required for satisfactory operating control and regulatory
Comments Date: 07111996
Comments: compliance requirements. Qualified supervisory personnel will o
Comments Date: 07111996
Comments: versee execution of the O&M tasks to minimize costs, and ensure t
Comments Date: 07111996
Comments: imely and accurate operating reports. DES -SITE 34: The design
Comments Date: 07111996
Comments: of the bioventing system was included in the treatability study d
Comments Date: 07111996
Comments: ocument. A Remedial Action Workplan was submitted in July 1996 t
Comments Date: 07111996
Comments: hat considered bioventing the final remedial alternative at Site
Comments Date: 07111996
Comments: 34. This is consistent with the Operable Unit #1 (OU#1) signed R
Comments Date: 07111996
Comments: ecord of Decision (ROD). The primary advantage in using bioventi
Comments Date: 07111996
Comments: ng is the low cost to install, operate, maintain and monitor the
Comments Date: 07111996
Comments: system as compared to other remediation technology. The treatabi
Comments Date: 07111996
Comments: lity study has demonstrated that the bioventing at Site 34 of the
Comments Date: 07111996
Comments: hydrocarbon contamination is cost effective, has minimal environ
Comments Date: 07111996
Comments: mental impact and will achieve the cleanup standards set in the O
Comments Date: 07111996
Comments: U#1 ROD. Bioventing is the process of delivering oxygen by force
Comments Date: 07111996
Comments: d air into the soil to stimulate or enhance the natural biodegrad
Comments Date: 07111996
Comments: ation process of petroleum hydrocarbon contaminants within the so

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR RESERVE BASE (Continued)

S104241831

Comments Date: 07111996
Comments: il. The existing bioventing system at Site 34 was designed with
Comments Date: 07111996
Comments: excess air injection capacity, therefore, it may be possible to t
Comments Date: 07111996
Comments: ap into this system for use at the adjacent sites. RA - SITE 34
Comments Date: 07111996
Comments: : Soil contaminants detected during the RI/FS conducted at Site 3
Comments Date: 07111996
Comments: 4 include VOCs, SVOCs, Pesticides/PCBs, Oil and Grease, JP-4 and
Comments Date: 07111996
Comments: Diesel Fuel. The Air Force (AF) will characterize the newly disc
Comments Date: 07111996
Comments: overed contamination at Site 34 using a soil gas survey which wil
Comments Date: 07111996
Comments: I provide potential locations for soil borings based on contamina
Comments Date: 07111996
Comments: nt concentrations. The AF installed and successfully demonstrated
Comments Date: 07111996
Comments: the effectiveness of a bioventing system at this Site. The obje
Comments Date: 07111996
Comments: ctives of this remedial action is to determine the extent of the
Comments Date: 07111996
Comments: new hydrocarbon contamination at the oil/water separator, to eval
Comments Date: 07111996
Comments: uate and select the best approach to biovent the site, and to mon
Comments Date: 07111996
Comments: itor that the bioremedial approach is achieving groundwater prote
Comments Date: 07111996
Comments: ction standards as established in the OU#1 Record of Decision (RO
Comments Date: 07111996
Comments: D).
Comments Date: 07241998
Comments: and soil aeration/bioventing, free product removal by vaporiza-
Comments Date: 07241998
Comments: tion and phase separation as necessary, and dissolved through the
Comments Date: 07241998
Comments: groundwater pump and treat and by natural attenuation/biochemical
Comments Date: 07241998
Comments: degradation mechanisms. The extracted groundwater would be pre-
Comments Date: 07241998
Comments: treated to remove any free product before transfer by pipeline to
Comments Date: 07241998
Comments: the Site 31 treatment facility for treatment by granular acti-
Comments Date: 07241998
Comments: vated carbon. Any free product would be collected via skimmer
Comments Date: 07241998
Comments: pump and contained for disposal. A soil vapor extraction and
Comments Date: 07241998
Comments: treatment system(thermal oxidizer) unit will be installed at site
Comments Date: 07241998
Comments: 18 to treat the recovered hydrocarbon vapors locally, before
Comments Date: 07241998
Comments: discharging to the atmosphere.
Comments Date: 09141995
Comments: RAP OU#3: This ROD/RAP presents the remedial alternative selected
Comments Date: 09141995

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR RESERVE BASE (Continued)

S104241831

Comments: to remediate soil and groundwater that is contaminated with petr
Comments Date: 09141995
Comments: oleum hydrocarbons and solvent beneath Operable Unit #3 (OU#3). O
Comments Date: 09141995
Comments: U#3, which encompasses the former Panero Fueling facility, is loc
Comments Date: 09141995
Comments: ated on the aircraft apron, between the flightline shops and the
Comments Date: 09141995
Comments: taxiway. The major components of the selected alternative include
Comments Date: 09141995
Comments: : 1. Institutional control, including fencing, site use restri
Comments Date: 09141995
Comments: ction, and deed restriction of groundwater use. 2. Quarterly grou
Comments Date: 09141995
Comments: ndwater monitoring. 3. Continued free product recovery. 4. Soil r
Comments Date: 09141995
Comments: emediation using soil vapor extracion and bioventing. 5. Groundwa
Comments Date: 09141995
Comments: ter source remediation using surfactant and in-situ bioremediatio
Comments Date: 09141995
Comments: n. 6. Groundwater dissolved plume treatment using groundwater pum
Comments Date: 09141995
Comments: p and treat (Air Strippers) system. The remedy is estimated to ac
Comments Date: 09141995
Comments: hieve cleanup goals within 30 years. Approximate cost: \$22,251
Comments Date: 09141995
Comments: ,655.00
Comments Date: 11131996
Comments: RAP - OU#3(SITE 33): This Decision Document (DD), which is equivi
Comments Date: 11131996
Comments: lant to a Remedial Action Plan (RAP), presents the selected Remov
Comments Date: 11131996
Comments: al Action upgrade for March Air Reserve Base (MARB) Operable Unit
Comments Date: 11131996
Comments: #3 pump and Treat System. This removal action upgrade is select
Comments Date: 11131996
Comments: ed to increase jet fuel (JP-4) free product recovery rates at OU#
Comments Date: 11131996
Comments: 3. The State of California, both DTSC and the Santa Ana Regional
Comments Date: 11131996
Comments: Water Quality Control Board (RWQCB), signed a Record of Decision
Comments Date: 11131996
Comments: (ROD) for OU#3 in September 1995. However, the US Environmental
Comments Date: 11131996
Comments: Protection Agency(USEPA) and the Air Force Reserves (AFRs) decli
Comments Date: 11131996
Comments: ned to sign the ROD at the last minute; the USEPA invoking the pe
Comments Date: 11131996
Comments: troleum exclusion section of CERCLA and the AFRs stating that the
Comments Date: 11131996
Comments: preferred alternative in the ROD is too expensive. Therefore, a
Comments Date: 11131996
Comments: fter considerable efforts, all parties agreed to expand and upgra
Comments Date: 11131996
Comments: de the existing free product recovery system as an interim remedy
Comments Date: 11131996
Comments: for the JP-4 free product beneath OU#3. This action addresses o

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR RESERVE BASE (Continued)

S104241831

Comments Date: 11131996
Comments: nly JP-4 free product and does not address all contamination rema
Comments Date: 11131996
Comments: ining at the site. the DD went through the RAP requirement of pu
Comments Date: 11131996
Comments: blic review and comment.
Comments Date: 05011996
Comments: discovered when March AFB personnel noticed a loss in line press
Comments Date: 05011996
Comments: ure during an integrity test of a section of the line between the
Comments Date: 05011996
Comments: fuel pump station and the flight line. Visual indications of a
Comments Date: 05011996
Comments: fuel leak were also observed in and around the concrete valult lo
Comments Date: 05011996
Comments: cated adjacent to the fuel pump station. The objective of the Imm
Comments Date: 05011996
Comments: ediate Response Action was to remove and replace the leaking sect
Comments Date: 05011996
Comments: ion of the sub-surface JP-8 fuel line. This was accomplished with
Comments Date: 05011996
Comments: in a very tight schedule (approx. seven days) to prevent the use
Comments Date: 05011996
Comments: of outside trucks for delivery of fuels to the aircrafts. The re
Comments Date: 05011996
Comments: moval action consisted of trenching to expose the sub-surface fue
Comments Date: 05011996
Comments: l lines and associated vault area including the demolishing and r
Comments Date: 05011996
Comments: emoval of overlaying asphalt and concrete, the removal of a 230 f
Comments Date: 05011996
Comments: oot of JP-8 fuel line and a 210 foot section of an inactive JP-8
Comments Date: 05011996
Comments: line was also removed, the placement of a new 8 inch steel JP-8 f
Comments Date: 05011996
Comments: uel line and a 12 inch steel road crossing sleeve and reconstruct
Comments Date: 05011996
Comments: ion of demolished concrete vault. Approximately, 380 cubic yards
Comments Date: 05011996
Comments: of contaminated soil was removed and stockpiled at Site 15 for r
Comments Date: 05011996
Comments: emediation. Upon getting the new pipe section on-line the general
Comments Date: 05011996
Comments: site area was landscaped and restored to the original condition
Comments Date: 05011996
Comments: to the extent possible. This included the backfilling maximum dr
Comments Date: 05011996
Comments: y density of the soil, and the replacement of the overlaying asph
Comments Date: 05011996
Comments: alt.
Comments Date: 05081996
Comments: DES - SITE 31: This is part of OU #1. The practice of dis- charg
Comments Date: 05081996
Comments: ing solvents on the ground reportedly occurred from about the mid
Comments Date: 05081996
Comments: -1950s to the mid-1970s. In addition, floor drains from mainten
Comments Date: 05081996

MAP FINDINGS

MARCH AIR RESERVE BASE (Continued)

S104241831

Comments: ce shops may have leaked solvents to the subsurface. The primary
Comments Date: 05081996
Comments: contaminants of concern at Site 31 are Trichloro- ethylene (PCE),
Comments Date: 05081996
Comments: and traces of other chlorinated solvents. The contaminants are
Comments Date: 05081996
Comments: contained within the soils and the groundwater and will require r
Comments Date: 05081996
Comments: emediation to prevent further contamination of the OU#1 groundwat
Comments Date: 05081996
Comments: er. Extensive studies to identify source locations, determine si
Comments Date: 05081996
Comments: te characteristics and evaluate cost effective remedial alternati
Comments Date: 05081996
Comments: ves have been performed. A dual phase extraction technology coup
Comments Date: 05081996
Comments: led with granular activated carbon treatment of extracted groundw
Comments Date: 05081996
Comments: ater and soil vapor has been selected based on a pilot scale syst
Comments Date: 05081996
Comments: em shown to be a cost- effective method for remediation of this S
Comments Date: 05081996
Comments: ite. The treatment system shall discharge treated water that wi
Comments Date: 05081996
Comments: ll have a daily average concentration of 0.5 ppb TCE or less, and
Comments Date: 05081996
Comments: never will exceed a concentration of 5 ppb TCE. Treated groundw
Comments Date: 05081996
Comments: ater will be reinjected into the aquifer combined with discharge
Comments Date: 05081996
Comments: of excess water to the Heacock Storm drain and/or the base sanita
Comments Date: 05081996
Comments: ry sewer system, as required. Installation of process equipment,
Comments Date: 05081996
Comments: surface piping and electrical facilities is planned for the end
Comments Date: 05081996
Comments: of April, and startup of the system July 1996. This remedial act
Comments Date: 05081996
Comments: ion complies with the statutory preference for remedies as specif
Comments Date: 05081996
Comments: ied in the Record of Decision (ROD) for OU#1. O&M SITE 31: The
Comments Date: 05081996
Comments: Site 31 dual phase extraction and treatment system is designed to
Comments Date: 05081996
Comments: sustain continuous operation without direct operator control. P
Comments Date: 05081996
Comments: eriodic surveillance and maintenance will be required to ensure r
Comments Date: 05081996
Comments: eliable operation and compliance with regulatory requirement. Pr
Comments Date: 05081996
Comments: ocess performing monitoring of the vapor and water treatment syst
Comments Date: 05081996
Comments: ems will be conducted. This includes on-site sampling and tests
Comments Date: 05081996
Comments: of the influent streams, intermittent treatment points and the ef
Comments Date: 05081996
Comments: fluent streams to verify satisfactory operation, and timely chang

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR RESERVE BASE (Continued)

S104241831

Comments Date: 05081996
Comments: e-out of the GAC treat- ment units to maintain regulatory dischar
Comments Date: 05081996
Comments: ge limits and cost effectiveness. Preventive equipment mainten
Comments Date: 05081996
Comments: ce tasks, in accordance with the manufacturers recommendations, w
Comments Date: 05081996
Comments: ill be performed along with routine maintenance and record keepin
Comments Date: 05081996
Comments: g activities. It is expected that the carbon change-out frequenc
Comments Date: 05081996
Comments: y will gradually decrease as the soil and groundwater contaminant
Comments Date: 05081996
Comments: levels decline with ongoing treatment. Initially the change-out
Comments Date: 05081996
Comments: s may occur once every 1-2 months and subsequently may decrease t
Comments Date: 05081996
Comments: o once or twice a year for the groundwater treatment system. Norm
Comments Date: 05081996
Comments: ally, one field technician will be required to perform the routin
Comments Date: 05081996
Comments: e O&M tasks, including wells inspections and maintenance, pump ov
Comments Date: 05081996
Comments: erhaults, process instrument calibrations, equipment repairs and r
Comments Date: 05081996
Comments: eplacements. Status reports along with analytical results and di
Comments Date: 05081996
Comments: scharge records will be prepared and submitted as required for sat
Comments Date: 05081996
Comments: isfactory operating control and regulatory compliance requirement
Comments Date: 05081996
Comments: s. Qualified supervisory personnel will oversee execution of the
Comments Date: 05081996
Comments: O&M tasks to minimize costs, and ensure timely and accurate oper
Comments Date: 05081996
Comments: ating reports.
Comments Date: 06011999
Comments: RA - SITE 36: The remedial action for Site 36 was completed on
Comments Date: 06011999
Comments: March 15, 1999. It included the installation of a groundwater
Comments Date: 06011999
Comments: extraction and treatment system in combination with a system for
Comments Date: 06011999
Comments: soil vapor extraction (SVE). A remedial design of this system
Comments Date: 06011999
Comments: was approved by DTSC on April 7, 1998. The Site 36 system
Comments Date: 06011999
Comments: includes conveyance piping, process vessels, and electrical and
Comments Date: 06011999
Comments: mechanical appurtenances. The remedial activities conducted at
Comments Date: 06011999
Comments: Site 36 included: 1) Installing a submersible pump into each of
ID Name: Not reported
ID Value: Not reported
Alternate Name: ALESSANDRO ARMY AIR FIELD
Alternate Name: |
Alternate Name: March Air Reserve Base

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

MARCH AIR RESERVE BASE (Continued)

S104241831

Alternate Name: Not reported
 Special Programs Code: DSMOA
 Special Programs Name: DEFENSE MEMORANDUM OF AGREEMENT

F33
ENE
1/4-1/2
0.416 mi.
2194 ft.

MARCH AIR FORCE BASE
MORENO VALLEY, CA 92518
Site 16 of 28 in cluster F

CA BOND EXP. PLAN S105960470
N/A

Relative:
Lower
Actual:
1483 ft.

CA BOND EXP. PLAN:
 Reponsible Party: FEDERAL FACILITY SITE CLEANUP WORKPLAN
 Project Revenue Source Company: Not reported
 Project Revenue Source Addr: Not reported
 Project Revenue Source City,St,Zip: Not reported
 Project Revenue Source Desc: The Department will either enter into an interagency agreement with the Department of Defense of issue an order for oversight/monitoring of the Air Force's cleanup efforts. DHS has budgeted \$100,000 for its oversight/monitoring costs. DHS will recover 100 percent of direct costs plus staff costs and overhead related to the project. The Department of Defense will pay all costs associated with remedial investigation and cleanup activities.

Site Description:
 Hazardous Waste Desc: The site is a U.S. Air Force Base. The initial assessment at this site identified hazardous waste disposal on base in landfills, burning pits, dry wells, and ground disposal. Several types of wastes associated with aircraft and general maintenance were identified, including fuels, oils, polychlorinated biphenyls (PCBs), pesticides, low-level radiation, and the solvents trichloroethylene (TCE) and perchloroethylene (PCE).

Threat To Public Health & Env:
 Past disposal practices at March Air Force Base pose a threat to surface and ground water. Work to date has identified ground water contamination on and off base, and recently, in private wells east of the base perimeter. There is no known exposure at this time.

Site Activity Status:
 The installation restoration program has been initiated at this base. Currently the program is in the confirmation/quantification step of the mitigation process. DHS's oversight has increased due to contamination of drinking water supplies.

F34
ENE
1/4-1/2
0.416 mi.
2194 ft.

US AIR FORCE, MARCH AIR RESERVE BASE - * BW
RIVERSIDE, CA 92518
Site 17 of 28 in cluster F

LUST S106784714
N/A

Relative:
Lower
Actual:
1483 ft.

LUST REG 8:
 Name: US Air Force, March Air Reserve Base - * BW
 Address: Not reported
 City: Riverside
 Region: 8
 County: Riverside
 Regional Board: Santa Ana Region
 Facility Status: Not reported
 Case Number: Not reported
 Local Case Num: 400689 -- 11
 Case Type: Not reported
 Substance: Not reported
 Qty Leaked: Not reported
 Abate Method: Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

US AIR FORCE, MARCH AIR RESERVE BASE - * BW (Continued)

S106784714

Cross Street:	3,545 Acres; E. of Riverside
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Not reported
How Stopped:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Global ID:	DOD100289800
How Stopped Date:	Not reported
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	Not reported
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	DODNUST
Latitude:	Not reported
Longitude:	Not reported
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	Not Required to be Tested.
MTBE Class:	*
Staff:	JCB
Staff Initials:	Not reported
Lead Agency:	Regional Board
Local Agency:	Not reported
Hydr Basin #:	Not reported
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

F35
ENE
 1/4-1/2
 0.416 mi.
 2194 ft.

US AIR FORCE, MARCH AIR RESERVE BASE - OU2-A - SIT
RIVERSIDE, CA 92518
Site 18 of 28 in cluster F

LUST S106784732
N/A

Relative:
Lower
Actual:
1483 ft.

LUST REG 8:
 Name: US Air Force, March Air Reserve Base - OU2-A - SITE 37 BLDG 317 PCB Contaminati
 Address: Not reported
 City: Riverside
 Region: 8

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

US AIR FORCE, MARCH AIR RESERVE BASE - OU2-A - SITE 37 BLDG (Continued)

S106784732

County:	Riverside
Regional Board:	Santa Ana Region
Facility Status:	Not reported
Case Number:	Not reported
Local Case Num:	400689 -- 5
Case Type:	Not reported
Substance:	Not reported
Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	3,545 Acres; E. of Riverside
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Not reported
How Stopped:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Global ID:	DOD100319700
How Stopped Date:	Not reported
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	Not reported
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	DODNUST
Latitude:	Not reported
Longitude:	Not reported
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	Not Required to be Tested.
MTBE Class:	*
Staff:	JCB
Staff Initials:	Not reported
Lead Agency:	Regional Board
Local Agency:	Not reported
Hydr Basin #:	Not reported
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

F36
ENE
1/4-1/2
0.416 mi.
2194 ft.

US AIR FORCE, MARCH AIR RESERVE BASE - OU2-A - SIT
RIVERSIDE, CA 92518
Site 19 of 28 in cluster F

LUST S106784691
N/A

Relative:
Lower
Actual:
1483 ft.

LUST REG 8:

Name: US Air Force, March Air Reserve Base - OU2-A - SITE 11 Bulk Fuel Storage Area (AST)
Address: Not reported
City: Riverside
Region: 8
County: Riverside
Regional Board: Santa Ana Region
Facility Status: Not reported
Case Number: Not reported
Local Case Num: 400689 -- 6
Case Type: Not reported
Substance: Not reported
Qty Leaked: Not reported
Abate Method: Not reported
Cross Street: 3,545 Acres; E. of Riverside
Enf Type: Not reported
Funding: Not reported
How Discovered: Not reported
How Stopped: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Global ID: DOD100319600
How Stopped Date: Not reported
Enter Date: Not reported
Date Confirmation of Leak Began: Not reported
Date Preliminary Assessment Began: Not reported
Discover Date: Not reported
Enforcement Date: Not reported
Close Date: Not reported
Date Prelim Assessment Workplan Submitted: Not reported
Date Pollution Characterization Began: Not reported
Date Remediation Plan Submitted: Not reported
Date Remedial Action Underway: Not reported
Date Post Remedial Action Monitoring: Not reported
Enter Date: Not reported
GW Qualifies: Not reported
Soil Qualifies: Not reported
Operator: Not reported
Facility Contact: Not reported
Interim: Not reported
Oversite Program: DODNUST
Latitude: Not reported
Longitude: Not reported
MTBE Date: Not reported
Max MTBE GW: Not reported
MTBE Concentration: 0
Max MTBE Soil: Not reported
MTBE Fuel: 0
MTBE Tested: Not Required to be Tested.
MTBE Class: *
Staff: JCB
Staff Initials: Not reported
Lead Agency: Regional Board

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

US AIR FORCE, MARCH AIR RESERVE BASE - OU2-A - SITE 11 BULK (Continued)

S106784691

Local Agency:	Not reported
Hydr Basin #:	Not reported
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

F37
ENE
1/4-1/2
0.416 mi.
2194 ft.
Relative:
Lower
Actual:
1483 ft.

US AIR FORCE, MARCH AIR RESERVE BASE - OU-1 - SITE

LUST S106784750
N/A

RIVERSIDE, CA 92518

Site 20 of 28 in cluster F

LUST REG 8:	
Name:	US Air Force, March Air Reserve Base - OU-1 - SITE 34 Pritchard Aircraft Fueling System
Address:	Not reported
City:	Riverside
Region:	8
County:	Riverside
Regional Board:	Santa Ana Region
Facility Status:	Not reported
Case Number:	Not reported
Local Case Num:	400689 -- 12
Case Type:	Not reported
Substance:	Not reported
Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	3,545 Acres; E. of Riverside
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Not reported
How Stopped:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Global ID:	DOD100286900
How Stopped Date:	Not reported
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	Not reported
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	DODNUST
Latitude:	Not reported
Longitude:	Not reported
MTBE Date:	Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

US AIR FORCE, MARCH AIR RESERVE BASE - OU-1 - SITE 34 PRITCH (Continued)

S106784750

Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	Not Required to be Tested.
MTBE Class:	*
Staff:	JCB
Staff Initials:	Not reported
Lead Agency:	Regional Board
Local Agency:	Not reported
Hydr Basin #:	Not reported
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

F38
ENE
1/4-1/2
0.416 mi.
2194 ft.

US AIR FORCE, MARCH AIR RESERVE BASE - OU-1 - SITE

LUST S106784704
N/A

RIVERSIDE, CA 92518

Site 21 of 28 in cluster F

Relative:
Lower
Actual:
1483 ft.

LUST REG 8:	
Name:	US Air Force, March Air Reserve Base - OU-1 - SITE 14 Liquid Fuel Pump Station Over
Address:	Not reported
City:	Riverside
Region:	8
County:	Riverside
Regional Board:	Santa Ana Region
Facility Status:	Not reported
Case Number:	Not reported
Local Case Num:	400689 -- 17
Case Type:	Not reported
Substance:	Not reported
Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	3,545 Acres; E. of Riverside
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Not reported
How Stopped:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Global ID:	DOD100282000
How Stopped Date:	Not reported
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	Not reported
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

US AIR FORCE, MARCH AIR RESERVE BASE - OU-1 - SITE 14 LIQUID (Continued)

S106784704

GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	DODNUST
Latitude:	Not reported
Longitude:	Not reported
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	Not Required to be Tested.
MTBE Class:	*
Staff:	JCB
Staff Initials:	Not reported
Lead Agency:	Regional Board
Local Agency:	Not reported
Hydr Basin #:	Not reported
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

F39
ENE
1/4-1/2
0.416 mi.
2194 ft.

US AIR FORCE, MARCH AIR RESERVE BASE - OU-1 - SITE
RIVERSIDE, CA 92518
Site 22 of 28 in cluster F

LUST S106784759
N/A

Relative:
Lower
Actual:
1483 ft.

LUST REG 8:	
Name:	US Air Force, March Air Reserve Base - OU-1 - SITE 29 Fire Protection Training Area N
Address:	Not reported
City:	Riverside
Region:	8
County:	Riverside
Regional Board:	Santa Ana Region
Facility Status:	Not reported
Case Number:	Not reported
Local Case Num:	400689 -- 14
Case Type:	Not reported
Substance:	Not reported
Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	3,545 Acres; E. of Riverside
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Not reported
How Stopped:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Global ID:	DOD100286700
How Stopped Date:	Not reported
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

US AIR FORCE, MARCH AIR RESERVE BASE - OU-1 - SITE 29 FIRE P (Continued)

S106784759

Discover Date:	Not reported
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	DODNUST
Latitude:	Not reported
Longitude:	Not reported
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	Not Required to be Tested.
MTBE Class:	*
Staff:	JCB
Staff Initials:	Not reported
Lead Agency:	Regional Board
Local Agency:	Not reported
Hydr Basin #:	Not reported
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

F40
ENE
1/4-1/2
0.416 mi.
2194 ft.

US AIR FORCE, MARCH AIR RESERVE BASE - OU2-B - NEW
RIVERSIDE, CA 92518
Site 23 of 28 in cluster F

LUST S106784622
N/A

Relative:
Lower
Actual:
1483 ft.

LUST REG 8:	
Name:	US Air Force, March Air Reserve Base - OU2-B - New Source Area
Address:	Not reported
City:	Riverside
Region:	8
County:	Riverside
Regional Board:	Santa Ana Region
Facility Status:	Not reported
Case Number:	Not reported
Local Case Num:	400689 -- 2
Case Type:	Not reported
Substance:	Not reported
Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	3,545 Acres; E. of Riverside
Enf Type:	Not reported
Funding:	Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

US AIR FORCE, MARCH AIR RESERVE BASE - OU2-B - NEW SOURCE AR (Continued)

S106784622

How Discovered:	Not reported
How Stopped:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Global ID:	DOD100321300
How Stopped Date:	Not reported
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	Not reported
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	DODNUST
Latitude:	Not reported
Longitude:	Not reported
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	Not Required to be Tested.
MTBE Class:	*
Staff:	JCB
Staff Initials:	Not reported
Lead Agency:	Regional Board
Local Agency:	Not reported
Hydr Basin #:	Not reported
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

F41
ENE
 1/4-1/2
 0.416 mi.
 2194 ft.

MARCH AIR RESERVE BASE
3 545 ACRES OF RIVERSIDE
RIVERSIDE, CA 92518
Site 24 of 28 in cluster F

HIST CORTESE **S105025888**
N/A

Relative:
Lower
Actual:
1483 ft.

HIST CORTESE:
 edr_fname: MARCH AIR RESERVE BASE
 edr_fadd1: 3 545 ACRES OF RIVERSIDE
 City,State,Zip: RIVERSIDE, CA 92518
 Region: CORTESE
 Facility County Code: 33
 Reg By: CALSI
 Reg Id: 33970004

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

F42 **MARCH AIR FORCE BASE (FORMER)**
ENE **SITE 43 35TH STREET**
1/4-1/2 **RIVERSIDE, CA 92518**
0.416 mi.
2194 ft. **Site 25 of 28 in cluster F**

LUST **S105624558**
 N/A

Relative:
Lower

LUST REG 8:

Actual:
1483 ft.

Name: MARCH AIR FORCE BASE (FORMER)
Address: SITE 43 35TH STREET
City: RIVERSIDE
Region: 8
County: Riverside
Regional Board: Santa Ana Region
Facility Status: Case Closed
Case Number: 083303876T
Local Case Num: Not reported
Case Type: Aquifer affected
Substance: Regular Gasoline
Qty Leaked: Not reported
Abate Method: Not reported
Cross Street: YOUNT
Enf Type: Not reported
Funding: D
How Discovered: OM
How Stopped: Other Means
Leak Cause: UNK
Leak Source: UNK
Global ID: T0606553811
How Stopped Date: 10/13/2001
Enter Date: Not reported
Date Confirmation of Leak Began: Not reported
Date Preliminary Assessment Began: Not reported
Discover Date: 1/15/1991
Enforcement Date: Not reported
Close Date: 8/21/2003
Date Prelim Assessment Workplan Submitted: Not reported
Date Pollution Characterization Began: 7/15/1993
Date Remediation Plan Submitted: Not reported
Date Remedial Action Underway: 9/25/2001
Date Post Remedial Action Monitoring: 4/19/2002
Enter Date: Not reported
GW Qualifies: <
Soil Qualifies: Not reported
Operator: Not reported
Facility Contact: Not reported
Interim: Yes
Oversite Program: DOD
Latitude: 33.9033805
Longitude: -117.2802296
MTBE Date: 3/15/1998
Max MTBE GW: 2.5
MTBE Concentration: 1
Max MTBE Soil: Not reported
MTBE Fuel: 1
MTBE Tested: MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class: Not reported
Staff: JCB
Staff Initials: Not reported
Lead Agency: Regional Board

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

MARCH AIR FORCE BASE (FORMER) (Continued)

S105624558

Local Agency: 33000L
 Hydr Basin #: Not reported
 Beneficial: MS_T
 Priority: Not reported
 Cleanup Fund Id: Not reported
 Work Suspended: Not reported
 Summary: IRP SITE 43, FORMER AUTOMOTIVE FUEL PUMPING AREA, IS A LISTED SITE AS PART OF THE SUPERFUND (NPL) SITE MARCH AIR FORCE BASE.

F43
ENE
 1/4-1/2
 0.416 mi.
 2194 ft.

MARCH AIR RESERVE BASE
BLDG 2406 SITE 39 GRABER STREET
MARCH ARB, CA 92518
Site 26 of 28 in cluster F

LUST S105624528
N/A

Relative:
Lower
Actual:
1483 ft.

LUST REG 8:
 Name: March Air Reserve Base
 Address: Bldg 2406 Site 39 Graber Street
 City: MARCH ARB
 Region: 8
 County: Riverside
 Regional Board: Santa Ana Region
 Facility Status: Case Closed
 Case Number: 083302119T
 Local Case Num: Not reported
 Case Type: Soil only
 Substance: Gasoline
 Qty Leaked: Not reported
 Abate Method: Not reported
 Cross Street: Not reported
 Enf Type: EF
 Funding: Not reported
 How Discovered: Tank Closure
 How Stopped: Not reported
 Leak Cause: UNK
 Leak Source: UNK
 Global ID: T0606500293
 How Stopped Date: 7/18/1991
 Enter Date: 9/28/1992
 Date Confirmation of Leak Began: Not reported
 Date Preliminary Assessment Began: Not reported
 Discover Date: 7/18/1991
 Enforcement Date: 9/18/1990
 Close Date: 10/10/2000
 Date Prelim Assessment Workplan Submitted: Not reported
 Date Pollution Characterization Began: 2/10/1997
 Date Remediation Plan Submitted: Not reported
 Date Remedial Action Underway: Not reported
 Date Post Remedial Action Monitoring: Not reported
 Enter Date: 9/28/1992
 GW Qualifies: <
 Soil Qualifies: Not reported
 Operator: Not reported
 Facility Contact: Not reported
 Interim: Not reported
 Oversight Program: DOD
 Latitude: 33.9457461
 Longitude: -117.4103167

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

MARCH AIR RESERVE BASE (Continued)

S105624528

MTBE Date:	3/15/1998
Max MTBE GW:	2.5
MTBE Concentration:	1
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class:	Not reported
Staff:	JCB
Staff Initials:	UNK
Lead Agency:	Regional Board
Local Agency:	33000L
Hydr Basin #:	UPPER SANTA ANA VALL
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	IRP SITE 39; CLEAN CLOSURE

F44
ENE
 1/4-1/2
 0.416 mi.
 2194 ft.

US AIR FORCE, MARCH AIR RESERVE BASE - OU-1 - OU-1
RIVERSIDE, CA 92518
Site 27 of 28 in cluster F

LUST S106784769
N/A

Relative:
Lower
Actual:
1483 ft.

Relative:	LUST REG 8:
Lower	Name: US Air Force, March Air Reserve Base - OU-1 - OU-1 Sites Groundwater Plume
Actual:	Address: Not reported
1483 ft.	City: Riverside
	Region: 8
	County: Riverside
	Regional Board: Santa Ana Region
	Facility Status: Not reported
	Case Number: Not reported
	Local Case Num: 400689 -- 8
	Case Type: Not reported
	Substance: Not reported
	Qty Leaked: Not reported
	Abate Method: Not reported
	Cross Street: 3,545 Acres; E. of Riverside
	Enf Type: Not reported
	Funding: Not reported
	How Discovered: Not reported
	How Stopped: Not reported
	Leak Cause: Not reported
	Leak Source: Not reported
	Global ID: DOD100319400
	How Stopped Date: Not reported
	Enter Date: Not reported
	Date Confirmation of Leak Began: Not reported
	Date Preliminary Assessment Began: Not reported
	Discover Date: Not reported
	Enforcement Date: Not reported
	Close Date: Not reported
	Date Prelim Assessment Workplan Submitted: Not reported
	Date Pollution Characterization Began: Not reported
	Date Remediation Plan Submitted: Not reported
	Date Remedial Action Underway: Not reported
	Date Post Remedial Action Monitoring: Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

US AIR FORCE, MARCH AIR RESERVE BASE - OU-1 - OU-1 SITES GRO (Continued)

S106784769

Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	DODNUST
Latitude:	Not reported
Longitude:	Not reported
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	Not Required to be Tested.
MTBE Class:	*
Staff:	JCB
Staff Initials:	Not reported
Lead Agency:	Regional Board
Local Agency:	Not reported
Hydr Basin #:	Not reported
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

F45
ENE
 1/4-1/2
 0.416 mi.
 2194 ft.

MARCH AIR RESERVE BASE
IRP S34 NW CORNOR OF FUELING FACILITY
MARCH AIR RESERVE BASE, CA 92518
Site 28 of 28 in cluster F

LUST S105624619
N/A

Relative:
Lower
Actual:
1483 ft.

Relative:	LUST REG 8:
Lower	Name: MARCH AIR RESERVE BASE
Actual:	Address: IRP S34 NW CORNOR OF FUELING FACILITY
1483 ft.	City: MARCH AIR RESERVE BASE
	Region: 8
	County: Riverside
	Regional Board: Santa Ana Region
	Facility Status: Case Closed
	Case Number: 083303883T
	Local Case Num: Not reported
	Case Type: Aquifer affected
	Substance: Benzene
	Qty Leaked: Not reported
	Abate Method: Not reported
	Cross Street: FLIGHTLINE
	Enf Type: Not reported
	Funding: Not reported
	How Discovered: OM
	How Stopped: Close Tank
	Leak Cause: Other Cause
	Leak Source: Piping
	Global ID: T0606592846
	How Stopped Date: 8/10/1999
	Enter Date: Not reported
	Date Confirmation of Leak Began: Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

MARCH AIR RESERVE BASE (Continued)

S105624619

Date Preliminary Assessment Began:	Not reported
Discover Date:	8/7/1998
Enforcement Date:	Not reported
Close Date:	5/1/2002
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	8/7/1998
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	8/10/1999
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	<
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	DOD
Latitude:	117.2472
Longitude:	-33.8859
MTBE Date:	10/7/2001
Max MTBE GW:	.5
MTBE Concentration:	1
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class:	Not reported
Staff:	JCB
Staff Initials:	Not reported
Lead Agency:	Regional Board
Local Agency:	33000L
Hydr Basin #:	Not reported
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	REMOVAL OF 550 GAL UST AND 93 FEET OF 8 IN. CONSDENSATE PIPE

46
West
1/2-1
0.660 mi.
3483 ft.

CAMP HAAN (J09CA0279)
WEST AND NORTH OF THE INTERSECTION OF NANDINA AVE AND FWY 21
RIVERSIDE, CA 92518

RESPONSE **S122495088**
ENVIROSTOR **N/A**

Relative:
Higher
Actual:
1549 ft.

RESPONSE:

Name:	CAMP HAAN (J09CA0279)
Address:	WEST AND NORTH OF THE INTERSECTION OF NANDINA AVE AND FWY 215
City,State,Zip:	RIVERSIDE, CA 92518
Facility ID:	71000062
Site Type:	State Response
Site Type Detail:	FUDS
Acres:	76
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP, RWQCB 8 - Santa Ana
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Stephen Niou
Supervisor:	Robert Senga
Division Branch:	Cleanup Cypress
Site Code:	401244
Site Mgmt. Req.:	NONE SPECIFIED

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CAMP HAAN (J09CA0279) (Continued)

S122495088

Assembly: 61
Senate: 31
Special Program Status: DSMOA
Status: Inactive - Needs Evaluation
Status Date: 08/06/2020
Restricted Use: NO
Funding: DERA
Latitude: 33.86779
Longitude: -117.2676
APN: NONE SPECIFIED
Past Use: FIRING RANGE - SMALL ARMS ETC...
Potential COC : Explosives (UXO, MEC Lead Copper and compounds)
Confirmed COC: 30013-NO 30011-NO 30156-NO
Potential Description: SOIL
Alias Name: Camp Haan Rifle Range
Alias Type: Alternate Name
Alias Name: J09CA0279
Alias Type: Federal Facility ID
Alias Name: J09CA0280
Alias Type: Federal Facility ID
Alias Name: 110033618379
Alias Type: EPA (FRS #)
Alias Name: T0606545483
Alias Type: GeoTracker Global ID
Alias Name: 19698
Alias Type: RB-PCA
Alias Name: 401244
Alias Type: Project Code (Site Code)
Alias Name: 71000062
Alias Type: Envirostor ID Number
Alias Name: 80000214
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Inventory Project Report (INPR)
Completed Date: 01/17/1995
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Inventory Project Report (INPR)
Completed Date: 08/16/1999
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 12/15/2009
Comments: a no-comment letter was sent to the Army for Additional RI workplan

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Quality Assurance Workplan
Completed Date: 09/17/2009
Comments: QAPP accepted

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CAMP HAAN (J09CA0279) (Continued)

S122495088

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 12/24/2009
Comments: sampling plan accepted

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 06/22/2010
Comments: Approval letter sent, awaiting final copy

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Workplan
Completed Date: 06/22/2010
Comments: Workplan approved, awaiting the final document.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/09/2011
Comments: Secondary document. No approval required.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment/Site Inspection Report (PA/SI)
Completed Date: 08/16/2011
Comments: DTSC comments incorporated into the Final SI report.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: PROJECT WIDE
Schedule Sub Area Name: Not reported
Schedule Document Type: Remedial Investigation / Feasibility Study
Schedule Due Date: 10/06/2019
Schedule Revised Date: 06/20/2021

ENVIROSTOR:

Name: CAMP HAAN (J09CA0279)
Address: WEST AND NORTH OF THE INTERSECTION OF NANDINA AVE AND FWY 215
City,State,Zip: RIVERSIDE, CA 92518
Facility ID: 71000062
Status: Inactive - Needs Evaluation
Status Date: 08/06/2020
Site Code: 401244
Site Type: State Response
Site Type Detailed: FUDS
Acres: 76
NPL: NO
Regulatory Agencies: SMBRP, RWQCB 8 - Santa Ana
Lead Agency: SMBRP
Program Manager: Stephen Niou
Supervisor: Robert Senga
Division Branch: Cleanup Cypress

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CAMP HAAN (J09CA0279) (Continued)

S122495088

Assembly: 61
Senate: 31
Special Program: DSMOA
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: DERA
Latitude: 33.86779
Longitude: -117.2676
APN: NONE SPECIFIED
Past Use: FIRING RANGE - SMALL ARMS ETC...
Potential COC: Explosives (UXO, MEC Lead Copper and compounds)
Confirmed COC: 30013-NO 30011-NO 30156-NO
Potential Description: SOIL
Alias Name: Camp Haan Rifle Range
Alias Type: Alternate Name
Alias Name: J09CA0279
Alias Type: Federal Facility ID
Alias Name: J09CA0280
Alias Type: Federal Facility ID
Alias Name: 110033618379
Alias Type: EPA (FRS #)
Alias Name: T0606545483
Alias Type: GeoTracker Global ID
Alias Name: 19698
Alias Type: RB-PCA
Alias Name: 401244
Alias Type: Project Code (Site Code)
Alias Name: 71000062
Alias Type: Envirostor ID Number
Alias Name: 80000214
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Inventory Project Report (INPR)
Completed Date: 01/17/1995
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Inventory Project Report (INPR)
Completed Date: 08/16/1999
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 12/15/2009
Comments: a no-comment letter was sent to the Army for Additional RI workplan

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Quality Assurance Workplan
Completed Date: 09/17/2009
Comments: QAPP accepted

Completed Area Name: PROJECT WIDE

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

CAMP HAAN (J09CA0279) (Continued)

S122495088

Completed Sub Area Name: Not reported
 Completed Document Type: Remedial Investigation Workplan
 Completed Date: 12/24/2009
 Comments: sampling plan accepted

Completed Area Name: PROJECT WIDE
 Completed Sub Area Name: Not reported
 Completed Document Type: Other Report
 Completed Date: 06/22/2010
 Comments: Approval letter sent, awaiting final copy

Completed Area Name: PROJECT WIDE
 Completed Sub Area Name: Not reported
 Completed Document Type: Site Characterization Workplan
 Completed Date: 06/22/2010
 Comments: Workplan approved, awaiting the final document.

Completed Area Name: PROJECT WIDE
 Completed Sub Area Name: Not reported
 Completed Document Type: Monitoring Report
 Completed Date: 08/09/2011
 Comments: Secondary document. No approval required.

Completed Area Name: PROJECT WIDE
 Completed Sub Area Name: Not reported
 Completed Document Type: Preliminary Assessment/Site Inspection Report (PA/SI)
 Completed Date: 08/16/2011
 Comments: DTSC comments incorporated into the Final SI report.

Future Area Name: Not reported
 Future Sub Area Name: Not reported
 Future Document Type: Not reported
 Future Due Date: Not reported
 Schedule Area Name: PROJECT WIDE
 Schedule Sub Area Name: Not reported
 Schedule Document Type: Remedial Investigation / Feasibility Study
 Schedule Due Date: 10/06/2019
 Schedule Revised Date: 06/20/2021

G47
NNE
1/2-1
0.773 mi.
4080 ft.

PANERO AIRCRAFT FUELING SYST.
MARCH AFB
MORENO VALLEY, CA 90062
Site 1 of 3 in cluster G

Notify 65 **S100179101**
N/A

Relative:
Higher

NOTIFY 65:
 Name: PANERO AIRCRAFT FUELING SYST.
 Address: MARCH AFB
 City,State,Zip: MORENO VALLEY, CA 90062
 Date Reported: Not reported
 Staff Initials: Not reported
 Board File Number: Not reported
 Facility Type: Not reported
 Discharge Date: Not reported
 Issue Date: Not reported
 Incident Description: Not reported
 Global ID: Not reported
 Status: Not reported

Actual:
1494 ft.

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

G48 **MARCH AIR FORCE BASE - SITE 40**
NNE **7,123 ACRES; EAST OF RIVERSIDE, CA**
1/2-1 **RIVERSIDE, CA 92518**
0.773 mi.
4080 ft. **Site 2 of 3 in cluster G**

HIST Cal-Sites **S102008377**
 N/A

Relative:
Higher
Actual:
1494 ft.

Calsite:
 Name: MARCH AIR FORCE BASE - SITE 40
 Address: 7,123 ACRES; EAST OF RIVERSIDE, CA
 City: RIVERSIDE
 Region: GLENDALE
 Facility ID: 33970003
 Facility Type: CLOSE
 Type: CLOSED MILITARY BASE
 Branch: SO
 Branch Name: OMF-SOUTHERN CALIF
 File Name: Not reported
 State Senate District: 10041995
 Status: CERTIFIED AS HAVING BEEN REMEDIED SATISFACTORILY UNDER DTSC OVERSIGHT
 Status Name: CERTIFIED
 Lead Agency: ENVIRONMENTAL PROTECTION AGENCY
 NPL: Not Listed
 SIC Code: 97
 SIC Name: NATIONAL SECURITY/INTERNATIONAL AFFAIRS
 Access: Not reported
 Cortese: Not reported
 Hazardous Ranking Score: Not reported
 Date Site Hazard Ranked: Not reported
 Groundwater Contamination: Confirmed
 Staff Member Responsible for Site: Not reported
 Supervisor Responsible for Site: Not reported
 Region Water Control Board: Not reported
 Region Water Control Board Name: Not reported
 Lat/Long Direction: Not reported
 Lat/Long (dms): 0 0 0 / 0 0 0
 Lat/long Method: Not reported
 Lat/Long Description: Not reported
 State Assembly District Code: 64
 State Senate District Code: 36
 Facility ID: 33970003
 Activity: RA
 Activity Name: REMOVAL ACTION
 AWP Code: STE40
 Proposed Budget: 0
 AWP Completion Date: 06281995
 Revised Due Date: Not reported
 Comments Date: 06281995
 Est Person-Yrs to complete: 0
 Estimated Size: Not reported
 Request to Delete Activity: Not reported
 Activity Status: CERT
 Definition of Status: CERTIFIED
 Liquids Removed (Gals): 214
 Liquids Treated (Gals): 0
 Action Included Capping: Not reported
 Well Decommissioned: Not reported
 Action Included Fencing: Not reported
 Removal Action Certification: N
 Activity Comments: EXCAVATION AND OFF-SITE DISPOSAL OF 70 5-GAL TO 20-GAL DRUMS, 30 55GAL

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE - SITE 40 (Continued)

S102008377

DRUMS, 14 TONS OF DEBRIS CONTAINING ASBESTOS, 200 CY OF CONTAMINATED SOIL, AND 6800 CY OF NON-HAZARDOUS MATERIALS REMOVED.

For Commercial Reuse: 0
For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0
Facility ID: 33970003
Activity: RIFS
Activity Name: REMEDIAL INVESTIGATION / FEASIBILITY STUDY
AWP Code: STE40
Proposed Budget: 0
AWP Completion Date: 10131994
Revised Due Date: Not reported
Comments Date: 10131994
Est Person-Yrs to complete: 0
Estimated Size: Not reported
Request to Delete Activity: Not reported
Activity Status: CERT
Definition of Status: CERTIFIED
Liquids Removed (Gals): 0
Liquids Treated (Gals): 0
Action Included Capping: Not reported
Well Decommissioned: Not reported
Action Included Fencing: Not reported
Removal Action Certification: Not reported
Activity Comments: Not reported
For Commercial Reuse: 0
For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0
Facility ID: 33970003
Activity: CERT
Activity Name: CERTIFICATION
AWP Code: STE40
Proposed Budget: 0
AWP Completion Date: Not reported
Revised Due Date: Not reported
Comments Date: 10041995
Est Person-Yrs to complete: 0
Estimated Size: Not reported
Request to Delete Activity: Not reported
Activity Status: CERT
Definition of Status: CERTIFIED
Liquids Removed (Gals): 0
Liquids Treated (Gals): 0
Action Included Capping: Not reported
Well Decommissioned: Not reported
Action Included Fencing: Not reported
Removal Action Certification: N
Activity Comments: Not reported
For Commercial Reuse: 0
For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0
Alternate Address: 22 CSG/CC
Alternate City,St,Zip: RIVERSIDE, CA 92518
Alternate Address: 7,123 ACRES; EAST OF RIVERSIDE, CA

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE - SITE 40 (Continued)

S102008377

Alternate City,St,Zip: RIVERSIDE, CA 92518
Background Info: Site 40 is a former landfill used for disposing wastes from March AFB. Site 40 is approximately 18 acres of rolling land and the central portion of the property consists of a pond which accumulates surface runoff. Buried drums at this landfill were filled with sodium hydroxide, roofing tar, asphalt solids and waste, and oil and grease. There is potential contamination of the surface and storm water due to exposure to the drums and debris. March AFB was included on the NPL in 1989. A Federal Facilities Agreement (FFA) was signed between EPA, DHS, the Santa Ana RWQCB and the Air Force in September 1990, to provide for the remediation of the Base. For details on other efforts at March AFB refer to March AFB site IDNUN 33970002.

Comments Date: 04301992
Comments: Landfill #8, Site 40 fence and posted complete. This landfill was exposed when a water tank overflowed after rain,
Comments Date: 04301992
Comments: and washed down a gulley north of Van Buren Blvd. and west
Comments Date: 04301992
Comments: of Plummer Road.
Comments Date: 06281995
Comments: Removal Action (RA) - The primary objective of this time-critical RA was to prevent potential contamination of the surface and storm water in the channel due to exposure to drums and debris buried in the channel bed. Field execution of the RA resulted in removing approximately 70 5-gallon to 20-gallon decomposed drums filled with sodium hydroxide and 30 55 gallon drums filled with roofing tar, asphalt solids and waste, and oil grease solids. Approximately 200 cubic yards of contaminated overburden material extending above and to the sides of the drums, in addition to the drums, were combined in 85 gallon overpack drums and transported off-site for treatment/stabilization in lined end-dumps at the Landlaw Environmental. Approximately 14 tons of debris containing nonfriable asbestos as less than 10% by total weight were placed in a lined roll-off box and transported off-site to BDC Services, Inc. for disposal. In addition, approximately 6,800 cubic yards of non-hazardous materials (consisting of soil and debris) were transported to IRP Site 6a. As part of Site 40 restoration, the water's elevation in the pond was raised by installing a concrete we

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE - SITE 40 (Continued)

S102008377

Comments Date: 06281995
Comments: ir at the outlet of the pond. Each site location, including the
Comments Date: 06281995
Comments: creek bed, was restored. Vegetation destroyed during constructio
Comments Date: 06281995
Comments: n was replaced with California native plants. This RA, at Site 40
Comments Date: 06281995
Comments: , is undertaken as part of the ongoing long term remedial actions
Comments Date: 06281995
Comments: (RI/FS OU-2). 100 drums, 200 cubic yards of contaminated so
Comments Date: 06281995
Comments: il, 14 tons of non-friable asbestos debris, and 6,800 cubic yards
Comments Date: 06281995
Comments: of non-hazardous materials were removed.
Comments Date: 10041995
Comments: Certification - Confirmation sampling has shown the soil to be s
Comments Date: 10041995
Comments: uitable for unrestricted use. DTSC has determined that all appr
Comments Date: 10041995
Comments: opriate response actions have been completed, that all acceptable
Comments Date: 10041995
Comments: engineering practices were implemented and that no further remov
Comments Date: 10041995
Comments: al/ remedial action is necessary.
Comments Date: 10131994
Comments: RI/FS - This RI/FS was completed via an EECA for Site 40 which DT
Comments Date: 10131994
Comments: SC approved on October 13, 1994. Site 40 is a former landfill use
Comments Date: 10131994
Comments: d for disposing military wastes. It is approximately 18 acres an
Comments Date: 10131994
Comments: d the central portion of the property consists of a pond which ac
Comments Date: 10131994
Comments: cumulates surface run- off. There are drums buried at this landfi
Comments Date: 10131994
Comments: ll that appear to contain a mixture of chemicals, clothing, and d
Comments Date: 10131994
Comments: omestic refuse. The Air Force will: 1) excavate buried drums and
Comments Date: 10131994
Comments: other solid waste from the creek bed to prepare subgrade for the
Comments Date: 10131994
Comments: liner. Containerized waste will be segregatged, sampled and char
Comments Date: 10131994
Comments: acterized for disposal, 2) construct a new channel, 3) raise the
Comments Date: 10131994
Comments: water level in the pond by constructing a weir, 4) trench at thre
Comments Date: 10131994
Comments: e areas outside of the orignial excavation area which responded p
Comments Date: 10131994
Comments: ositively during the magnetometer survey, 5) engineer the drainag
Comments Date: 10131994
Comments: e inlet and outlet to limit contact between the water in the pond
Comments Date: 10131994
Comments: and the remaining contaminants, if any. Approximate cost = not a
Comments Date: 10131994
Comments: available; funding = BRAC
ID Name: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE - SITE 40 (Continued)

S102008377

ID Value: Not reported
Alternate Name: ALESSANDRO AVIATION FIELD
Alternate Name: MARCH AIR FORCE BASE - SITE 40
Alternate Name: Not reported
Special Programs Code: Not reported
Special Programs Name: Not reported

G49 BUILDING 962
NNE MARCH AFB
1/2-1 MORENO VALLEY, CA 90062
0.773 mi.
4080 ft. Site 3 of 3 in cluster G

CHMIRS S100179024
Notify 65 N/A

Relative:
Higher
Actual:
1494 ft.

CHMIRS:
Name: Not reported
Address: MARCH AFB
City,State,Zip: MORENO VALLEY, CA
OES Incident Number: 7-1205
OES notification: 03/24/1997
OES Date: Not reported
OES Time: Not reported
Date Completed: Not reported
Property Use: Not reported
Agency Id Number: Not reported
Agency Incident Number: Not reported
Time Notified: Not reported
Time Completed: Not reported
Surrounding Area: Not reported
Estimated Temperature: Not reported
Property Management: Not reported
More Than Two Substances Involved?: Not reported
Resp Agncy Personel # Of Decontaminated: Not reported
Responding Agency Personel # Of Injuries: Not reported
Responding Agency Personel # Of Fatalities: Not reported
Others Number Of Decontaminated: Not reported
Others Number Of Injuries: Not reported
Others Number Of Fatalities: Not reported
Vehicle Make/year: Not reported
Vehicle License Number: Not reported
Vehicle State: Not reported
Vehicle Id Number: Not reported
CA DOT PUC/ICC Number: Not reported
Company Name: Not reported
Reporting Officer Name/ID: Not reported
Report Date: Not reported
Facility Telephone: Not reported
Waterway Involved: No
Waterway: Not reported
Spill Site: Not reported
Cleanup By: Reporting Party
Containment: Not reported
What Happened: Not reported
Type: Not reported
Measure: Not reported
Other: Not reported
Date/Time: Not reported
Year: 1997
Agency: AFB Conversion Agency

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUILDING 962 (Continued)

S100179024

Incident Date: 3/23/1997 12:00:00 AM
Admin Agency: Riverside County Environmental Health
Amount: Not reported
Contained: Yes
Site Type: Military Base
E Date: Not reported
Substance: Trichloroethylene
Gallons: btwn 500-1000
Unknown: 0
Substance #2: Not reported
Substance #3: Not reported
Evacuations: 0
Number of Injuries: 0
Number of Fatalities: 0
#1 Pipeline: Not reported
#2 Pipeline: Not reported
#3 Pipeline: Not reported
#1 Vessel >= 300 Tons: Not reported
#2 Vessel >= 300 Tons: Not reported
#3 Vessel >= 300 Tons: Not reported
Evacs: Not reported
Injuries: Not reported
FATALS: Not reported
Comments: Not reported
Description: Somehow the pump tripped at the lift station. Two check valves failed causing tank to overflow. The average concentration is 19.6 PPB

NOTIFY 65:

Name: BUILDING 962
Address: MARCH AFB
City,State,Zip: MORENO VALLEY, CA 90062
Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Issue Date: Not reported
Incident Description: Not reported
Global ID: Not reported
Status: Not reported

**H50
WNW
1/2-1
0.881 mi.
4653 ft.**

**PISTOL RANGE
RIVERSIDE, CA
Site 1 of 2 in cluster H**

**UXO 1024713494
N/A**

**Relative:
Higher
Actual:
1570 ft.**

UXO:
DoD Component: FUDS
Installation Name: CAMP HAAN
Name: PISTOL RANGE
Address: Not reported
Address 2: Not reported
City,State,Zip: RIVERSIDE, CA
Site ID: 000EW
Site Type: Small Arms Range

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

EDR ID Number
 EPA ID Number

PISTOL RANGE (Continued)

1024713494

Latitude: 33.870556
 Longitude: -117.271944

**H51
 WNW
 1/2-1
 0.881 mi.
 4653 ft.**

**CAMP HAAN
 RIVERSIDE, CA
 Site 2 of 2 in cluster H**

**FUDS 1007372675
 N/A**

**Relative:
 Higher
 Actual:
 1570 ft.**

FUDS:
 EPA Region: 9
 Installation ID: CA99799F540000
 Congressional District Number: 41
 Name: CAMP HAAN
 FUDS Number: J09CA0279
 City: RIVERSIDE
 State: CA
 County: RIVERSIDE
 Object ID: 1662
 USACE Division: SPD
 USACE District: Los Angeles District (SPL)
 Status: Properties with all projects at site closeout
 Current Owner: FED: FEDERAL DEPT. OF AIR FORCE , FEDERAL DEPT. OF AIR FORCE
 EMS Map Link: <https://fudsportal.usace.army.mil/ems/ems/inventory/map/map?id=61045>
 Eligibility: Eligible
 Has Projects: Yes
 NPL Status: Not on the NPL
 Property History: The War Department developed Camp Haan on 7,808.59 acres of land that were acquired from August 1940 to December 1943. Originally established as an anti-artillery training center, the camp was later used as a replacement camp, a Prisoner of War distribution center, and a staging area for the Port of Embarkation. The site was declared surplus in August 1946. March Air Force Base acquired 5,596.21 acres as part of the base and March Air Reserve. The remaining 2,212.38 acres (predominantly along the southern and western border) were returned to private ownership and developed into residential areas. From 1976 to 1978 March AFB transferred 921.28 acres to the Veterans Administration for Riverside National Cemetery. In 1984, March AFB sold an additional 2,200 acres to private owners for residential and commercial development.

Project Required: Yes
 Feature Description: Not reported
 Latitude: 33.87055556
 Longitude: -117.27194444

FUDS Detail as of Jan 2015:
 Fiscal Year: 2013
 Federal Facility ID: CA9799F5400
 RAB: Not reported
 NPL Status: Not Listed
 Description: LOCATED SOUTHEAST OF RIVERSIDE AND MORENO VALLEY
 History: CAMP HAAN WAS PRIMARILY USED AS COAST ARTILLERY ANTI-AIRCRAFT TRAINING CENTER. ALSO USED AS A SEPARATION POINT FOR WARTIME SOLDIERS, AND A POW CAMP

CTC: 20112.099999999999
 Current Program: Not reported
 Future Program: Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

CAMP HAAN (Continued)

1007372675

Institutional ID: 61045

MRA:
 Inst ID: 61045
 FUDS Number: J09CA0279
 Facility Name: CAMP HAAN
 PHASE: 4
 ARC: Y
 DIST: SPL
 MMRP: Y
 MRA ID: J09CA027900R01

MRS:
 Inst ID: 61045
 FUDS Number: J09CA0279
 Facility Name: CAMP HAAN
 PHASE: 4
 Site ID: 00
 DIST: SPL
 MMRP: Y
 MRA ID: J09CA027900R01
 PROJ NO: J09CA027900

52
NNW
1/2-1
0.945 mi.
4989 ft.

MARCH AIR FORCE BASE - SITE 24
7,123 ACRES; EAST OF RIVERSIDE, CA
RIVERSIDE, CA 92518

RESPONSE
ENVIROSTOR
HIST Cal-Sites

S101272803
N/A

Relative:
Higher
Actual:
1521 ft.

RESPONSE:
 Name: MARCH AIR FORCE BASE - SITE 40
 Address: 7,123 ACRES; EAST OF RIVERSIDE, CA
 City,State,Zip: RIVERSIDE, CA 92518
 Facility ID: 33970003
 Site Type: State Response
 Site Type Detail: Closed Base
 Acres: 18
 National Priorities List: NO
 Cleanup Oversight Agencies: US EPA
 Lead Agency Description: US EPA
 Project Manager: Not reported
 Supervisor: Not reported
 Division Branch: Cleanup Cypress
 Site Code: Not reported
 Site Mgmt. Req.: NONE SPECIFIED
 Assembly: 61
 Senate: 31
 Special Program Status: Not reported
 Status: Certified
 Status Date: 10/04/1995
 Restricted Use: NO
 Funding: * Defense Environmental Restoration Program (DERP)
 Latitude: 33.88333
 Longitude: -117.2630
 APN: NONE SPECIFIED
 Past Use: LANDFILL - DOMESTIC

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE - SITE 24 (Continued)

S101272803

Potential COC : * Asbestos and Naturally Occurring Asbestos (NOA)
Confirmed COC: * Asbestos and Naturally Occurring Asbestos (NOA)
Potential Description: OTH, SOIL
Alias Name: ALESSANDRO AVIATION FIELD
Alias Type: Alternate Name
Alias Name: 110033608656
Alias Type: EPA (FRS #)
Alias Name: 33970003
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: STE40
Completed Document Type: Removal Action Completion Report
Completed Date: 06/28/1995
Comments: Removal Action (RA) - The primary objective of this time- critical RA was to prevent potential contamination of the surface and storm water in the channel due to exposure to drums and debris buried in the channel bed. Field execution of the RA resulted in removing approximately 70 5-gallon to 20-gallon decomposed drums filled with sodium hydroxide and 30 55 gallon drums filled with roofing tar, asphalt solids and waste, and oil grease solids. Approximately 200 cubic yards of contaminated overburden material extending above and to the sides of the drums, in addition to the drums, were combined in 85 gallon overpack drums and transported off site for treatment/stabilization in lined end-dumps at the Landlaw Environmental. Approximately 14 tons of debris containing non-friable asbestos as less than 10% by total weight were placed in a lined roll-off box and transported off-site to BDC Services, Inc. for disposal. In addition, approximately 6,800 cubic yards of non hazardous materials (consisting of soil and debris) were transported to IRP Site 6a. As part of Site 40 restoration, the water's elevation in the pond was raised by installing a concrete weir at the outlet of the pond. Each site location, including the creek bed, was restored. Vegetation destroyed during construction was replaced with California native plants. This RA, at Site 40, is undertaken as part of the ongoing long term remedial actions (RI/FS OU-2). 100 drums, 200 cubic yards of contaminated soil, 14 tons of non-friable asbestos debris, and 6,800 cubic yards of non-hazardous materials were removed.

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: STE40
Completed Document Type: Feasibility Study Report
Completed Date: 10/13/1994
Comments: RI/FS - This RI/FS was completed via an EECA for Site 40 which DTSC approved on October 13, 1994. Site 40 is a former landfill used for disposing military wastes. It is approximately 18 acres and the central portion of the property consists of a pond which accumulates surface run-off. There are drums buried at this landfill that appear to contain a mixture of chemicals, clothing, and domestic refuse. The Air Force will: 1) excavate buried drums and other solid waste from the creek bed to prepare subgrade for the liner. Containerized waste will be segregated, sampled and characterized for disposal, 2) construct a new channel, 3) raise the water level in the pond by constructing a weir, 4) trench at three areas outside of the original excavation area which responded positively during the magnetometer survey, 5) engineer the drainage inlet and outlet to limit contact between the water in the pond and the remaining contaminants, if any.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE - SITE 24 (Continued)

S101272803

Approximate cost = not available; funding = BRAC

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: STE40
Completed Document Type: Certification
Completed Date: 10/04/1995
Comments: Certification - Confirmation sampling has shown the soil to be suitable for unrestricted use. DTSC has determined that all appropriate response actions have been completed, that all acceptable engineering practices were implemented and that no further removal/remedial action is necessary.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

Name: MARCH AIR FORCE BASE - SITE 24
Address: 7,123 ACRES; EAST OF RIVERSIDE, CA
City,State,Zip: RIVERSIDE, CA 92518
Facility ID: 33350014
Site Type: State Response
Site Type Detail: Closed Base
Acres: 4
National Priorities List: NO
Cleanup Oversight Agencies: US EPA
Lead Agency Description: US EPA
Project Manager: Not reported
Supervisor: Manny Alonzo
Division Branch: Cleanup Cypress
Site Code: Not reported
Site Mgmt. Req.: NONE SPECIFIED
Assembly: 61
Senate: 31
Special Program Status: Not reported
Status: Certified
Status Date: 05/01/1986
Restricted Use: NO
Funding: * Defense Environmental Restoration Program (DERP)
Latitude: 33.8676
Longitude: -117.2636
APN: NONE SPECIFIED
Past Use: INCINERATOR - OTHER
Potential COC : NONE SPECIFIED
Confirmed COC: 31000-NO
Potential Description: OTH, SOIL
Alias Name: 110033608647
Alias Type: EPA (FRS #)
Alias Name: DOD100278600
Alias Type: GeoTracker Global ID
Alias Name: DOD100278800
Alias Type: GeoTracker Global ID

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE - SITE 24 (Continued)

S101272803

Alias Name:	DOD100280300
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100280500
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100281800
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100281900
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100282000
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100282100
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100283700
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100285000
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100285100
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100285200
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100286600
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100288200
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100288300
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100290000
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100291300
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100291400
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100291500
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100291600
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100319500
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100319700
Alias Type:	GeoTracker Global ID
Alias Name:	T0606500618
Alias Type:	GeoTracker Global ID
Alias Name:	33350014
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	Sites With No Operable Unit
Completed Sub Area Name:	STE24
Completed Document Type:	Feasibility Study Report
Completed Date:	09/22/1995
Comments:	Not reported

Completed Area Name:	Sites With No Operable Unit
Completed Sub Area Name:	STE24
Completed Document Type:	Certification
Completed Date:	07/22/1996
Comments:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE - SITE 24 (Continued)

S101272803

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

ENVIROSTOR:

Name: MARCH AIR FORCE BASE - SITE 40
Address: 7,123 ACRES; EAST OF RIVERSIDE, CA
City,State,Zip: RIVERSIDE, CA 92518
Facility ID: 33970003
Status: Certified
Status Date: 10/04/1995
Site Code: Not reported
Site Type: State Response
Site Type Detailed: Closed Base
Acres: 18
NPL: NO
Regulatory Agencies: US EPA
Lead Agency: US EPA
Program Manager: Not reported
Supervisor: Not reported
Division Branch: Cleanup Cypress
Assembly: 61
Senate: 31
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: * Defense Environmental Restoration Program (DERP)
Latitude: 33.88333
Longitude: -117.2630
APN: NONE SPECIFIED
Past Use: LANDFILL - DOMESTIC
Potential COC: * Asbestos and Naturally Occurring Asbestos (NOA)
Confirmed COC: * Asbestos and Naturally Occurring Asbestos (NOA)
Potential Description: OTH, SOIL
Alias Name: ALESSANDRO AVIATION FIELD
Alias Type: Alternate Name
Alias Name: 110033608656
Alias Type: EPA (FRS #)
Alias Name: 33970003
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: STE40
Completed Document Type: Removal Action Completion Report
Completed Date: 06/28/1995
Comments: Removal Action (RA) - The primary objective of this time- critical RA was to prevent potential contamination of the surface and storm water in the channel due to exposure to drums and debris buried in the channel bed. Field execution of the RA resulted in removing approximately 70 5-gallon to 20-gallon decomposed drums filled with

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE - SITE 24 (Continued)

S101272803

sodium hydroxide and 30 55 gallon drums filled with roofing tar, asphalt solids and waste, and oil grease solids. Approximately 200 cubic yards of contaminated overburden material extending above and to the sides of the drums, in addition to the drums, were combined in 85 gallon overpack drums and transported off site for treatment/stabilization in lined end-dumps at the Landlaw Environmental. Approximately 14 tons of debris containing non-friable asbestos as less than 10% by total weight were placed in a lined roll-off box and transported off-site to BDC Services, Inc. for disposal. In addition, approximately 6,800 cubic yards of non hazardous materials (consisting of soil and debris) were transported to IRP Site 6a. As part of Site 40 restoration, the water's elevation in the pond was raised by installing a concrete weir at the outlet of the pond. Each site location, including the creek bed, was restored. Vegetation destroyed during construction was replaced with California native plants. This RA, at Site 40, is undertaken as part of the ongoing long term remedial actions (RI/FS OU-2). 100 drums, 200 cubic yards of contaminated soil, 14 tons of non-friable asbestos debris, and 6,800 cubic yards of non-hazardous materials were removed.

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: STE40
Completed Document Type: Feasibility Study Report
Completed Date: 10/13/1994
Comments: RI/FS - This RI/FS was completed via an EECA for Site 40 which DTSC approved on October 13, 1994. Site 40 is a former landfill used for disposing military wastes. It is approximately 18 acres and the central portion of the property consists of a pond which accumulates surface run-off. There are drums buried at this landfill that appear to contain a mixture of chemicals, clothing, and domestic refuse. The Air Force will: 1) excavate buried drums and other solid waste from the creek bed to prepare subgrade for the liner. Containerized waste will be segregated, sampled and characterized for disposal, 2) construct a new channel, 3) raise the water level in the pond by constructing a weir, 4) trench at three areas outside of the original excavation area which responded positively during the magnetometer survey, 5) engineer the drainage inlet and outlet to limit contact between the water in the pond and the remaining contaminants, if any. Approximate cost = not available; funding = BRAC

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: STE40
Completed Document Type: Certification
Completed Date: 10/04/1995
Comments: Certification - Confirmation sampling has shown the soil to be suitable for unrestricted use. DTSC has determined that all appropriate response actions have been completed, that all acceptable engineering practices were implemented and that no further removal/remedial action is necessary.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE - SITE 24 (Continued)

S101272803

Schedule Due Date: Not reported
Schedule Revised Date: Not reported

Name: MARCH AIR FORCE BASE - SITE 24
Address: 7,123 ACRES; EAST OF RIVERSIDE, CA
City,State,Zip: RIVERSIDE, CA 92518
Facility ID: 33350014
Status: Certified
Status Date: 05/01/1986
Site Code: Not reported
Site Type: State Response
Site Type Detailed: Closed Base
Acres: 4
NPL: NO
Regulatory Agencies: US EPA
Lead Agency: US EPA
Program Manager: Not reported
Supervisor: Manny Alonzo
Division Branch: Cleanup Cypress
Assembly: 61
Senate: 31
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: * Defense Environmental Restoration Program (DERP)
Latitude: 33.8676
Longitude: -117.2636
APN: NONE SPECIFIED
Past Use: INCINERATOR - OTHER
Potential COC: NONE SPECIFIED
Confirmed COC: 31000-NO
Potential Description: OTH, SOIL

Alias Name: 110033608647
Alias Type: EPA (FRS #)
Alias Name: DOD100278600
Alias Type: GeoTracker Global ID
Alias Name: DOD100278800
Alias Type: GeoTracker Global ID
Alias Name: DOD100280300
Alias Type: GeoTracker Global ID
Alias Name: DOD100280500
Alias Type: GeoTracker Global ID
Alias Name: DOD100281800
Alias Type: GeoTracker Global ID
Alias Name: DOD100281900
Alias Type: GeoTracker Global ID
Alias Name: DOD100282000
Alias Type: GeoTracker Global ID
Alias Name: DOD100282100
Alias Type: GeoTracker Global ID
Alias Name: DOD100283700
Alias Type: GeoTracker Global ID
Alias Name: DOD100285000
Alias Type: GeoTracker Global ID
Alias Name: DOD100285100
Alias Type: GeoTracker Global ID
Alias Name: DOD100285200

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE - SITE 24 (Continued)

S101272803

Alias Type: GeoTracker Global ID
Alias Name: DOD100286600
Alias Type: GeoTracker Global ID
Alias Name: DOD100288200
Alias Type: GeoTracker Global ID
Alias Name: DOD100288300
Alias Type: GeoTracker Global ID
Alias Name: DOD100290000
Alias Type: GeoTracker Global ID
Alias Name: DOD100291300
Alias Type: GeoTracker Global ID
Alias Name: DOD100291400
Alias Type: GeoTracker Global ID
Alias Name: DOD100291500
Alias Type: GeoTracker Global ID
Alias Name: DOD100291600
Alias Type: GeoTracker Global ID
Alias Name: DOD100319500
Alias Type: GeoTracker Global ID
Alias Name: DOD100319700
Alias Type: GeoTracker Global ID
Alias Name: T0606500618
Alias Type: GeoTracker Global ID
Alias Name: 33350014
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: STE24
Completed Document Type: Feasibility Study Report
Completed Date: 09/22/1995
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: STE24
Completed Document Type: Certification
Completed Date: 07/22/1996
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

Calsite:

Name: MARCH AIR FORCE BASE - SITE 24
Address: 7,123 ACRES; EAST OF RIVERSIDE, CA
City: RIVERSIDE
Region: GLENDALE
Facility ID: 33350014
Facility Type: CLOSE
Type: CLOSED MILITARY BASE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE - SITE 24 (Continued)

S101272803

Branch: SO
Branch Name: OMF-SOUTHERN CALIF
File Name: Not reported
State Senate District: 05011986
Status: CERTIFIED AS HAVING BEEN REMEDIATED SATISFACTORILY UNDER DTSC OVERSIGHT
Status Name: CERTIFIED
Lead Agency: ENVIRONMENTAL PROTECTION AGENCY
NPL: Not Listed
SIC Code: 35
SIC Name: MANU - INDUSTRIAL MACHINERY & EQUIPMENT
Access: Not reported
Cortese: Not reported
Hazardous Ranking Score: Not reported
Date Site Hazard Ranked: Not reported
Groundwater Contamination: Confirmed
Staff Member Responsible for Site: Not reported
Supervisor Responsible for Site: Not reported
Region Water Control Board: Not reported
Region Water Control Board Name: Not reported
Lat/Long Direction: Not reported
Lat/Long (dms): 0 0 0 / 0 0 0
Lat/long Method: Not reported
Lat/Long Description: Not reported
State Assembly District Code: 64
State Senate District Code: 36
Facility ID: 33350014
Activity: RIFS
Activity Name: REMEDIAL INVESTIGATION / FEASIBILITY STUDY
AWP Code: STE24
Proposed Budget: 0
AWP Completion Date: 09221995
Revised Due Date: Not reported
Comments Date: 09221995
Est Person-Yrs to complete: 0
Estimated Size: Not reported
Request to Delete Activity: Not reported
Activity Status: CERT
Definition of Status: CERTIFIED
Liquids Removed (Gals): 0
Liquids Treated (Gals): 0
Action Included Capping: Not reported
Well Decommissioned: Not reported
Action Included Fencing: Not reported
Removal Action Certification: Not reported
Activity Comments: Not reported
For Commercial Reuse: 0
For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0
Facility ID: 33350014
Activity: CERT
Activity Name: CERTIFICATION
AWP Code: STE24
Proposed Budget: 0
AWP Completion Date: Not reported
Revised Due Date: Not reported
Comments Date: 07221996

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARCH AIR FORCE BASE - SITE 24 (Continued)

S101272803

Est Person-Yrs to complete: 0
Estimated Size: Not reported
Request to Delete Activity: Not reported
Activity Status: CERT
Definition of Status: CERTIFIED
Liquids Removed (Gals): 0
Liquids Treated (Gals): 0
Action Included Capping: Not reported
Well Decommissioned: Not reported
Action Included Fencing: Not reported
Removal Action Certification: Not reported
Activity Comments: Not reported
For Commercial Reuse: 0
For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0
Alternate Address: 7,123 ACRES; EAST OF RIVERSIDE, CA
Alternate City,St,Zip: RIVERSIDE, CA 92518
Alternate Address: 7,123; EAST OF RIVERSIDE, CA
Alternate City,St,Zip: RIVERSIDE, CA 92518
Background Info: Not reported
Comments Date: Not reported
Comments: Not reported
ID Name: Not reported
ID Value: Not reported
Alternate Name: MARCH AIR FORCE BASE - SITE 24
Alternate Name: Not reported
Special Programs Code: Not reported
Special Programs Name: Not reported

Count: 1 records.

ORPHAN SUMMARY

<u>City</u>	<u>EDR ID</u>	<u>Site Name</u>	<u>Site Address</u>	<u>Zip</u>	<u>Database(s)</u>
MORENO VALLEY	S125638995	FUTURE TRUCK TERMINAL	17205 HEACOCK STREET	92551	CPS-SLIC

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 10/20/2021	Source: EPA
Date Data Arrived at EDR: 11/05/2021	Telephone: N/A
Date Made Active in Reports: 11/29/2021	Last EDR Contact: 12/01/2021
Number of Days to Update: 24	Next Scheduled EDR Contact: 01/10/2022
	Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 10/20/2021	Source: EPA
Date Data Arrived at EDR: 11/05/2021	Telephone: N/A
Date Made Active in Reports: 11/29/2021	Last EDR Contact: 12/01/2021
Number of Days to Update: 24	Next Scheduled EDR Contact: 01/10/2022
	Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Lists of Federal Delisted NPL sites

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 10/20/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 11/29/2021
Number of Days to Update: 24

Source: EPA
Telephone: N/A
Last EDR Contact: 12/01/2021
Next Scheduled EDR Contact: 01/10/2022
Data Release Frequency: Quarterly

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 05/25/2021
Date Data Arrived at EDR: 06/24/2021
Date Made Active in Reports: 09/20/2021
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 10/01/2021
Next Scheduled EDR Contact: 01/10/2022
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/20/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 11/29/2021
Number of Days to Update: 24

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 12/01/2021
Next Scheduled EDR Contact: 01/24/2022
Data Release Frequency: Quarterly

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 10/20/2021	Source: EPA
Date Data Arrived at EDR: 11/05/2021	Telephone: 800-424-9346
Date Made Active in Reports: 11/29/2021	Last EDR Contact: 12/01/2021
Number of Days to Update: 24	Next Scheduled EDR Contact: 01/24/2022
	Data Release Frequency: Quarterly

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 09/13/2021	Source: EPA
Date Data Arrived at EDR: 09/15/2021	Telephone: 800-424-9346
Date Made Active in Reports: 10/12/2021	Last EDR Contact: 12/17/2021
Number of Days to Update: 27	Next Scheduled EDR Contact: 04/04/2022
	Data Release Frequency: Quarterly

Lists of Federal RCRA TSD facilities

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 09/13/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/15/2021	Telephone: (415) 495-8895
Date Made Active in Reports: 10/12/2021	Last EDR Contact: 12/17/2021
Number of Days to Update: 27	Next Scheduled EDR Contact: 04/04/2022
	Data Release Frequency: Quarterly

Lists of Federal RCRA generators

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/13/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/15/2021	Telephone: (415) 495-8895
Date Made Active in Reports: 10/12/2021	Last EDR Contact: 12/17/2021
Number of Days to Update: 27	Next Scheduled EDR Contact: 04/04/2022
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 09/13/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/15/2021	Telephone: (415) 495-8895
Date Made Active in Reports: 10/12/2021	Last EDR Contact: 12/17/2021
Number of Days to Update: 27	Next Scheduled EDR Contact: 04/04/2022
	Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/13/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/15/2021	Telephone: (415) 495-8895
Date Made Active in Reports: 10/12/2021	Last EDR Contact: 12/17/2021
Number of Days to Update: 27	Next Scheduled EDR Contact: 04/04/2022
	Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 07/12/2021	Source: Department of the Navy
Date Data Arrived at EDR: 08/06/2021	Telephone: 843-820-7326
Date Made Active in Reports: 10/22/2021	Last EDR Contact: 11/08/2021
Number of Days to Update: 77	Next Scheduled EDR Contact: 02/21/2022
	Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 08/23/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/23/2021	Telephone: 703-603-0695
Date Made Active in Reports: 11/12/2021	Last EDR Contact: 11/18/2021
Number of Days to Update: 81	Next Scheduled EDR Contact: 03/06/2022
	Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 08/23/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/23/2021	Telephone: 703-603-0695
Date Made Active in Reports: 11/12/2021	Last EDR Contact: 11/19/2021
Number of Days to Update: 81	Next Scheduled EDR Contact: 03/07/2022
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/13/2021

Date Data Arrived at EDR: 09/21/2021

Date Made Active in Reports: 12/15/2021

Number of Days to Update: 85

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180

Last EDR Contact: 12/16/2021

Next Scheduled EDR Contact: 04/04/2022

Data Release Frequency: Quarterly

Lists of state- and tribal (Superfund) equivalent sites

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity.

These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 07/22/2021

Date Data Arrived at EDR: 07/22/2021

Date Made Active in Reports: 10/08/2021

Number of Days to Update: 78

Source: Department of Toxic Substances Control

Telephone: 916-323-3400

Last EDR Contact: 10/26/2021

Next Scheduled EDR Contact: 02/07/2022

Data Release Frequency: Quarterly

Lists of state- and tribal hazardous waste facilities

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 07/22/2021

Date Data Arrived at EDR: 07/22/2021

Date Made Active in Reports: 10/08/2021

Number of Days to Update: 78

Source: Department of Toxic Substances Control

Telephone: 916-323-3400

Last EDR Contact: 10/26/2021

Next Scheduled EDR Contact: 02/07/2022

Data Release Frequency: Quarterly

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 08/09/2021

Date Data Arrived at EDR: 08/10/2021

Date Made Active in Reports: 11/05/2021

Number of Days to Update: 87

Source: Department of Resources Recycling and Recovery

Telephone: 916-341-6320

Last EDR Contact: 11/09/2021

Next Scheduled EDR Contact: 02/21/2022

Data Release Frequency: Quarterly

Lists of state and tribal leaking storage tanks

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)

Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/07/2021	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/07/2021	Telephone: see region list
Date Made Active in Reports: 11/29/2021	Last EDR Contact: 12/07/2021
Number of Days to Update: 83	Next Scheduled EDR Contact: 03/21/2022
	Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001	Source: California Regional Water Quality Control Board North Coast (1)
Date Data Arrived at EDR: 02/28/2001	Telephone: 707-570-3769
Date Made Active in Reports: 03/29/2001	Last EDR Contact: 08/01/2011
Number of Days to Update: 29	Next Scheduled EDR Contact: 11/14/2011
	Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003	Source: California Regional Water Quality Control Board Lahontan Region (6)
Date Data Arrived at EDR: 09/10/2003	Telephone: 530-542-5572
Date Made Active in Reports: 10/07/2003	Last EDR Contact: 09/12/2011
Number of Days to Update: 27	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005	Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Date Data Arrived at EDR: 06/07/2005	Telephone: 760-241-7365
Date Made Active in Reports: 06/29/2005	Last EDR Contact: 09/12/2011
Number of Days to Update: 22	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003	Source: California Regional Water Quality Control Board Central Coast Region (3)
Date Data Arrived at EDR: 05/19/2003	Telephone: 805-542-4786
Date Made Active in Reports: 06/02/2003	Last EDR Contact: 07/18/2011
Number of Days to Update: 14	Next Scheduled EDR Contact: 10/31/2011
	Data Release Frequency: No Update Planned

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 06/01/2021	Source: EPA Region 7
Date Data Arrived at EDR: 06/11/2021	Telephone: 913-551-7003
Date Made Active in Reports: 09/07/2021	Last EDR Contact: 11/15/2021
Number of Days to Update: 88	Next Scheduled EDR Contact: 01/31/2022
	Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/28/2021	Source: EPA Region 1
Date Data Arrived at EDR: 06/11/2021	Telephone: 617-918-1313
Date Made Active in Reports: 09/07/2021	Last EDR Contact: 11/15/2021
Number of Days to Update: 88	Next Scheduled EDR Contact: 01/31/2022
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 05/17/2021	Source: EPA Region 6
Date Data Arrived at EDR: 06/11/2021	Telephone: 214-665-6597
Date Made Active in Reports: 09/07/2021	Last EDR Contact: 11/15/2021
Number of Days to Update: 88	Next Scheduled EDR Contact: 01/31/2022
	Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 05/27/2021	Source: EPA Region 8
Date Data Arrived at EDR: 06/11/2021	Telephone: 303-312-6271
Date Made Active in Reports: 09/07/2021	Last EDR Contact: 11/15/2021
Number of Days to Update: 88	Next Scheduled EDR Contact: 01/31/2022
	Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 05/28/2021	Source: EPA Region 4
Date Data Arrived at EDR: 06/22/2021	Telephone: 404-562-8677
Date Made Active in Reports: 09/20/2021	Last EDR Contact: 11/15/2021
Number of Days to Update: 90	Next Scheduled EDR Contact: 01/31/2022
	Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 05/27/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/11/2021	Telephone: 415-972-3372
Date Made Active in Reports: 09/07/2021	Last EDR Contact: 11/15/2021
Number of Days to Update: 88	Next Scheduled EDR Contact: 01/31/2022
	Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/06/2021	Source: EPA, Region 5
Date Data Arrived at EDR: 06/11/2021	Telephone: 312-886-7439
Date Made Active in Reports: 09/07/2021	Last EDR Contact: 11/15/2021
Number of Days to Update: 88	Next Scheduled EDR Contact: 01/31/2022
	Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/27/2021	Source: EPA Region 10
Date Data Arrived at EDR: 06/11/2021	Telephone: 206-553-2857
Date Made Active in Reports: 09/07/2021	Last EDR Contact: 11/15/2021
Number of Days to Update: 88	Next Scheduled EDR Contact: 01/31/2022
	Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)

Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/07/2021	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/07/2021	Telephone: 866-480-1028
Date Made Active in Reports: 11/29/2021	Last EDR Contact: 12/07/2021
Number of Days to Update: 83	Next Scheduled EDR Contact: 03/21/2022
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SLIC REG 6L: SLIC Sites

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: No Update Planned

Lists of state and tribal registered storage tanks

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/29/2021
Date Data Arrived at EDR: 02/17/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 33

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 11/01/2021
Next Scheduled EDR Contact: 01/17/2022
Data Release Frequency: Varies

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 09/07/2021
Date Data Arrived at EDR: 09/07/2021
Date Made Active in Reports: 11/30/2021
Number of Days to Update: 84

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 12/07/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

MILITARY UST SITES: Military UST Sites (GEOTRACKER)

Military ust sites

Date of Government Version: 09/07/2021	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/07/2021	Telephone: 866-480-1028
Date Made Active in Reports: 11/29/2021	Last EDR Contact: 12/07/2021
Number of Days to Update: 83	Next Scheduled EDR Contact: 03/21/2022
	Data Release Frequency: Varies

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases

UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 08/18/2021	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/08/2021	Telephone: 916-327-7844
Date Made Active in Reports: 12/03/2021	Last EDR Contact: 12/07/2021
Number of Days to Update: 86	Next Scheduled EDR Contact: 03/21/2022
	Data Release Frequency: Varies

AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 07/12/2016	Telephone: 916-327-5092
Date Made Active in Reports: 09/19/2016	Last EDR Contact: 12/08/2021
Number of Days to Update: 69	Next Scheduled EDR Contact: 03/28/2022
	Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/27/2021	Source: EPA Region 10
Date Data Arrived at EDR: 06/11/2021	Telephone: 206-553-2857
Date Made Active in Reports: 09/07/2021	Last EDR Contact: 11/15/2021
Number of Days to Update: 88	Next Scheduled EDR Contact: 01/31/2022
	Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/06/2021	Source: EPA Region 5
Date Data Arrived at EDR: 06/11/2021	Telephone: 312-886-6136
Date Made Active in Reports: 09/07/2021	Last EDR Contact: 11/15/2021
Number of Days to Update: 88	Next Scheduled EDR Contact: 01/31/2022
	Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 06/01/2021	Source: EPA Region 7
Date Data Arrived at EDR: 06/11/2021	Telephone: 913-551-7003
Date Made Active in Reports: 09/07/2021	Last EDR Contact: 11/15/2021
Number of Days to Update: 88	Next Scheduled EDR Contact: 01/31/2022
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 05/27/2021	Source: EPA Region 8
Date Data Arrived at EDR: 06/11/2021	Telephone: 303-312-6137
Date Made Active in Reports: 09/07/2021	Last EDR Contact: 11/15/2021
Number of Days to Update: 88	Next Scheduled EDR Contact: 01/31/2022
	Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 05/27/2021	Source: EPA Region 9
Date Data Arrived at EDR: 06/11/2021	Telephone: 415-972-3368
Date Made Active in Reports: 09/07/2021	Last EDR Contact: 11/15/2021
Number of Days to Update: 88	Next Scheduled EDR Contact: 01/31/2022
	Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/17/2021	Source: EPA Region 6
Date Data Arrived at EDR: 06/11/2021	Telephone: 214-665-7591
Date Made Active in Reports: 09/07/2021	Last EDR Contact: 11/15/2021
Number of Days to Update: 88	Next Scheduled EDR Contact: 01/31/2022
	Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations).

Date of Government Version: 05/28/2021	Source: EPA Region 4
Date Data Arrived at EDR: 06/22/2021	Telephone: 404-562-9424
Date Made Active in Reports: 09/20/2021	Last EDR Contact: 11/15/2021
Number of Days to Update: 90	Next Scheduled EDR Contact: 01/31/2022
	Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/28/2021	Source: EPA, Region 1
Date Data Arrived at EDR: 06/11/2021	Telephone: 617-918-1313
Date Made Active in Reports: 09/07/2021	Last EDR Contact: 11/15/2021
Number of Days to Update: 88	Next Scheduled EDR Contact: 01/31/2022
	Data Release Frequency: Varies

Lists of state and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015	Source: EPA, Region 1
Date Data Arrived at EDR: 09/29/2015	Telephone: 617-918-1102
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 12/14/2021
Number of Days to Update: 142	Next Scheduled EDR Contact: 04/04/2022
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 07/22/2021
Date Data Arrived at EDR: 07/22/2021
Date Made Active in Reports: 10/08/2021
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/26/2021
Next Scheduled EDR Contact: 02/07/2022
Data Release Frequency: Quarterly

INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 07/08/2021
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

Lists of state and tribal brownfield sites

BROWNFIELDS: Considered Brownfields Sites Listing

A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 09/20/2021
Date Data Arrived at EDR: 09/21/2021
Date Made Active in Reports: 12/08/2021
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 12/16/2021
Next Scheduled EDR Contact: 04/04/2022
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/10/2021
Date Data Arrived at EDR: 06/10/2021
Date Made Active in Reports: 08/17/2021
Number of Days to Update: 68

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 12/08/2021
Next Scheduled EDR Contact: 03/28/2022
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 10/22/2021
Next Scheduled EDR Contact: 02/07/2022
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 09/07/2021
Date Data Arrived at EDR: 09/08/2021
Date Made Active in Reports: 11/29/2021
Number of Days to Update: 82

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 12/07/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 09/14/2021
Date Data Arrived at EDR: 11/11/2021
Date Made Active in Reports: 11/23/2021
Number of Days to Update: 12

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 11/05/2021
Next Scheduled EDR Contact: 02/21/2022
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 10/22/2021
Next Scheduled EDR Contact: 02/07/2022
Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 10/14/2021
Next Scheduled EDR Contact: 01/31/2022
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Services, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 10/28/2021
Next Scheduled EDR Contact: 02/07/2022
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 05/18/2021	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 05/18/2021	Telephone: 202-307-1000
Date Made Active in Reports: 08/03/2021	Last EDR Contact: 11/16/2021
Number of Days to Update: 77	Next Scheduled EDR Contact: 03/07/2022
	Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005	Source: Department of Toxic Substance Control
Date Data Arrived at EDR: 08/03/2006	Telephone: 916-323-3400
Date Made Active in Reports: 08/24/2006	Last EDR Contact: 02/23/2009
Number of Days to Update: 21	Next Scheduled EDR Contact: 05/25/2009
	Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 07/22/2021	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 07/22/2021	Telephone: 916-323-3400
Date Made Active in Reports: 10/08/2021	Last EDR Contact: 10/26/2021
Number of Days to Update: 78	Next Scheduled EDR Contact: 02/07/2022
	Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2019	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 01/20/2021	Telephone: 916-255-6504
Date Made Active in Reports: 04/08/2021	Last EDR Contact: 11/11/2021
Number of Days to Update: 78	Next Scheduled EDR Contact: 01/17/2022
	Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995	Source: State Water Resources Control Board
Date Data Arrived at EDR: 08/30/1995	Telephone: 916-227-4364
Date Made Active in Reports: 09/26/1995	Last EDR Contact: 01/26/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 04/27/2009
	Data Release Frequency: No Update Planned

CERS HAZ WASTE: CERS HAZ WASTE

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/15/2021
Date Data Arrived at EDR: 07/15/2021
Date Made Active in Reports: 10/06/2021
Number of Days to Update: 83

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 10/19/2021
Next Scheduled EDR Contact: 01/31/2022
Data Release Frequency: Quarterly

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 05/18/2021
Date Data Arrived at EDR: 05/18/2021
Date Made Active in Reports: 08/03/2021
Number of Days to Update: 77

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 11/16/2021
Next Scheduled EDR Contact: 03/07/2022
Data Release Frequency: Quarterly

AQUEOUS FOAM: Former Fire Training Facility Assessments Listing

Airports shown on this list are those believed to use Aqueous Film Forming Foam (AFFF), and certified by the Federal Aviation Administration (FAA) under Title 14, Code of Federal Regulations (CFR), Part 139 (14 CFR Part 139). This list was created by SWRCB using information available from the FAA. Location points shown are from the latitude and longitude listed on the FAA airport master record.

Date of Government Version: 12/01/2019
Date Data Arrived at EDR: 08/19/2021
Date Made Active in Reports: 10/28/2021
Number of Days to Update: 70

Source: State Water Resources Control Board
Telephone: 916-341-5455
Last EDR Contact: 12/10/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Varies

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 09/07/2021
Date Data Arrived at EDR: 09/08/2021
Date Made Active in Reports: 12/01/2021
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/07/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Varies

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing

Aboveground storage tank sites

Date of Government Version: 08/05/2021
Date Data Arrived at EDR: 08/05/2021
Date Made Active in Reports: 10/29/2021
Number of Days to Update: 85

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 10/31/2021
Next Scheduled EDR Contact: 02/14/2022
Data Release Frequency: Varies

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CERS TANKS: California Environmental Reporting System (CERS) Tanks

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 07/15/2021
Date Data Arrived at EDR: 07/15/2021
Date Made Active in Reports: 10/06/2021
Number of Days to Update: 83

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 10/19/2021
Next Scheduled EDR Contact: 01/31/2022
Data Release Frequency: Quarterly

Local Land Records

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 08/25/2021
Date Data Arrived at EDR: 09/03/2021
Date Made Active in Reports: 11/22/2021
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 11/22/2021
Next Scheduled EDR Contact: 03/14/2022
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 10/20/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 11/29/2021
Number of Days to Update: 24

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 12/01/2021
Next Scheduled EDR Contact: 01/10/2022
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 08/30/2021	Source: DTSC and SWRCB
Date Data Arrived at EDR: 08/31/2021	Telephone: 916-323-3400
Date Made Active in Reports: 11/19/2021	Last EDR Contact: 11/30/2021
Number of Days to Update: 80	Next Scheduled EDR Contact: 03/14/2022
	Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 09/12/2021	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 09/13/2021	Telephone: 202-366-4555
Date Made Active in Reports: 09/28/2021	Last EDR Contact: 12/16/2021
Number of Days to Update: 15	Next Scheduled EDR Contact: 04/04/2022
	Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 06/30/2021	Source: Office of Emergency Services
Date Data Arrived at EDR: 07/15/2021	Telephone: 916-845-8400
Date Made Active in Reports: 10/06/2021	Last EDR Contact: 10/19/2021
Number of Days to Update: 83	Next Scheduled EDR Contact: 01/31/2022
	Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/07/2021	Source: State Water Quality Control Board
Date Data Arrived at EDR: 09/07/2021	Telephone: 866-480-1028
Date Made Active in Reports: 11/29/2021	Last EDR Contact: 12/07/2021
Number of Days to Update: 83	Next Scheduled EDR Contact: 03/21/2022
	Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/07/2021	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/07/2021	Telephone: 866-480-1028
Date Made Active in Reports: 11/29/2021	Last EDR Contact: 12/07/2021
Number of Days to Update: 83	Next Scheduled EDR Contact: 03/21/2022
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012	Source: FirstSearch
Date Data Arrived at EDR: 01/03/2013	Telephone: N/A
Date Made Active in Reports: 02/22/2013	Last EDR Contact: 01/03/2013
Number of Days to Update: 50	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 09/13/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/15/2021	Telephone: (415) 495-8895
Date Made Active in Reports: 10/12/2021	Last EDR Contact: 12/17/2021
Number of Days to Update: 27	Next Scheduled EDR Contact: 04/04/2022
	Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 08/10/2021	Source: U.S. Army Corps of Engineers
Date Data Arrived at EDR: 08/17/2021	Telephone: 202-528-4285
Date Made Active in Reports: 10/22/2021	Last EDR Contact: 11/16/2021
Number of Days to Update: 66	Next Scheduled EDR Contact: 02/28/2022
	Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005	Source: USGS
Date Data Arrived at EDR: 11/10/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 10/15/2021
Number of Days to Update: 62	Next Scheduled EDR Contact: 01/24/2022
	Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018	Source: U.S. Geological Survey
Date Data Arrived at EDR: 04/11/2018	Telephone: 888-275-8747
Date Made Active in Reports: 11/06/2019	Last EDR Contact: 10/05/2021
Number of Days to Update: 574	Next Scheduled EDR Contact: 01/17/2022
	Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 11/08/2021
Next Scheduled EDR Contact: 02/21/2022
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 09/13/2021
Date Data Arrived at EDR: 09/15/2021
Date Made Active in Reports: 09/28/2021
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 12/17/2021
Next Scheduled EDR Contact: 04/04/2022
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 11/01/2021
Next Scheduled EDR Contact: 02/14/2022
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 11/05/2021
Next Scheduled EDR Contact: 02/14/2022
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/17/2020
Date Made Active in Reports: 09/10/2020
Number of Days to Update: 85

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 12/17/2021
Next Scheduled EDR Contact: 03/28/2022
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 08/14/2020
Date Made Active in Reports: 11/04/2020
Number of Days to Update: 82

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 11/16/2021
Next Scheduled EDR Contact: 02/28/2022
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 07/19/2021
Date Data Arrived at EDR: 07/19/2021
Date Made Active in Reports: 10/12/2021
Number of Days to Update: 85

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 10/20/2021
Next Scheduled EDR Contact: 01/31/2022
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 10/20/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 11/29/2021
Number of Days to Update: 24

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 12/01/2021
Next Scheduled EDR Contact: 03/14/2022
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 10/20/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 11/12/2021
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 10/18/2021
Next Scheduled EDR Contact: 01/31/2022
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/20/2021	Source: EPA
Date Data Arrived at EDR: 11/05/2021	Telephone: 202-564-6023
Date Made Active in Reports: 12/15/2021	Last EDR Contact: 12/01/2021
Number of Days to Update: 40	Next Scheduled EDR Contact: 02/14/2022
	Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 11/19/2020	Source: EPA
Date Data Arrived at EDR: 01/08/2021	Telephone: 202-566-0500
Date Made Active in Reports: 03/22/2021	Last EDR Contact: 10/08/2021
Number of Days to Update: 73	Next Scheduled EDR Contact: 01/17/2022
	Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/23/2016	Telephone: 202-564-2501
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 09/30/2021
Number of Days to Update: 79	Next Scheduled EDR Contact: 01/17/2022
	Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 07/29/2021	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 08/24/2021	Telephone: 301-415-7169
Date Made Active in Reports: 11/19/2021	Last EDR Contact: 10/18/2021
Number of Days to Update: 87	Next Scheduled EDR Contact: 01/31/2022
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2019	Source: Department of Energy
Date Data Arrived at EDR: 12/01/2020	Telephone: 202-586-8719
Date Made Active in Reports: 02/09/2021	Last EDR Contact: 11/30/2021
Number of Days to Update: 70	Next Scheduled EDR Contact: 03/14/2022
	Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/05/2019	Telephone: N/A
Date Made Active in Reports: 11/11/2019	Last EDR Contact: 12/02/2021
Number of Days to Update: 251	Next Scheduled EDR Contact: 03/14/2022
	Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/06/2019	Telephone: 202-566-0517
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 11/05/2021
Number of Days to Update: 96	Next Scheduled EDR Contact: 02/14/2022
	Data Release Frequency: Varies

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/01/2019	Telephone: 202-343-9775
Date Made Active in Reports: 09/23/2019	Last EDR Contact: 09/27/2021
Number of Days to Update: 84	Next Scheduled EDR Contact: 01/10/2022
	Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80

Source: Department of Transportation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 10/26/2021
Next Scheduled EDR Contact: 02/07/2022
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/30/2021
Date Data Arrived at EDR: 07/14/2021
Date Made Active in Reports: 07/16/2021
Number of Days to Update: 2

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 09/30/2021
Next Scheduled EDR Contact: 01/17/2022
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 09/15/2021
Date Made Active in Reports: 12/14/2021
Number of Days to Update: 90

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 12/17/2021
Next Scheduled EDR Contact: 04/04/2022
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 10/05/2021
Next Scheduled EDR Contact: 01/17/2022
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 07/26/2021
Date Data Arrived at EDR: 07/27/2021
Date Made Active in Reports: 10/22/2021
Number of Days to Update: 87

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 11/01/2021
Next Scheduled EDR Contact: 02/14/2022
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 12/09/2021
Next Scheduled EDR Contact: 02/28/2022
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 10/20/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 11/29/2021
Number of Days to Update: 24

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 11/30/2021
Next Scheduled EDR Contact: 01/10/2022
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 06/30/2021
Date Data Arrived at EDR: 07/01/2021
Date Made Active in Reports: 09/28/2021
Number of Days to Update: 89

Source: DOL, Mine Safety & Health Administration
Telephone: 202-693-9424
Last EDR Contact: 12/20/2021
Next Scheduled EDR Contact: 03/14/2022
Data Release Frequency: Quarterly

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/09/2021
Date Data Arrived at EDR: 08/24/2021
Date Made Active in Reports: 11/19/2021
Number of Days to Update: 87

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 11/22/2021
Next Scheduled EDR Contact: 03/07/2022
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 05/06/2020
Date Data Arrived at EDR: 05/27/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 78

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 11/22/2021
Next Scheduled EDR Contact: 03/07/2022
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 11/22/2021
Next Scheduled EDR Contact: 03/07/2022
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 09/14/2021
Date Data Arrived at EDR: 09/15/2021
Date Made Active in Reports: 12/15/2021
Number of Days to Update: 91

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 12/14/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 05/05/2021
Date Data Arrived at EDR: 05/18/2021
Date Made Active in Reports: 08/17/2021
Number of Days to Update: 91

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 11/22/2021
Next Scheduled EDR Contact: 03/14/2022
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 07/02/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 77

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 10/07/2021
Next Scheduled EDR Contact: 01/24/2022
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 06/26/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/01/2021	Telephone: 202-564-2280
Date Made Active in Reports: 09/28/2021	Last EDR Contact: 10/05/2021
Number of Days to Update: 89	Next Scheduled EDR Contact: 01/17/2022
	Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/06/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/21/2021	Telephone: 202-564-0527
Date Made Active in Reports: 08/11/2021	Last EDR Contact: 11/23/2021
Number of Days to Update: 82	Next Scheduled EDR Contact: 03/07/2022
	Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 08/13/2021	Source: EPA
Date Data Arrived at EDR: 08/13/2021	Telephone: 800-385-6164
Date Made Active in Reports: 10/22/2021	Last EDR Contact: 11/15/2021
Number of Days to Update: 70	Next Scheduled EDR Contact: 02/28/2022
	Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989	Source: Department of Health Services
Date Data Arrived at EDR: 07/27/1994	Telephone: 916-255-2118
Date Made Active in Reports: 08/02/1994	Last EDR Contact: 05/31/1994
Number of Days to Update: 6	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 09/20/2021	Source: CAL EPA/Office of Emergency Information
Date Data Arrived at EDR: 09/21/2021	Telephone: 916-323-3400
Date Made Active in Reports: 12/08/2021	Last EDR Contact: 12/16/2021
Number of Days to Update: 78	Next Scheduled EDR Contact: 04/04/2022
	Data Release Frequency: Quarterly

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing

list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 05/01/2019	Source: Livermore-Pleasanton Fire Department
Date Data Arrived at EDR: 05/14/2019	Telephone: 925-454-2361
Date Made Active in Reports: 07/17/2019	Last EDR Contact: 11/19/2021
Number of Days to Update: 64	Next Scheduled EDR Contact: 02/21/2022
	Data Release Frequency: Varies

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing

A listing of dry cleaners in the South Coast Air Quality Management District

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/18/2021
Date Data Arrived at EDR: 08/23/2021
Date Made Active in Reports: 11/12/2021
Number of Days to Update: 81

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 11/16/2021
Next Scheduled EDR Contact: 03/07/2022
Data Release Frequency: Varies

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing

A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 08/24/2021
Date Data Arrived at EDR: 08/25/2021
Date Made Active in Reports: 11/17/2021
Number of Days to Update: 84

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 11/23/2021
Next Scheduled EDR Contact: 03/14/2022
Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 08/27/2021
Date Data Arrived at EDR: 09/01/2021
Date Made Active in Reports: 11/19/2021
Number of Days to Update: 79

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 12/20/2021
Next Scheduled EDR Contact: 03/14/2022
Data Release Frequency: Annually

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 06/10/2021
Date Made Active in Reports: 08/27/2021
Number of Days to Update: 78

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 12/17/2021
Next Scheduled EDR Contact: 03/28/2022
Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 04/16/2021
Date Data Arrived at EDR: 04/20/2021
Date Made Active in Reports: 07/07/2021
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 11/04/2021
Next Scheduled EDR Contact: 01/31/2022
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 04/14/2021
Date Data Arrived at EDR: 04/15/2021
Date Made Active in Reports: 07/06/2021
Number of Days to Update: 82

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 10/05/2021
Next Scheduled EDR Contact: 01/31/2022
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/13/2021
Date Data Arrived at EDR: 08/13/2021
Date Made Active in Reports: 11/05/2021
Number of Days to Update: 84

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 11/16/2021
Next Scheduled EDR Contact: 02/21/2022
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 04/15/2020
Date Made Active in Reports: 07/02/2020
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 10/08/2021
Next Scheduled EDR Contact: 01/17/2022
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 08/13/2021
Date Data Arrived at EDR: 08/13/2021
Date Made Active in Reports: 11/08/2021
Number of Days to Update: 87

Source: Department of Toxic Substances Control
Telephone: 877-786-9427
Last EDR Contact: 11/15/2021
Next Scheduled EDR Contact: 02/28/2022
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 08/13/2021
Date Data Arrived at EDR: 08/13/2021
Date Made Active in Reports: 11/08/2021
Number of Days to Update: 87

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 11/15/2021
Next Scheduled EDR Contact: 02/28/2022
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 10/04/2021
Date Data Arrived at EDR: 10/05/2021
Date Made Active in Reports: 12/22/2021
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 10/05/2021
Next Scheduled EDR Contact: 01/17/2022
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 09/07/2021	Source: Department of Conservation
Date Data Arrived at EDR: 09/07/2021	Telephone: 916-322-1080
Date Made Active in Reports: 11/29/2021	Last EDR Contact: 12/07/2021
Number of Days to Update: 83	Next Scheduled EDR Contact: 03/21/2022
	Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 08/05/2021	Source: Department of Public Health
Date Data Arrived at EDR: 08/31/2021	Telephone: 916-558-1784
Date Made Active in Reports: 11/19/2021	Last EDR Contact: 11/30/2021
Number of Days to Update: 80	Next Scheduled EDR Contact: 03/14/2022
	Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 05/10/2021	Source: State Water Resources Control Board
Date Data Arrived at EDR: 05/11/2021	Telephone: 916-445-9379
Date Made Active in Reports: 07/27/2021	Last EDR Contact: 11/09/2021
Number of Days to Update: 77	Next Scheduled EDR Contact: 02/21/2022
	Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 08/30/2021	Source: Department of Pesticide Regulation
Date Data Arrived at EDR: 08/31/2021	Telephone: 916-445-4038
Date Made Active in Reports: 11/19/2021	Last EDR Contact: 11/30/2021
Number of Days to Update: 80	Next Scheduled EDR Contact: 03/14/2022
	Data Release Frequency: Quarterly

PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 06/04/2021	Source: Department of Conservation
Date Data Arrived at EDR: 06/04/2021	Telephone: 916-323-3836
Date Made Active in Reports: 08/27/2021	Last EDR Contact: 11/29/2021
Number of Days to Update: 84	Next Scheduled EDR Contact: 03/21/2022
	Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 03/12/2021	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/16/2021	Telephone: 916-445-3846
Date Made Active in Reports: 06/01/2021	Last EDR Contact: 12/08/2021
Number of Days to Update: 77	Next Scheduled EDR Contact: 03/28/2022
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 06/03/2021	Source: Department of Conservation
Date Data Arrived at EDR: 06/03/2021	Telephone: 916-445-2408
Date Made Active in Reports: 08/25/2021	Last EDR Contact: 12/07/2021
Number of Days to Update: 83	Next Scheduled EDR Contact: 03/21/2022
	Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)

Underground control injection sites

Date of Government Version: 09/07/2021	Source: State Water Resource Control Board
Date Data Arrived at EDR: 09/07/2021	Telephone: 866-480-1028
Date Made Active in Reports: 11/29/2021	Last EDR Contact: 12/07/2021
Number of Days to Update: 83	Next Scheduled EDR Contact: 03/21/2022
	Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing

Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 02/11/2021	Source: RWQCB, Central Valley Region
Date Data Arrived at EDR: 07/01/2021	Telephone: 559-445-5577
Date Made Active in Reports: 09/29/2021	Last EDR Contact: 10/08/2021
Number of Days to Update: 90	Next Scheduled EDR Contact: 01/17/2022
	Data Release Frequency: Varies

WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007	Source: State Water Resources Control Board
Date Data Arrived at EDR: 06/20/2007	Telephone: 916-341-5227
Date Made Active in Reports: 06/29/2007	Last EDR Contact: 11/15/2021
Number of Days to Update: 9	Next Scheduled EDR Contact: 02/28/2022
	Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009	Source: Los Angeles Water Quality Control Board
Date Data Arrived at EDR: 07/21/2009	Telephone: 213-576-6726
Date Made Active in Reports: 08/03/2009	Last EDR Contact: 12/14/2021
Number of Days to Update: 13	Next Scheduled EDR Contact: 04/04/2022
	Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)

Military privatized sites

Date of Government Version: 09/07/2021	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/07/2021	Telephone: 866-480-1028
Date Made Active in Reports: 11/29/2021	Last EDR Contact: 12/07/2021
Number of Days to Update: 83	Next Scheduled EDR Contact: 03/21/2022
	Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)

Projects sites

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/07/2021
Date Data Arrived at EDR: 09/07/2021
Date Made Active in Reports: 11/29/2021
Number of Days to Update: 83

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/07/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing

In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 09/07/2021
Date Data Arrived at EDR: 09/08/2021
Date Made Active in Reports: 12/01/2021
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 12/07/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 08/30/2021
Date Data Arrived at EDR: 08/31/2021
Date Made Active in Reports: 11/19/2021
Number of Days to Update: 80

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 11/30/2021
Next Scheduled EDR Contact: 03/14/2022
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 07/15/2021
Date Data Arrived at EDR: 07/15/2021
Date Made Active in Reports: 10/06/2021
Number of Days to Update: 83

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 10/19/2021
Next Scheduled EDR Contact: 01/31/2022
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 09/07/2021
Date Data Arrived at EDR: 09/07/2021
Date Made Active in Reports: 11/29/2021
Number of Days to Update: 83

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/07/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 09/07/2021
Date Data Arrived at EDR: 09/07/2021
Date Made Active in Reports: 11/29/2021
Number of Days to Update: 83

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/07/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)

Produced water ponds sites

Date of Government Version: 09/07/2021

Date Data Arrived at EDR: 09/07/2021

Date Made Active in Reports: 11/29/2021

Number of Days to Update: 83

Source: State Water Resources Control Board

Telephone: 866-480-1028

Last EDR Contact: 12/07/2021

Next Scheduled EDR Contact: 03/21/2022

Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)

Sampling point - public sites

Date of Government Version: 09/07/2021

Date Data Arrived at EDR: 09/07/2021

Date Made Active in Reports: 11/29/2021

Number of Days to Update: 83

Source: State Water Resources Control Board

Telephone: 866-480-1028

Last EDR Contact: 12/07/2021

Next Scheduled EDR Contact: 03/21/2022

Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)

Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 09/07/2021

Date Data Arrived at EDR: 09/07/2021

Date Made Active in Reports: 11/29/2021

Number of Days to Update: 83

Source: State Water Resources Control Board

Telephone: 866-480-1028

Last EDR Contact: 12/07/2021

Next Scheduled EDR Contact: 03/21/2022

Data Release Frequency: Varies

HWTS: Hazardous Waste Tracking System

DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.

Date of Government Version: 07/13/2021

Date Data Arrived at EDR: 07/14/2021

Date Made Active in Reports: 10/06/2021

Number of Days to Update: 84

Source: Department of Toxic Substances Control

Telephone: 916-324-2444

Last EDR Contact: 09/30/2021

Next Scheduled EDR Contact: 01/17/2022

Data Release Frequency: Varies

MINES MRDS: Mineral Resources Data System

Mineral Resources Data System

Date of Government Version: 04/06/2018

Date Data Arrived at EDR: 10/21/2019

Date Made Active in Reports: 10/24/2019

Number of Days to Update: 3

Source: USGS

Telephone: 703-648-6533

Last EDR Contact: 11/23/2021

Next Scheduled EDR Contact: 03/07/2022

Data Release Frequency: Varies

PCS ENF: Enforcement data

No description is available for this data

Date of Government Version: 12/31/2014

Date Data Arrived at EDR: 02/05/2015

Date Made Active in Reports: 03/06/2015

Number of Days to Update: 29

Source: EPA

Telephone: 202-564-2497

Last EDR Contact: 09/30/2021

Next Scheduled EDR Contact: 01/17/2022

Data Release Frequency: Varies

PCS INACTIVE: Listing of Inactive PCS Permits

An inactive permit is a facility that has shut down or is no longer discharging.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 11/05/2014
Date Data Arrived at EDR: 01/06/2015
Date Made Active in Reports: 05/06/2015
Number of Days to Update: 120

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/30/2021
Next Scheduled EDR Contact: 01/17/2022
Data Release Frequency: Semi-Annually

PCS: Permit Compliance System

PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 55

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 09/30/2021
Next Scheduled EDR Contact: 01/17/2022
Data Release Frequency: Semi-Annually

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 09/30/2021
Next Scheduled EDR Contact: 01/17/2022
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 09/30/2021
Date Data Arrived at EDR: 10/01/2021
Date Made Active in Reports: 12/15/2021
Number of Days to Update: 75

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 09/30/2021
Next Scheduled EDR Contact: 01/17/2022
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA AMADOR: CUPA Facility List Cupa Facility List

Date of Government Version: 08/05/2021
Date Data Arrived at EDR: 08/06/2021
Date Made Active in Reports: 09/17/2021
Number of Days to Update: 42

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 10/29/2021
Next Scheduled EDR Contact: 02/14/2022
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 09/30/2021
Next Scheduled EDR Contact: 01/17/2022
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing Cupa Facility Listing

Date of Government Version: 09/15/2021
Date Data Arrived at EDR: 09/16/2021
Date Made Active in Reports: 12/09/2021
Number of Days to Update: 84

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 12/14/2021
Next Scheduled EDR Contact: 04/04/2022
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List Cupa facility list.

Date of Government Version: 04/06/2020
Date Data Arrived at EDR: 04/23/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 78

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 10/29/2021
Next Scheduled EDR Contact: 02/14/2022
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 07/20/2021
Date Data Arrived at EDR: 07/20/2021
Date Made Active in Reports: 10/11/2021
Number of Days to Update: 83

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 10/22/2021
Next Scheduled EDR Contact: 02/07/2022
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA DEL NORTE: CUPA Facility List Cupa Facility list

Date of Government Version: 06/29/2021
Date Data Arrived at EDR: 07/23/2021
Date Made Active in Reports: 10/08/2021
Number of Days to Update: 77

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 10/29/2021
Next Scheduled EDR Contact: 02/07/2022
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List CUPA facility list.

Date of Government Version: 07/30/2021
Date Data Arrived at EDR: 08/03/2021
Date Made Active in Reports: 10/26/2021
Number of Days to Update: 84

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 11/16/2021
Next Scheduled EDR Contact: 02/07/2022
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 04/09/2021
Date Data Arrived at EDR: 06/23/2021
Date Made Active in Reports: 09/17/2021
Number of Days to Update: 86

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 12/21/2021
Next Scheduled EDR Contact: 04/11/2022
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 07/13/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List CUPA facility list.

Date of Government Version: 08/12/2021
Date Data Arrived at EDR: 08/12/2021
Date Made Active in Reports: 11/08/2021
Number of Days to Update: 88

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 11/11/2021
Next Scheduled EDR Contact: 02/28/2022
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA IMPERIAL: CUPA Facility List Cupa facility list.

Date of Government Version: 07/13/2021
Date Data Arrived at EDR: 07/15/2021
Date Made Active in Reports: 10/06/2021
Number of Days to Update: 83

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 10/15/2021
Next Scheduled EDR Contact: 01/31/2022
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 11/11/2021
Next Scheduled EDR Contact: 02/28/2022
Data Release Frequency: Varies

KERN COUNTY:

CUPA KERN: CUPA Facility List

A listing of sites included in the Kern County Hazardous Material Business Plan.

Date of Government Version: 07/06/2021
Date Data Arrived at EDR: 08/12/2021
Date Made Active in Reports: 10/07/2021
Number of Days to Update: 56

Source: Kern County Public Health
Telephone: 661-321-3000
Last EDR Contact: 11/11/2021
Next Scheduled EDR Contact: 02/14/2022
Data Release Frequency: Varies

UST KERN: Underground Storage Tank Sites & Tank Listing Kern County Sites and Tanks Listing.

Date of Government Version: 07/06/2021
Date Data Arrived at EDR: 08/12/2021
Date Made Active in Reports: 08/18/2021
Number of Days to Update: 6

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 11/11/2021
Next Scheduled EDR Contact: 02/14/2022
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 12/03/2020
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/14/2021
Number of Days to Update: 78

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 12/22/2021
Next Scheduled EDR Contact: 02/28/2022
Data Release Frequency: Varies

LAKE COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA LAKE: CUPA Facility List Cupa facility list

Date of Government Version: 07/27/2021
Date Data Arrived at EDR: 07/28/2021
Date Made Active in Reports: 10/21/2021
Number of Days to Update: 85

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 10/06/2021
Next Scheduled EDR Contact: 01/24/2022
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List Cupa facility list

Date of Government Version: 07/31/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 11/09/2020
Number of Days to Update: 80

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 11/11/2021
Next Scheduled EDR Contact: 01/31/2022
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 12/08/2021
Next Scheduled EDR Contact: 03/28/2022
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 07/08/2021
Date Data Arrived at EDR: 07/09/2021
Date Made Active in Reports: 09/29/2021
Number of Days to Update: 82

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 10/15/2021
Next Scheduled EDR Contact: 01/17/2022
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities Solid Waste Facilities in Los Angeles County.

Date of Government Version: 07/09/2021
Date Data Arrived at EDR: 07/09/2021
Date Made Active in Reports: 09/29/2021
Number of Days to Update: 82

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 10/08/2021
Next Scheduled EDR Contact: 01/24/2022
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2021
Date Data Arrived at EDR: 02/18/2021
Date Made Active in Reports: 05/10/2021
Number of Days to Update: 81

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 10/05/2021
Next Scheduled EDR Contact: 01/24/2022
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LOS ANGELES AST: Active & Inactive AST Inventory

A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019	Source: Los Angeles Fire Department
Date Data Arrived at EDR: 06/25/2019	Telephone: 213-978-3800
Date Made Active in Reports: 08/22/2019	Last EDR Contact: 12/16/2021
Number of Days to Update: 58	Next Scheduled EDR Contact: 04/04/2022
	Data Release Frequency: Varies

LOS ANGELES CO LF METHANE: Methane Producing Landfills

This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 02/04/2021	Source: Los Angeles County Department of Public Works
Date Data Arrived at EDR: 04/16/2021	Telephone: 626-458-6973
Date Made Active in Reports: 04/21/2021	Last EDR Contact: 10/08/2021
Number of Days to Update: 5	Next Scheduled EDR Contact: 01/24/2022
	Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory

A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 04/19/2021	Source: Los Angeles Fire Department
Date Data Arrived at EDR: 06/17/2021	Telephone: 213-978-3800
Date Made Active in Reports: 06/28/2021	Last EDR Contact: 12/17/2021
Number of Days to Update: 11	Next Scheduled EDR Contact: 04/04/2022
	Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory

A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 04/19/2021	Source: Los Angeles Fire Department
Date Data Arrived at EDR: 06/17/2021	Telephone: 213-978-3800
Date Made Active in Reports: 09/14/2021	Last EDR Contact: 12/17/2021
Number of Days to Update: 89	Next Scheduled EDR Contact: 04/04/2022
	Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 05/26/2021	Source: Community Health Services
Date Data Arrived at EDR: 07/09/2021	Telephone: 323-890-7806
Date Made Active in Reports: 09/29/2021	Last EDR Contact: 10/15/2021
Number of Days to Update: 82	Next Scheduled EDR Contact: 01/24/2022
	Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017	Source: City of El Segundo Fire Department
Date Data Arrived at EDR: 04/19/2017	Telephone: 310-524-2236
Date Made Active in Reports: 05/10/2017	Last EDR Contact: 10/06/2021
Number of Days to Update: 21	Next Scheduled EDR Contact: 01/24/2022
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST LONG BEACH: City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019	Source: City of Long Beach Fire Department
Date Data Arrived at EDR: 04/23/2019	Telephone: 562-570-2563
Date Made Active in Reports: 06/27/2019	Last EDR Contact: 10/14/2021
Number of Days to Update: 65	Next Scheduled EDR Contact: 01/31/2022
	Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 02/02/2021	Source: City of Torrance Fire Department
Date Data Arrived at EDR: 04/28/2021	Telephone: 310-618-2973
Date Made Active in Reports: 07/13/2021	Last EDR Contact: 10/15/2021
Number of Days to Update: 76	Next Scheduled EDR Contact: 01/31/2022
	Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/10/2020	Source: Madera County Environmental Health
Date Data Arrived at EDR: 08/12/2020	Telephone: 559-675-7823
Date Made Active in Reports: 10/23/2020	Last EDR Contact: 11/11/2021
Number of Days to Update: 72	Next Scheduled EDR Contact: 02/28/2022
	Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018	Source: Public Works Department Waste Management
Date Data Arrived at EDR: 10/04/2018	Telephone: 415-473-6647
Date Made Active in Reports: 11/02/2018	Last EDR Contact: 12/20/2021
Number of Days to Update: 29	Next Scheduled EDR Contact: 04/11/2022
	Data Release Frequency: Semi-Annually

MENDOCINO COUNTY:

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/22/2021	Source: Department of Public Health
Date Data Arrived at EDR: 11/18/2021	Telephone: 707-463-4466
Date Made Active in Reports: 11/22/2021	Last EDR Contact: 11/16/2021
Number of Days to Update: 4	Next Scheduled EDR Contact: 03/07/2022
	Data Release Frequency: Annually

MERCED COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA MERCED: CUPA Facility List CUPA facility list.

Date of Government Version: 08/11/2021
Date Data Arrived at EDR: 08/12/2021
Date Made Active in Reports: 11/08/2021
Number of Days to Update: 88

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 11/23/2021
Next Scheduled EDR Contact: 02/28/2022
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List CUPA Facility List

Date of Government Version: 02/22/2021
Date Data Arrived at EDR: 03/02/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 78

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 12/14/2021
Next Scheduled EDR Contact: 06/06/3021
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing CUPA Program listing from the Environmental Health Division.

Date of Government Version: 06/23/2021
Date Data Arrived at EDR: 06/23/2021
Date Made Active in Reports: 06/24/2021
Number of Days to Update: 1

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 12/20/2021
Next Scheduled EDR Contact: 04/11/2022
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 11/16/2021
Next Scheduled EDR Contact: 03/07/2022
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 11/16/2021
Next Scheduled EDR Contact: 03/07/2022
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List CUPA facility list.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/28/2021
Date Data Arrived at EDR: 07/28/2021
Date Made Active in Reports: 10/21/2021
Number of Days to Update: 85

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 10/22/2021
Next Scheduled EDR Contact: 02/07/2022
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 07/09/2021
Date Data Arrived at EDR: 08/03/2021
Date Made Active in Reports: 10/26/2021
Number of Days to Update: 84

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 10/29/2021
Next Scheduled EDR Contact: 02/14/2022
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 07/09/2021
Date Data Arrived at EDR: 08/03/2021
Date Made Active in Reports: 10/26/2021
Number of Days to Update: 84

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 10/29/2021
Next Scheduled EDR Contact: 02/14/2022
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 07/09/2021
Date Data Arrived at EDR: 07/29/2021
Date Made Active in Reports: 10/19/2021
Number of Days to Update: 82

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 10/29/2021
Next Scheduled EDR Contact: 02/14/2022
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 09/07/2021
Date Data Arrived at EDR: 09/09/2021
Date Made Active in Reports: 11/29/2021
Number of Days to Update: 81

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 11/23/2021
Next Scheduled EDR Contact: 03/14/2022
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 10/14/2021
Next Scheduled EDR Contact: 01/31/2022
Data Release Frequency: Varies

RIVERSIDE COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites

Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 09/29/2021
Date Data Arrived at EDR: 09/30/2021
Date Made Active in Reports: 12/14/2021
Number of Days to Update: 75

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 12/08/2021
Next Scheduled EDR Contact: 03/28/2022
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 09/29/2021
Date Data Arrived at EDR: 09/30/2021
Date Made Active in Reports: 12/15/2021
Number of Days to Update: 76

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 12/08/2021
Next Scheduled EDR Contact: 03/28/2022
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List

List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 06/18/2021
Date Data Arrived at EDR: 09/28/2021
Date Made Active in Reports: 12/14/2021
Number of Days to Update: 77

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 09/28/2021
Next Scheduled EDR Contact: 01/10/2022
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 08/02/2021
Date Data Arrived at EDR: 08/04/2021
Date Made Active in Reports: 11/02/2021
Number of Days to Update: 90

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 10/01/2021
Next Scheduled EDR Contact: 01/10/2022
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List

Cupa facility list

Date of Government Version: 07/27/2021
Date Data Arrived at EDR: 07/28/2021
Date Made Active in Reports: 10/21/2021
Number of Days to Update: 85

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 10/29/2021
Next Scheduled EDR Contact: 02/14/2022
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/11/2021
Date Data Arrived at EDR: 08/12/2021
Date Made Active in Reports: 11/08/2021
Number of Days to Update: 88

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 11/01/2021
Next Scheduled EDR Contact: 02/14/2022
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 08/30/2021
Date Data Arrived at EDR: 08/31/2021
Date Made Active in Reports: 11/19/2021
Number of Days to Update: 80

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 11/30/2021
Next Scheduled EDR Contact: 03/14/2022
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/01/2020
Date Data Arrived at EDR: 11/23/2020
Date Made Active in Reports: 02/08/2021
Number of Days to Update: 77

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 12/08/2021
Next Scheduled EDR Contact: 01/31/2022
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 07/14/2020
Date Data Arrived at EDR: 07/16/2020
Date Made Active in Reports: 09/29/2020
Number of Days to Update: 75

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 10/15/2021
Next Scheduled EDR Contact: 01/31/2022
Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 11/23/2021
Next Scheduled EDR Contact: 03/14/2022
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

CUPA SAN FRANCISCO CO: CUPA Facility Listing
Cupa facilities

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/05/2021
Date Data Arrived at EDR: 08/05/2021
Date Made Active in Reports: 10/29/2021
Number of Days to Update: 85

Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 11/11/2021
Next Scheduled EDR Contact: 02/14/2022
Data Release Frequency: Varies

LUST SAN FRANCISCO: Local Oversight Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 11/01/2021
Next Scheduled EDR Contact: 02/14/2022
Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 08/05/2021
Date Data Arrived at EDR: 08/05/2021
Date Made Active in Reports: 10/29/2021
Number of Days to Update: 85

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 10/31/2021
Next Scheduled EDR Contact: 02/14/2022
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 09/09/2021
Next Scheduled EDR Contact: 12/27/2021
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List

Cupa Facility List.

Date of Government Version: 08/10/2021
Date Data Arrived at EDR: 08/11/2021
Date Made Active in Reports: 11/08/2021
Number of Days to Update: 89

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 11/11/2021
Next Scheduled EDR Contact: 02/28/2022
Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 02/20/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 64

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 12/10/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST SAN MATEO: Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 03/29/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 61

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 12/02/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing

CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 11/11/2021
Next Scheduled EDR Contact: 02/28/2022
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List

Cupa facility list

Date of Government Version: 08/04/2021
Date Data Arrived at EDR: 08/05/2021
Date Made Active in Reports: 10/29/2021
Number of Days to Update: 85

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 11/18/2021
Next Scheduled EDR Contact: 02/27/2022
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 11/16/2021
Next Scheduled EDR Contact: 03/07/2022
Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/03/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 01/26/2021
Number of Days to Update: 82

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 11/23/2021
Next Scheduled EDR Contact: 02/14/2022
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA SANTA CRUZ: CUPA Facility List CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 11/11/2021
Next Scheduled EDR Contact: 02/28/2022
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 11/11/2021
Next Scheduled EDR Contact: 02/28/2022
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 08/13/2019
Number of Days to Update: 68

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 11/23/2021
Next Scheduled EDR Contact: 03/14/2022
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 09/15/2021
Date Data Arrived at EDR: 09/16/2021
Date Made Active in Reports: 12/09/2021
Number of Days to Update: 84

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 11/23/2021
Next Scheduled EDR Contact: 03/14/2022
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List Cupa Facility list

Date of Government Version: 07/02/2021
Date Data Arrived at EDR: 07/06/2021
Date Made Active in Reports: 07/14/2021
Number of Days to Update: 8

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 12/14/2021
Next Scheduled EDR Contact: 04/04/2022
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 06/30/2021
Date Data Arrived at EDR: 06/30/2021
Date Made Active in Reports: 09/24/2021
Number of Days to Update: 86

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 12/14/2021
Next Scheduled EDR Contact: 04/04/2022
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA STANISLAUS: CUPA Facility List Cupa facility list

Date of Government Version: 05/14/2021
Date Data Arrived at EDR: 05/17/2021
Date Made Active in Reports: 08/03/2021
Number of Days to Update: 78

Source: Stanislaus County Department of Environmental Protection
Telephone: 209-525-6751
Last EDR Contact: 10/06/2021
Next Scheduled EDR Contact: 01/24/2022
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks Underground storage tank sites located in Sutter county.

Date of Government Version: 08/23/2021
Date Data Arrived at EDR: 08/25/2021
Date Made Active in Reports: 11/17/2021
Number of Days to Update: 84

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 11/23/2021
Next Scheduled EDR Contact: 03/14/2022
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List Cupa facilities

Date of Government Version: 01/13/2021
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 04/06/2021
Number of Days to Update: 82

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 12/20/2021
Next Scheduled EDR Contact: 02/14/2022
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List Cupa facility list

Date of Government Version: 07/14/2021
Date Data Arrived at EDR: 07/15/2021
Date Made Active in Reports: 10/06/2021
Number of Days to Update: 83

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 10/15/2021
Next Scheduled EDR Contact: 01/31/2022
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List Cupa program facilities

Date of Government Version: 04/26/2021
Date Data Arrived at EDR: 04/28/2021
Date Made Active in Reports: 07/13/2021
Number of Days to Update: 76

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 11/01/2021
Next Scheduled EDR Contact: 02/14/2022
Data Release Frequency: Varies

TUOLUMNE COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA TUOLUMNE: CUPA Facility List Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 10/14/2021
Next Scheduled EDR Contact: 01/31/2022
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 05/26/2021
Date Data Arrived at EDR: 07/19/2021
Date Made Active in Reports: 10/08/2021
Number of Days to Update: 81

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 10/18/2021
Next Scheduled EDR Contact: 01/31/2022
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 12/20/2021
Next Scheduled EDR Contact: 04/11/2022
Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 11/05/2021
Next Scheduled EDR Contact: 02/21/2022
Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 05/26/2021
Date Data Arrived at EDR: 07/19/2021
Date Made Active in Reports: 10/07/2021
Number of Days to Update: 80

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 10/18/2021
Next Scheduled EDR Contact: 01/31/2022
Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 07/26/2021
Date Data Arrived at EDR: 09/08/2021
Date Made Active in Reports: 11/29/2021
Number of Days to Update: 82

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 12/07/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Quarterly

YOLO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST YOLO: Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 09/23/2021	Source: Yolo County Department of Health
Date Data Arrived at EDR: 09/28/2021	Telephone: 530-666-8646
Date Made Active in Reports: 12/15/2021	Last EDR Contact: 12/20/2021
Number of Days to Update: 78	Next Scheduled EDR Contact: 04/11/2022
	Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 07/20/2021	Source: Yuba County Environmental Health Department
Date Data Arrived at EDR: 07/20/2021	Telephone: 530-749-7523
Date Made Active in Reports: 10/08/2021	Last EDR Contact: 10/22/2021
Number of Days to Update: 80	Next Scheduled EDR Contact: 02/07/2022
	Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/23/2021	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 08/10/2021	Telephone: 860-424-3375
Date Made Active in Reports: 11/08/2021	Last EDR Contact: 11/12/2021
Number of Days to Update: 90	Next Scheduled EDR Contact: 02/21/2022
	Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2018	Source: Department of Environmental Protection
Date Data Arrived at EDR: 04/10/2019	Telephone: N/A
Date Made Active in Reports: 05/16/2019	Last EDR Contact: 10/05/2021
Number of Days to Update: 36	Next Scheduled EDR Contact: 01/17/2022
	Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 04/29/2020	Telephone: 518-402-8651
Date Made Active in Reports: 07/10/2020	Last EDR Contact: 10/29/2021
Number of Days to Update: 72	Next Scheduled EDR Contact: 02/07/2022
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 10/07/2021
Next Scheduled EDR Contact: 01/24/2022
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 02/11/2021
Date Made Active in Reports: 02/24/2021
Number of Days to Update: 13

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 11/29/2021
Next Scheduled EDR Contact: 02/28/2022
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 12/06/2021
Next Scheduled EDR Contact: 03/21/2022
Data Release Frequency: Annually

Oil/Gas Pipelines

Source: Endeavor Business Media

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data

Source: Endeavor Business Media

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.
Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health
Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics
Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities

Source: Department of Social Services

Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory

Source: Department of Fish and Wildlife

Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK[®] - PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

PERRIS VALLEY CHANNEL
NANDINA AVENUE AND PATTERSON AVENUE
MARCH AIR RESERVE BA, CA 92518

TARGET PROPERTY COORDINATES

Latitude (North): 33.865932 - 33° 51' 57.36"
Longitude (West): 117.251872 - 117° 15' 6.74"
Universal Transverse Mercator: Zone 11
UTM X (Meters): 476703.1
UTM Y (Meters): 3747125.5
Elevation: 1484 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map: 12015925 STEELE PEAK, CA
Version Date: 2018

Northeast Map: 12015927 SUNNYMEAD, CA
Version Date: 2018

Southeast Map: 12015907 PERRIS, CA
Version Date: 2018

Northwest Map: 12014858 RIVERSIDE EAST, CA
Version Date: 2018

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

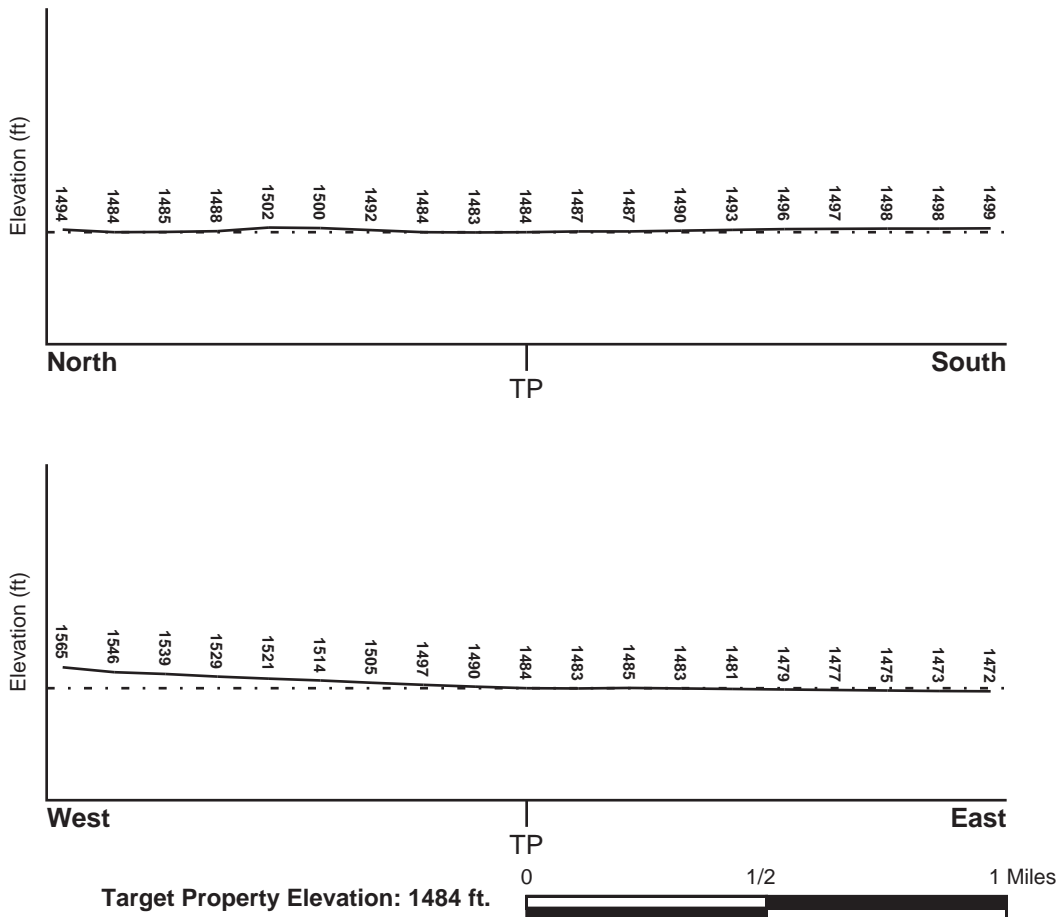
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General ENE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

<u>Flood Plain Panel at Target Property</u>	<u>FEMA Source Type</u>
06065C1410G	FEMA FIRM Flood data
<u>Additional Panels in search area:</u>	<u>FEMA Source Type</u>
06065C0745G	FEMA FIRM Flood data
06065C0765G	FEMA FIRM Flood data
06065C1430H	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
NOT AVAILABLE	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

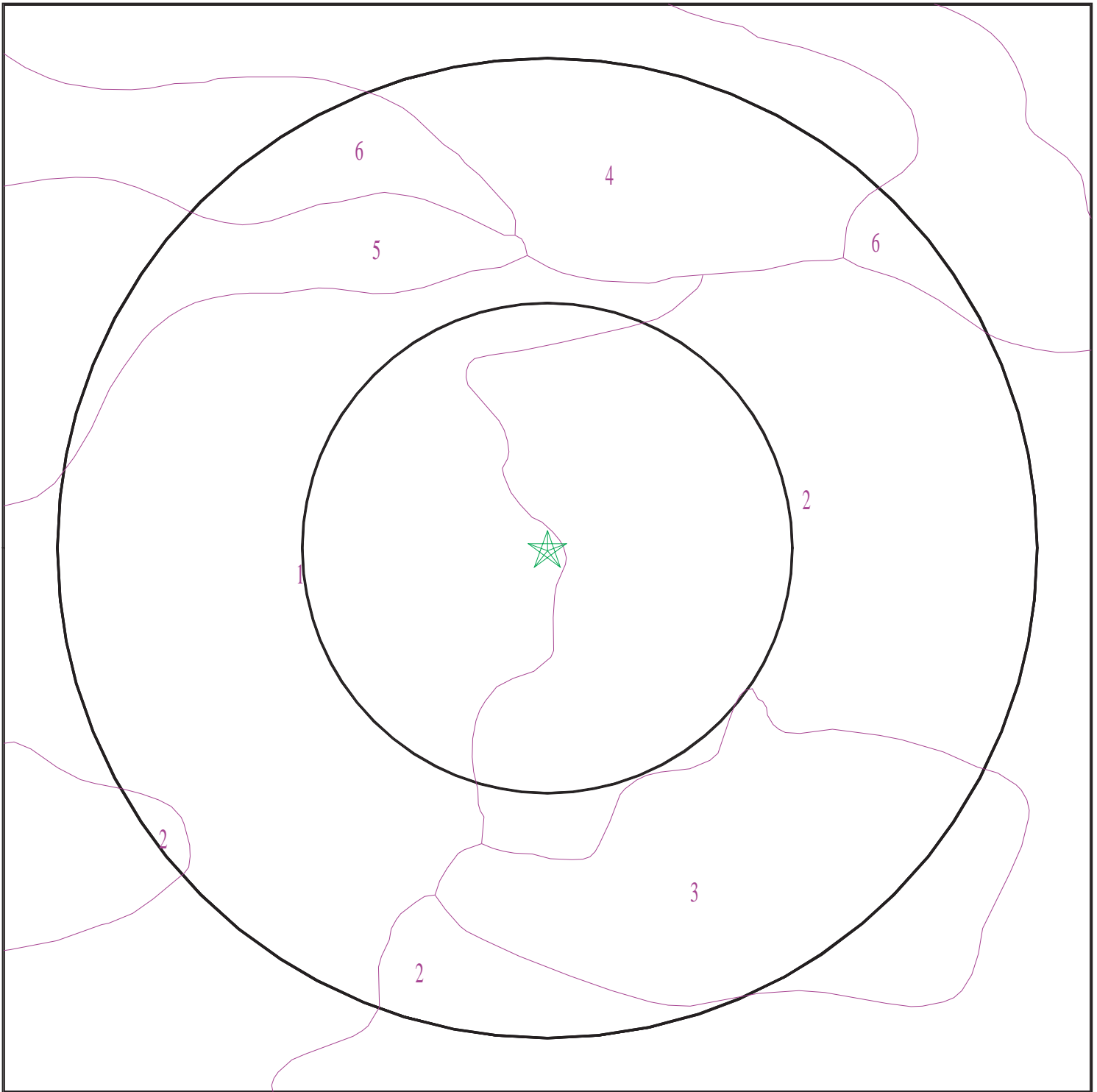
Era: Mesozoic
System: Cretaceous
Series: Cretaceous granitic rocks
Code: Kg *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

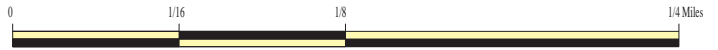
Category: Plutonic and Intrusive Rocks

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 6798685.2s



- ★ Target Property
- SSURGO Soil
- Water



SITE NAME: Perris Valley Channel
ADDRESS: Nandina Avenue and Patterson Avenue
March Air Reserve Ba CA 92518
LAT/LONG: 33.865932 / 117.251872

CLIENT: Group Delta Consultants
CONTACT: Laura Botzong
INQUIRY #: 6798685.2s
DATE: December 23, 2021 8:20 am

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: EXETER

Soil Surface Texture: sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	16 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4
2	16 inches	37 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4
3	37 inches	50 inches	indurated	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
4	50 inches	59 inches	stratified sandy loam to silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4

Soil Map ID: 2

Soil Component Name: RAMONA

Soil Surface Texture: sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	14 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 4 Min: 1.4	Max: 8.4 Min: 6.6
2	14 inches	22 inches	fine sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 4 Min: 1.4	Max: 8.4 Min: 6.6

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
3	22 inches	68 inches	sandy clay loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 4 Min: 1.4	Max: 8.4 Min: 6.6
4	68 inches	74 inches	gravelly sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 4 Min: 1.4	Max: 8.4 Min: 6.6

Soil Map ID: 3

Soil Component Name: PACHAPPA

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	20 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 14 Min: 4	Max: 7.8 Min: 6.6
2	20 inches	62 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 14 Min: 4	Max: 7.8 Min: 6.6

Soil Map ID: 4

Soil Component Name: HANFORD

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.8 Min: 5.6

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
2	7 inches	40 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.8 Min: 5.6
3	40 inches	59 inches	stratified loamy sand to coarse sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.8 Min: 5.6

Soil Map ID: 5

Soil Component Name: MONSERATE

Soil Surface Texture: sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	9 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 8.4 Min: 6.6

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
2	9 inches	27 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 8.4 Min: 6.6
3	27 inches	44 inches	indurated	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 8.4 Min: 6.6
4	44 inches	57 inches	cemented	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 8.4 Min: 6.6
5	57 inches	70 inches	loamy coarse sand	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 8.4 Min: 6.6

Soil Map ID: 6

Soil Component Name: GREENFIELD

Soil Surface Texture: sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	25 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 8.4 Min: 6.6
2	25 inches	42 inches	fine sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 8.4 Min: 6.6
3	42 inches	59 inches	loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 8.4 Min: 6.6
4	59 inches	72 inches	stratified loamy sand to sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 8.4 Min: 6.6

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
B32	USGS40000138620	1/2 - 1 Mile SSE
C34	USGS40000138614	1/2 - 1 Mile SSE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

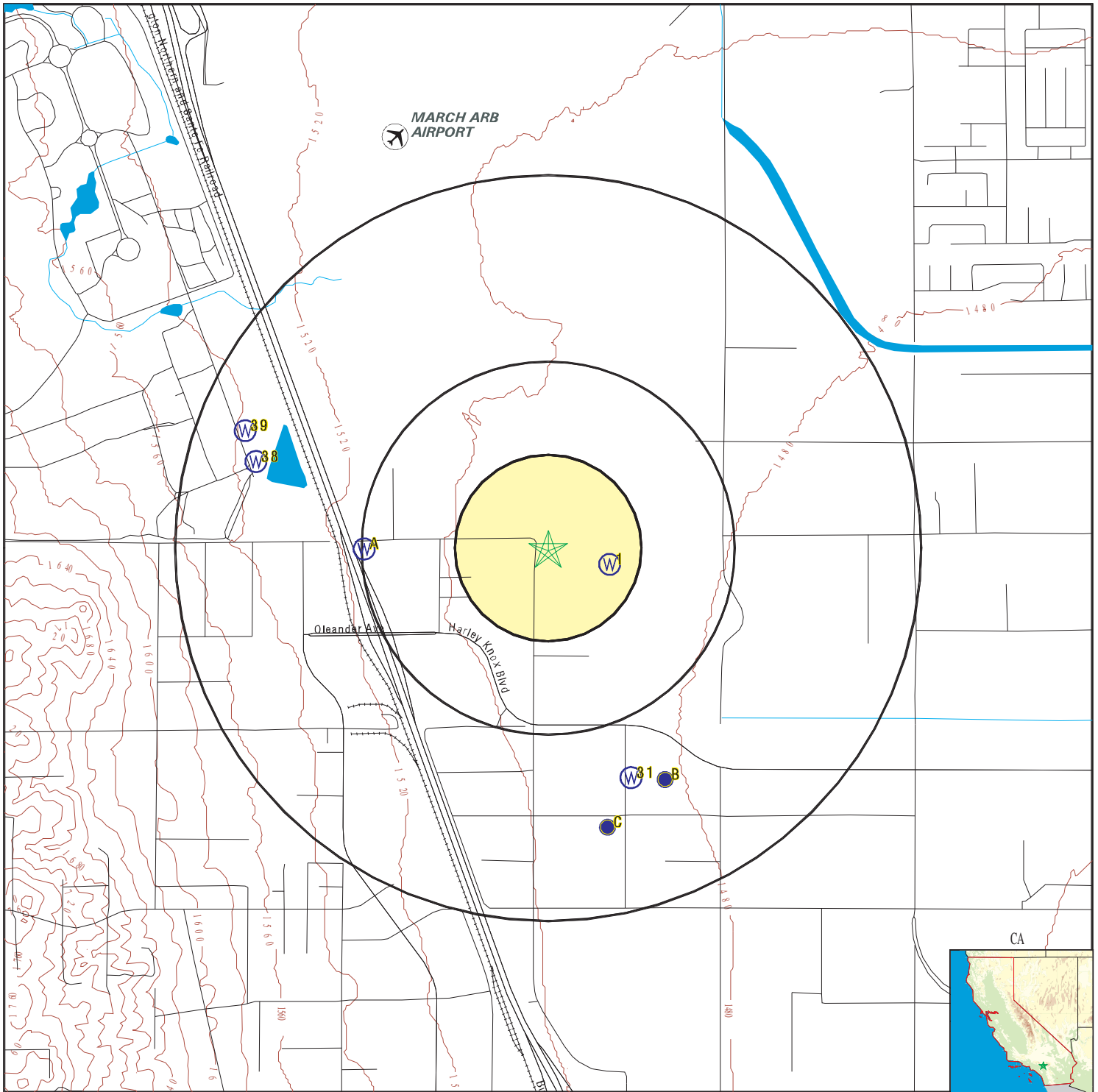
MAP ID	WELL ID	LOCATION FROM TP
1	CADWR00000027443	1/8 - 1/4 Mile ESE
A2	CAEDF0000043356	1/4 - 1/2 Mile West
A3	CAEDF0000115797	1/4 - 1/2 Mile West
A4	CAEDF0000097222	1/4 - 1/2 Mile West
A5	CAEDF0000133212	1/4 - 1/2 Mile West
A6	CAEDF0000072358	1/4 - 1/2 Mile West
A7	CAEDF0000100210	1/4 - 1/2 Mile West
A8	CAEDF0000022393	1/4 - 1/2 Mile West
A9	CAEDF0000035156	1/4 - 1/2 Mile West
A10	CAEDF0000080414	1/4 - 1/2 Mile West
A11	CAEDF0000118926	1/4 - 1/2 Mile West
A12	CAEDF0000031052	1/4 - 1/2 Mile West
A13	CAEDF0000005173	1/4 - 1/2 Mile West
A14	CAEDF0000061536	1/4 - 1/2 Mile West
A15	CAEDF0000129092	1/4 - 1/2 Mile West
A16	CAEDF0000117529	1/4 - 1/2 Mile West
A17	CAEDF0000000743	1/4 - 1/2 Mile West
A18	CAEDF0000073962	1/4 - 1/2 Mile West
A19	CAEDF0000012342	1/4 - 1/2 Mile West
A20	CAEDF0000076742	1/4 - 1/2 Mile West
A21	CAEDF0000132144	1/4 - 1/2 Mile West
A22	CAEDF0000085382	1/2 - 1 Mile West
A23	CAEDF0000133677	1/2 - 1 Mile West
A24	CAEDF0000096670	1/2 - 1 Mile West
A25	CAEDF0000040148	1/2 - 1 Mile West
A26	CAEDF0000048298	1/2 - 1 Mile West
A27	CAEDF0000108797	1/2 - 1 Mile West
A28	CAEDF0000019985	1/2 - 1 Mile West
A29	CAEDF0000119358	1/2 - 1 Mile West
A30	CAEDF0000092047	1/2 - 1 Mile West
31	CADWR9000005915	1/2 - 1 Mile SSE
B33	CAUSGSN00003468	1/2 - 1 Mile SSE
C35	CADWR9000005902	1/2 - 1 Mile SSE
C36	CAUSGSN00002987	1/2 - 1 Mile SSE
C37	CADWR0000037413	1/2 - 1 Mile SSE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
38	CAEDF0000083190	1/2 - 1 Mile WNW
39	CAEDF0000053896	1/2 - 1 Mile WNW

PHYSICAL SETTING SOURCE MAP - 6798685.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells



SITE NAME: Perris Valley Channel
 ADDRESS: Nandina Avenue and Patterson Avenue
 March Air Reserve Ba CA 92518
 LAT/LONG: 33.865932 / 117.251872

CLIENT: Group Delta Consultants
 CONTACT: Laura Botzong
 INQUIRY #: 6798685.2s
 DATE: December 23, 2021 8:20 am

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

1
ESE
1/8 - 1/4 Mile
Lower **CA WELLS** **CADWR0000027443**

Well ID: 03S04W36K001S Well Type: UNK
Source: Department of Water Resources
Other Name: 03S04W36K001S GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=03S04W36K001S&store_num=
GeoTracker Data: Not Reported

A2
West
1/4 - 1/2 Mile
Higher **CA WELLS** **CAEDF0000043356**

Well ID: T0606500307-MW 7 Well Type: MONITORING
Source: EDF Other Name: MW 7
GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606500307&assigned_name=MW 7&store_num=
GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606500307&assigned_name=MW 7

A3
West
1/4 - 1/2 Mile
Higher **CA WELLS** **CAEDF0000115797**

Well ID: T0606500307-MW7 Well Type: MONITORING
Source: EDF Other Name: MW7
GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606500307&assigned_name=MW7&store_num=
GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606500307&assigned_name=MW7

A4
West
1/4 - 1/2 Mile
Higher **CA WELLS** **CAEDF0000097222**

Well ID: T0606500307-MW6 Well Type: MONITORING
Source: EDF Other Name: MW6
GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606500307&assigned_name=MW6&store_num=
GeoTracker Data: https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606500307&assigned_name=MW6

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

A5
West
1/4 - 1/2 Mile
Higher

CA WELLS CAEDF0000133212

Well ID:	T0606500307-MW 6	Well Type:	MONITORING
Source:	EDF	Other Name:	MW 6
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606500307&assigned_name=MW 6&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606500307&assigned_name=MW 6		

A6
West
1/4 - 1/2 Mile
Higher

CA WELLS CAEDF0000072358

Well ID:	T0606500307-MW 3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW 3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606500307&assigned_name=MW 3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606500307&assigned_name=MW 3		

A7
West
1/4 - 1/2 Mile
Higher

CA WELLS CAEDF0000100210

Well ID:	T0606500307-MW3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606500307&assigned_name=MW3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606500307&assigned_name=MW3		

A8
West
1/4 - 1/2 Mile
Higher

CA WELLS CAEDF0000022393

Well ID:	T0606500307-MW13	Well Type:	MONITORING
Source:	EDF	Other Name:	MW13
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606500307&assigned_name=MW13&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606500307&assigned_name=MW13		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

A9
West
1/4 - 1/2 Mile
Higher

CA WELLS CAEDF0000035156

Well ID:	T0606500307-MW12	Well Type:	MONITORING
Source:	EDF	Other Name:	MW12
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606500307&assigned_name=MW12&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606500307&assigned_name=MW12		

A10
West
1/4 - 1/2 Mile
Higher

CA WELLS CAEDF0000080414

Well ID:	T0606500307-MW 12	Well Type:	MONITORING
Source:	EDF	Other Name:	MW 12
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606500307&assigned_name=MW 12&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606500307&assigned_name=MW 12		

A11
West
1/4 - 1/2 Mile
Higher

CA WELLS CAEDF0000118926

Well ID:	T0606500307-MW11	Well Type:	MONITORING
Source:	EDF	Other Name:	MW11
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606500307&assigned_name=MW11&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606500307&assigned_name=MW11		

A12
West
1/4 - 1/2 Mile
Higher

CA WELLS CAEDF0000031052

Well ID:	T0606500307-MW 11	Well Type:	MONITORING
Source:	EDF	Other Name:	MW 11
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606500307&assigned_name=MW 11&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606500307&assigned_name=MW 11		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

A13
West
1/4 - 1/2 Mile
Higher

CA WELLS CAEDF000005173

Well ID:	T0606500307-DPE3	Well Type:	MONITORING
Source:	EDF	Other Name:	DPE3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606500307&assigned_name=DPE3&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606500307&assigned_name=DPE3		

A14
West
1/4 - 1/2 Mile
Higher

CA WELLS CAEDF0000061536

Well ID:	T0606500307-MW2	Well Type:	MONITORING
Source:	EDF	Other Name:	MW2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606500307&assigned_name=MW2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606500307&assigned_name=MW2		

A15
West
1/4 - 1/2 Mile
Higher

CA WELLS CAEDF0000129092

Well ID:	T0606500307-DPE6	Well Type:	MONITORING
Source:	EDF	Other Name:	DPE6
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606500307&assigned_name=DPE6&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606500307&assigned_name=DPE6		

A16
West
1/4 - 1/2 Mile
Higher

CA WELLS CAEDF0000117529

Well ID:	T0606500307-MW 2	Well Type:	MONITORING
Source:	EDF	Other Name:	MW 2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606500307&assigned_name=MW 2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606500307&assigned_name=MW 2		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

A17
West
1/4 - 1/2 Mile
Higher

CA WELLS CAEDF000000743

Well ID:	T0606500307-DPE5	Well Type:	MONITORING
Source:	EDF	Other Name:	DPE5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606500307&assigned_name=DPE5&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606500307&assigned_name=DPE5		

A18
West
1/4 - 1/2 Mile
Higher

CA WELLS CAEDF0000073962

Well ID:	T0606500307-DPE4	Well Type:	MONITORING
Source:	EDF	Other Name:	DPE4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606500307&assigned_name=DPE4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606500307&assigned_name=DPE4		

A19
West
1/4 - 1/2 Mile
Higher

CA WELLS CAEDF0000012342

Well ID:	T0606500307-MW 8	Well Type:	MONITORING
Source:	EDF	Other Name:	MW 8
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606500307&assigned_name=MW 8&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606500307&assigned_name=MW 8		

A20
West
1/4 - 1/2 Mile
Higher

CA WELLS CAEDF0000076742

Well ID:	T0606500307-MW9	Well Type:	MONITORING
Source:	EDF	Other Name:	MW9
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606500307&assigned_name=MW9&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606500307&assigned_name=MW9		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

A21
West
1/4 - 1/2 Mile
Higher

CA WELLS CAEDF0000132144

Well ID:	T0606500307-MW 9	Well Type:	MONITORING
Source:	EDF	Other Name:	MW 9
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606500307&assigned_name=MW 9&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606500307&assigned_name=MW 9		

A22
West
1/2 - 1 Mile
Higher

CA WELLS CAEDF0000085382

Well ID:	T0606500307-DPE1	Well Type:	MONITORING
Source:	EDF	Other Name:	DPE1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606500307&assigned_name=DPE1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606500307&assigned_name=DPE1		

A23
West
1/2 - 1 Mile
Higher

CA WELLS CAEDF0000133677

Well ID:	T0606500307-MW 1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW 1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606500307&assigned_name=MW 1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606500307&assigned_name=MW 1		

A24
West
1/2 - 1 Mile
Higher

CA WELLS CAEDF0000096670

Well ID:	T0606500307-MW1	Well Type:	MONITORING
Source:	EDF	Other Name:	MW1
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606500307&assigned_name=MW1&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606500307&assigned_name=MW1		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

A25
West
1/2 - 1 Mile
Higher

CA WELLS CAEDF0000040148

Well ID:	T0606500307-DPE2	Well Type:	MONITORING
Source:	EDF	Other Name:	DPE2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606500307&assigned_name=DPE2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606500307&assigned_name=DPE2		

A26
West
1/2 - 1 Mile
Higher

CA WELLS CAEDF0000048298

Well ID:	T0606500307-MW5	Well Type:	MONITORING
Source:	EDF	Other Name:	MW5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606500307&assigned_name=MW5&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606500307&assigned_name=MW5		

A27
West
1/2 - 1 Mile
Higher

CA WELLS CAEDF0000108797

Well ID:	T0606500307-MW 5	Well Type:	MONITORING
Source:	EDF	Other Name:	MW 5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606500307&assigned_name=MW 5&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606500307&assigned_name=MW 5		

A28
West
1/2 - 1 Mile
Higher

CA WELLS CAEDF0000019985

Well ID:	T0606500307-MW 4	Well Type:	MONITORING
Source:	EDF	Other Name:	MW 4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606500307&assigned_name=MW 4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606500307&assigned_name=MW 4		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

A29
West
1/2 - 1 Mile
Higher

CA WELLS CAEDF0000119358

Well ID:	T0606500307-MW10	Well Type:	MONITORING
Source:	EDF	Other Name:	MW10
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606500307&assigned_name=MW10&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606500307&assigned_name=MW10		

A30
West
1/2 - 1 Mile
Higher

CA WELLS CAEDF0000092047

Well ID:	T0606500307-MW 10	Well Type:	MONITORING
Source:	EDF	Other Name:	MW 10
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606500307&assigned_name=MW 10&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606500307&assigned_name=MW 10		

31
SSE
1/2 - 1 Mile
Higher

CA WELLS CADWR9000005915

State Well #:	Not Reported	Station ID:	48246
Well Name:	EMWD12471	Basin Name:	San Jacinto
Well Use:	Irrigation	Well Type:	Single Well
Well Depth:	0	Well Completion Rpt #:	Not Reported

B32
SSE
1/2 - 1 Mile
Lower

FED USGS USGS40000138620

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	004S004W01A001S	Type:	Well
Description:	Not Reported	HUC:	18070202
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

B33
SSE
 1/2 - 1 Mile
 Lower

CA WELLS CAUSGSN00003468

Well ID:	USGS-335125117144401	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-335125117144401	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&amp_date=&global_id=&assigned_name=USGS-335125117144401&store_num=		
GeoTracker Data:	Not Reported		

C34
SSE
 1/2 - 1 Mile
 Higher

FED USGS USGS40000138614

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	004S004W01G001S	Type:	Well
Description:	Not Reported	HUC:	18070202
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

C35
SSE
 1/2 - 1 Mile
 Higher

CA WELLS CADWR9000005902

State Well #:	Not Reported	Station ID:	48247
Well Name:	EMWD12474	Basin Name:	San Jacinto
Well Use:	Irrigation	Well Type:	Single Well
Well Depth:	0	Well Completion Rpt #:	Not Reported

C36
SSE
 1/2 - 1 Mile
 Higher

CA WELLS CAUSGSN00002987

Well ID:	USGS-335119117145401	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-335119117145401	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&amp_date=&global_id=&assigned_name=USGS-335119117145401&store_num=		
GeoTracker Data:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

C37
SSE
1/2 - 1 Mile
Higher

CA WELLS CADWR0000037413

Well ID:	04S04W01G001S	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	04S04W01G001S	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=04S04W01G001S&store_num=		
GeoTracker Data:	Not Reported		

38
WNW
1/2 - 1 Mile
Higher

CA WELLS CAEDF0000083190

Well ID:	T0606545483-MW-5	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-5
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606545483&assigned_name=MW-5&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606545483&assigned_name=MW-5		

39
WNW
1/2 - 1 Mile
Higher

CA WELLS CAEDF0000053896

Well ID:	T0606545483-MW-4	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606545483&assigned_name=MW-4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606545483&assigned_name=MW-4		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for RIVERSIDE County: 2

- Note: Zone 1 indoor average level > 4 pCi/L.
- : Zone 2 indoor average level \geq 2 pCi/L and \leq 4 pCi/L.
- : Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for RIVERSIDE COUNTY, CA

Number of sites tested: 12

<u>Area</u>	<u>Average Activity</u>	<u>% <4 pCi/L</u>	<u>% 4-20 pCi/L</u>	<u>% >20 pCi/L</u>
Living Area - 1st Floor	0.117 pCi/L	100%	0%	0%
Living Area - 2nd Floor	0.450 pCi/L	100%	0%	0%
Basement	1.700 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory

Source: Department of Fish and Wildlife

Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

Groundwater Ambient Monitoring & Assessment Program

State Water Resources Control Board

Telephone: 916-341-5577

The GAMA Program is California's comprehensive groundwater quality monitoring program. GAMA collects data by testing the untreated, raw water in different types of wells for naturally-occurring and man-made chemicals. The GAMA data includes Domestic, Monitoring and Municipal well types from the following sources, Department of Water Resources, Department of Health Services, EDF, Agricultural Lands, Lawrence Livermore National Laboratory, Department of Pesticide Regulation, United States Geological Survey, Groundwater Ambient Monitoring and Assessment Program and Local Groundwater Projects.

Water Well Database

Source: Department of Water Resources

Telephone: 916-651-9648

California Drinking Water Quality Database

Source: Department of Public Health

Telephone: 916-324-2319

The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

California Oil and Gas Well Locations

Source: Dept of Conservation, Geologic Energy Management Division

Telephone: 916-323-1779

Oil and Gas well locations in the state.

California Earthquake Fault Lines

Source: California Division of Mines and Geology

The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon

Source: Department of Public Health

Telephone: 916-210-8558

Radon Database for California

PHYSICAL SETTING SOURCE RECORDS SEARCHED

Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRRA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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Perris Valley Channel
Nandina Avenue and Patterson Avenue
March Air Reserve Ba, CA 92518

Inquiry Number: 6798685.3

December 22, 2021

Certified Sanborn® Map Report



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

12/22/21

Site Name:

Perris Valley Channel
Nandina Avenue and Pattersor
March Air Reserve Ba, CA 925
EDR Inquiry # 6798685.3

Client Name:

Group Delta Consultants
32 Mauchly
Irvine, CA 92618
Contact: Laura Botzong



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The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # EBB3-4900-A520
PO # EN8180
Project Perris Valley Channel

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.



Sanborn® Library search results

Certification #: EBB3-4900-A520

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- Library of Congress
- University Publications of America
- EDR Private Collection

The Sanborn Library LLC Since 1866™

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Perris Valley Channel

Nandina Avenue and Patterson Avenue

March Air Reserve Ba, CA 92518

Inquiry Number: 6798685.8

December 27, 2021

The EDR Aerial Photo Decade Package



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

12/27/21

Site Name:

Perris Valley Channel
Nandina Avenue and Pattersor
March Air Reserve Ba, CA 925
EDR Inquiry # 6798685.8

Client Name:

Group Delta Consultants
32 Mauchly
Irvine, CA 92618
Contact: Laura Botzong



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Search Results:

<u>Year</u>	<u>Scale</u>	<u>Details</u>	<u>Source</u>
2016	1"=625'	Flight Year: 2016	USDA/NAIP
2012	1"=625'	Flight Year: 2012	USDA/NAIP
2009	1"=625'	Flight Year: 2009	USDA/NAIP
2006	1"=625'	Flight Year: 2006	USDA/NAIP
2002	1"=625'	Acquisition Date: January 01, 2002	USGS/DOQQ
1997	1"=625'	Acquisition Date: January 01, 1997	USGS/DOQQ
1994	1"=625'	Acquisition Date: January 01, 1994	USGS/DOQQ
1990	1"=625'	Flight Date: September 06, 1990	USDA
1989	1"=625'	Flight Date: August 15, 1989	USDA
1985	1"=625'	Flight Date: July 28, 1985	USDA
1978	1"=625'	Flight Date: September 20, 1978	USDA
1967	1"=625'	Flight Date: May 15, 1967	USDA
1961	1"=625'	Flight Date: June 14, 1961	USDA
1953	1"=625'	Flight Date: August 28, 1953	USDA
1949	1"=625'	Flight Date: May 06, 1949	USDA
1938	1"=625'	Flight Date: June 14, 1938	USDA

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INQUIRY # 6798685.8

YEAR: 2016

 = 625'





INQUIRY #: 6798685.8

YEAR: 2012

— = 625'





INQUIRY #: 6798685.8

YEAR: 2009

— = 625'





INQUIRY #: 6798685.8

YEAR: 2006

— = 625'





INQUIRY #: 6798685.8

YEAR: 2002

— = 625'



UNMAPPED

UNMAP

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UNMAP



INQUIRY #: 6798685.8

YEAR: 1997

— = 625'





INQUIRY #: 6798685.8

YEAR: 1990

— = 625'





INQUIRY #: 6798685.8

YEAR: 1989

— = 625'





INQUIRY #: 6798685.8

YEAR: 1985

— = 625'





INQUIRY #: 6798685.8

YEAR: 1978

— = 625'





INQUIRY #: 6798685.8

YEAR: 1967

— = 625'





INQUIRY #: 6798685.8

YEAR: 1961

— = 625'





INQUIRY #: 6798685.8

YEAR: 1953

— = 625'





INQUIRY #: 6798685.8

YEAR: 1949

— = 625'





INQUIRY #: 6798685.8
YEAR: 1938

↑ N
CEDR

— = 625'

Perris Valley Channel
Nandina Avenue and Patterson Avenue
March Air Reserve Ba, CA 92518

Inquiry Number: 6798685.4

December 22, 2021

EDR Historical Topo Map Report

with QuadMatch™



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

12/22/21

Site Name:

Perris Valley Channel
Nandina Avenue and Pattersor
March Air Reserve Ba, CA 925
EDR Inquiry # 6798685.4

Client Name:

Group Delta Consultants
32 Mauchly
Irvine, CA 92618
Contact: Laura Botzong



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Search Results:**Coordinates:**

P.O.#	EN8180	Latitude:	33.865932 33° 51' 57" North
Project:	Perris Valley Channel	Longitude:	-117.251872 -117° 15' 7" West
		UTM Zone:	Zone 11 North
		UTM X Meters:	476703.66
		UTM Y Meters:	3747319.48
		Elevation:	1484.01' above sea level

Maps Provided:

2018	1947
2015	1943
2012	1942
1979, 1980	1901
1978	
1973	
1967	
1953	

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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

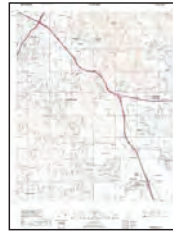
2018 Source Sheets



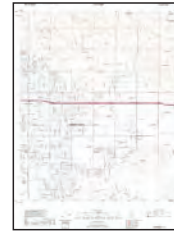
Steele Peak
2018
7.5-minute, 24000



Perris
2018
7.5-minute, 24000



Riverside East
2018
7.5-minute, 24000



Sunnymead
2018
7.5-minute, 24000

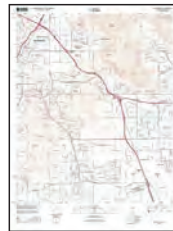
2015 Source Sheets



Steele Peak
2015
7.5-minute, 24000



Perris
2015
7.5-minute, 24000



Riverside East
2015
7.5-minute, 24000



Sunnymead
2015
7.5-minute, 24000

2012 Source Sheets



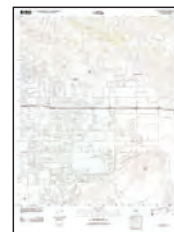
Steele Peak
2012
7.5-minute, 24000



Perris
2012
7.5-minute, 24000



Riverside East
2012
7.5-minute, 24000



Sunnymead
2012
7.5-minute, 24000

1979, 1980 Source Sheets



Perris
1979
7.5-minute, 24000
Aerial Photo Revised 1978



Sunnymead
1980
7.5-minute, 24000
Aerial Photo Revised 1978



Riverside East
1980
7.5-minute, 24000
Aerial Photo Revised 1978

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1978 Source Sheets



Steele Peak
1978
7.5-minute, 24000
Aerial Photo Revised 1978

1973 Source Sheets



Sunnymead
1973
7.5-minute, 24000
Aerial Photo Revised 1973



Steele Peak
1973
7.5-minute, 24000
Aerial Photo Revised 1973

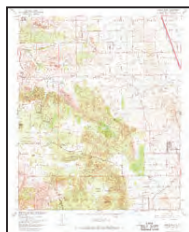


Perris
1973
7.5-minute, 24000
Aerial Photo Revised 1973

1967 Source Sheets



Riverside East
1967
7.5-minute, 24000
Aerial Photo Revised 1966



Steele Peak
1967
7.5-minute, 24000
Aerial Photo Revised 1966



Sunnymead
1967
7.5-minute, 24000
Aerial Photo Revised 1966



Perris
1967
7.5-minute, 24000
Aerial Photo Revised 1966

1953 Source Sheets



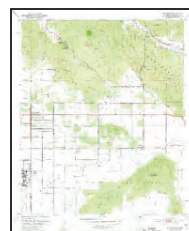
Steele Peak
1953
7.5-minute, 24000
Aerial Photo Revised 1951



Perris
1953
7.5-minute, 24000
Aerial Photo Revised 1951



Riverside East
1953
7.5-minute, 24000
Aerial Photo Revised 1951



Sunnymead
1953
7.5-minute, 24000
Aerial Photo Revised 1951

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1947 Source Sheets



RIVERSIDE
1947
15-minute, 50000

1943 Source Sheets

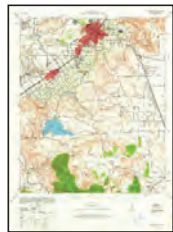


PERRIS
1943
15-minute, 62500

1942 Source Sheets



Perris
1942
15-minute, 62500
Aerial Photo Revised 1939

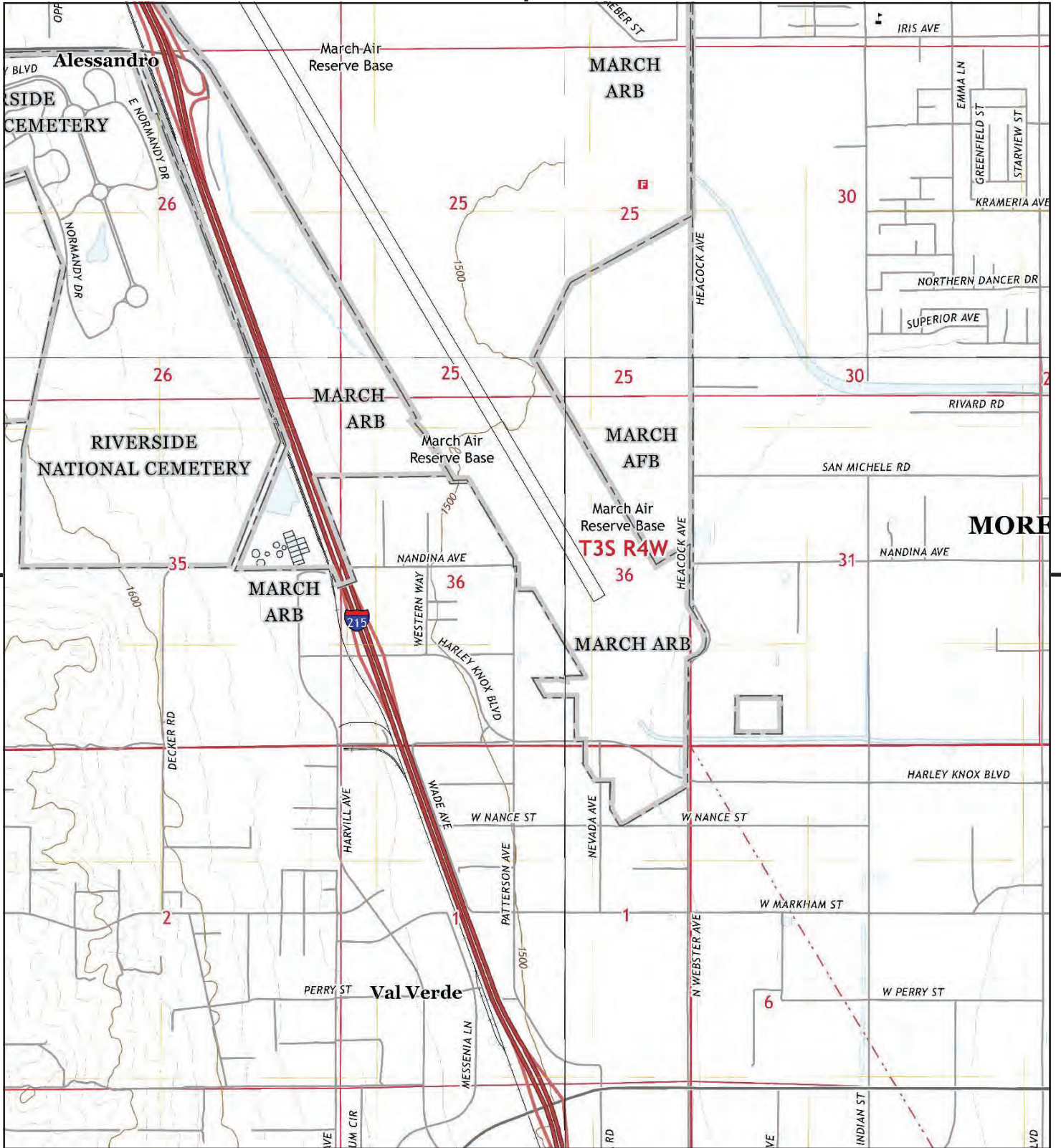


Riverside
1942
15-minute, 62500
Aerial Photo Revised 1939

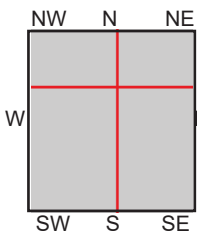
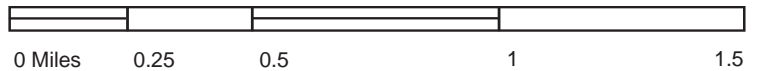
1901 Source Sheets



Riverside
1901
15-minute, 62500



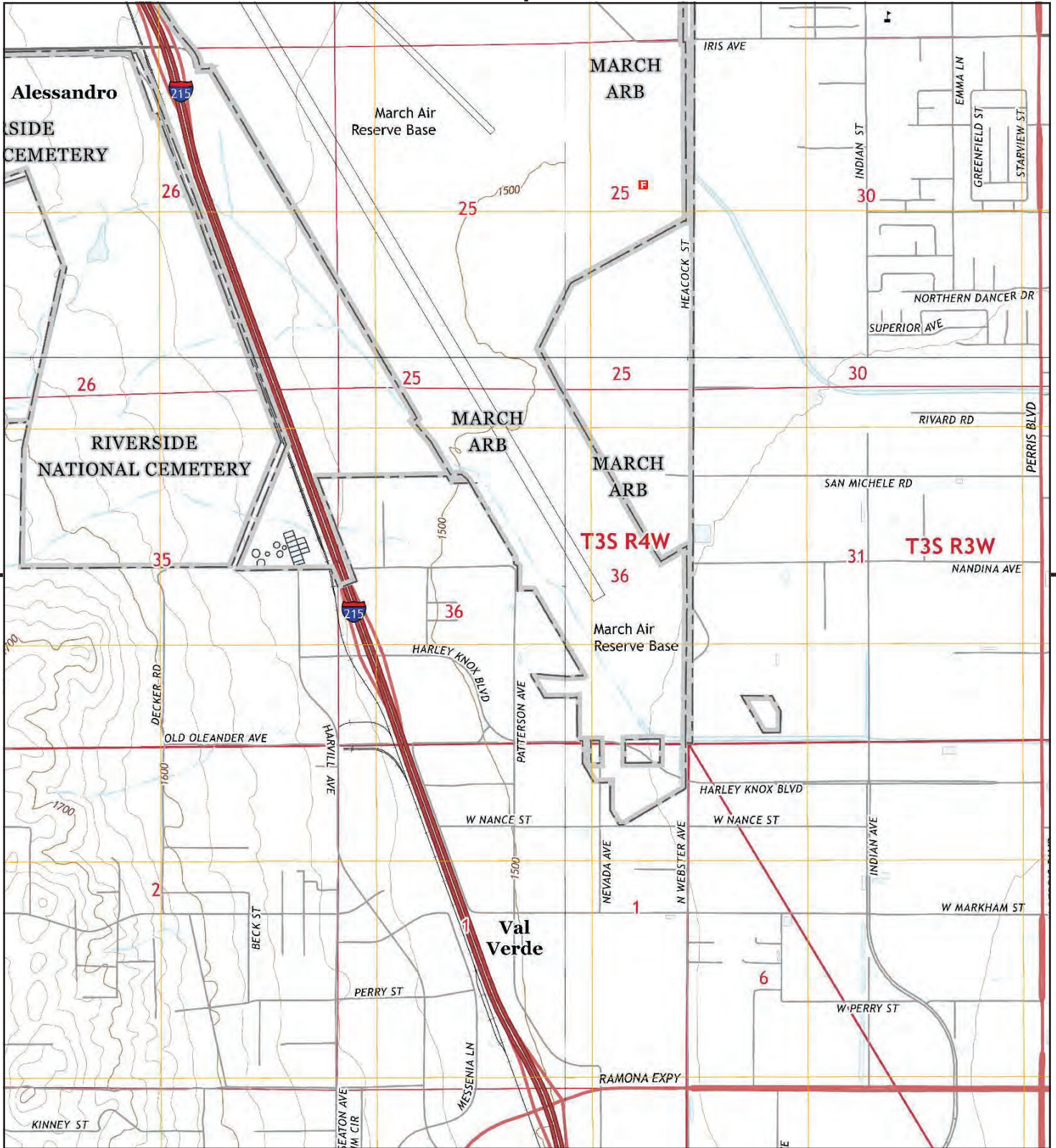
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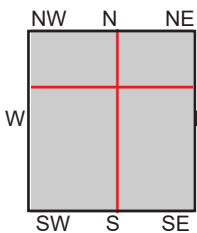
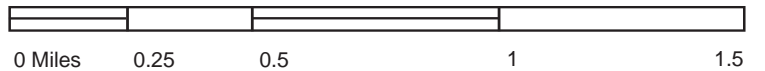
TP, Steele Peak, 2018, 7.5-minute
 NE, Sunnymead, 2018, 7.5-minute
 SE, Perris, 2018, 7.5-minute
 NW, Riverside East, 2018, 7.5-minute

SITE NAME: Perris Valley Channel
ADDRESS: Nandina Avenue and Patterson Avenue
 March Air Reserve Ba, CA 92518
CLIENT: Group Delta Consultants





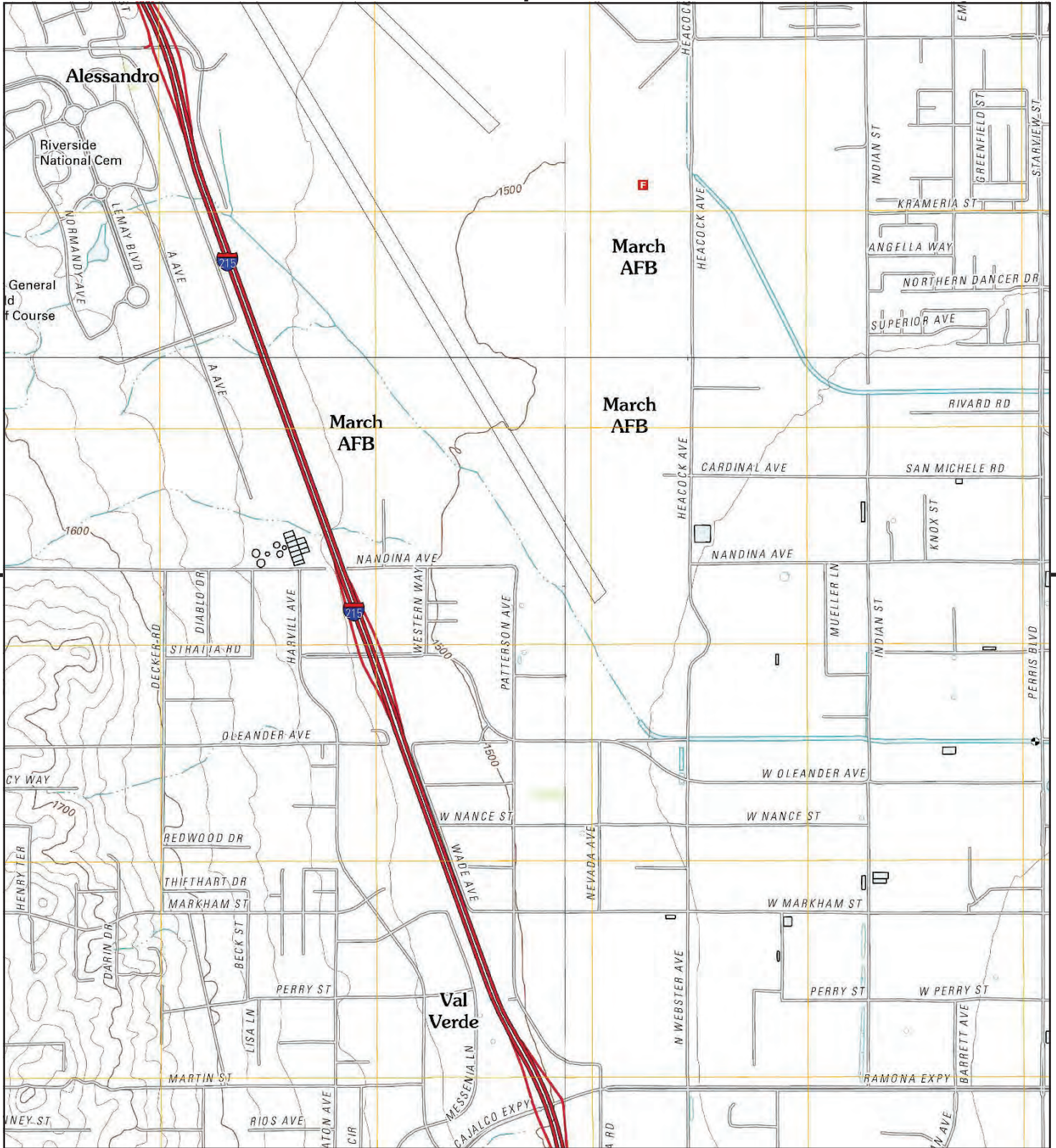
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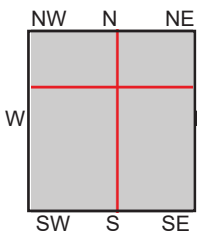
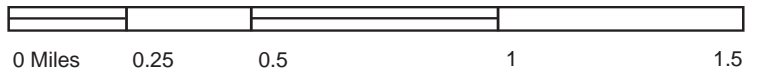
TP, Steele Peak, 2015, 7.5-minute
 NE, Sunnymead, 2015, 7.5-minute
 SE, Perris, 2015, 7.5-minute
 NW, Riverside East, 2015, 7.5-minute

SITE NAME: Perris Valley Channel
 ADDRESS: Nandina Avenue and Patterson Avenue
 March Air Reserve Ba, CA 92518
 CLIENT: Group Delta Consultants





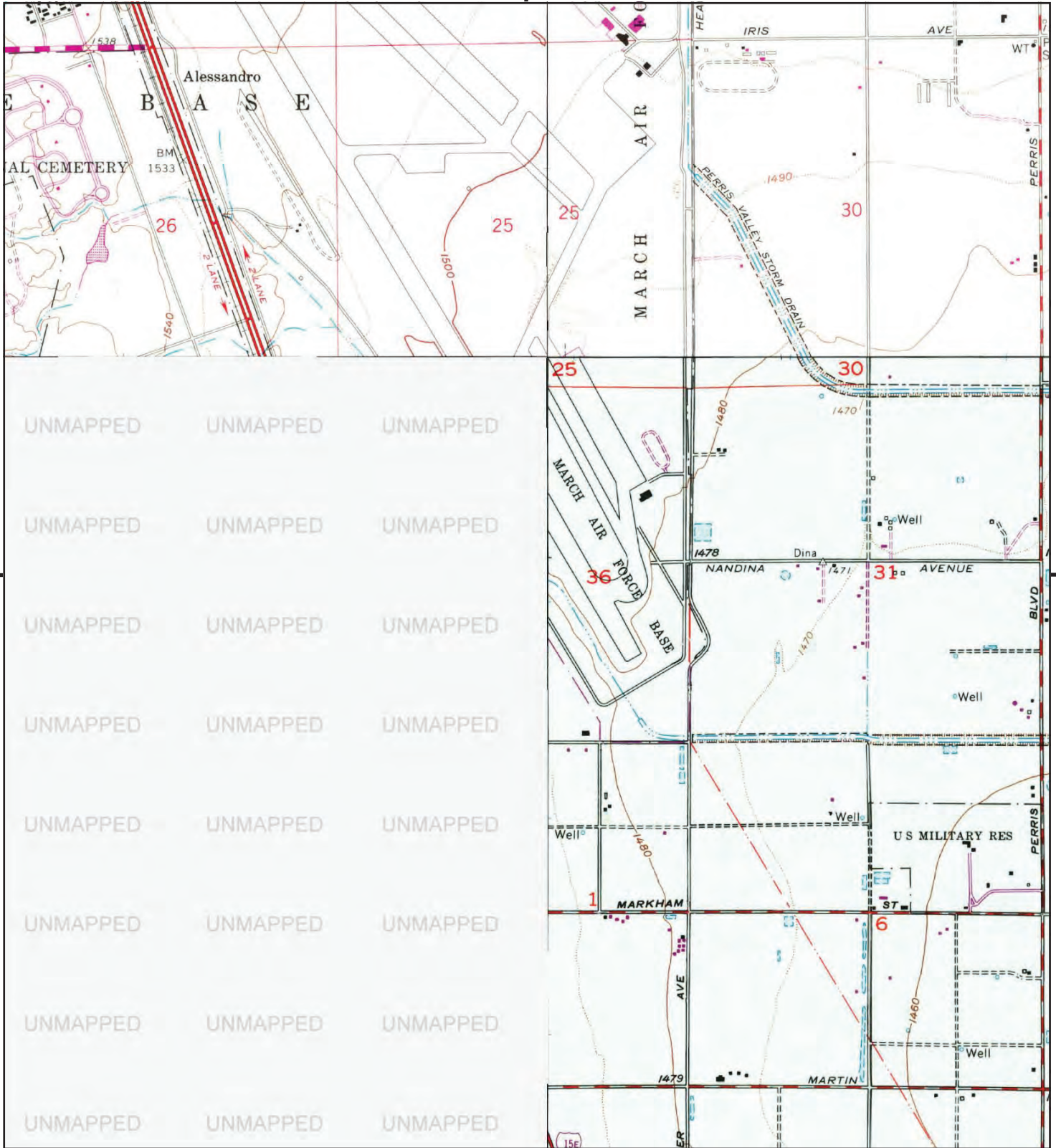
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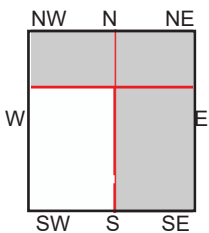
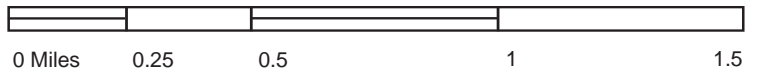
TP, Steele Peak, 2012, 7.5-minute
 NE, Sunnymead, 2012, 7.5-minute
 SE, Perris, 2012, 7.5-minute
 NW, Riverside East, 2012, 7.5-minute

SITE NAME: Perris Valley Channel
 ADDRESS: Nandina Avenue and Patterson Avenue
 March Air Reserve Ba, CA 92518
 CLIENT: Group Delta Consultants





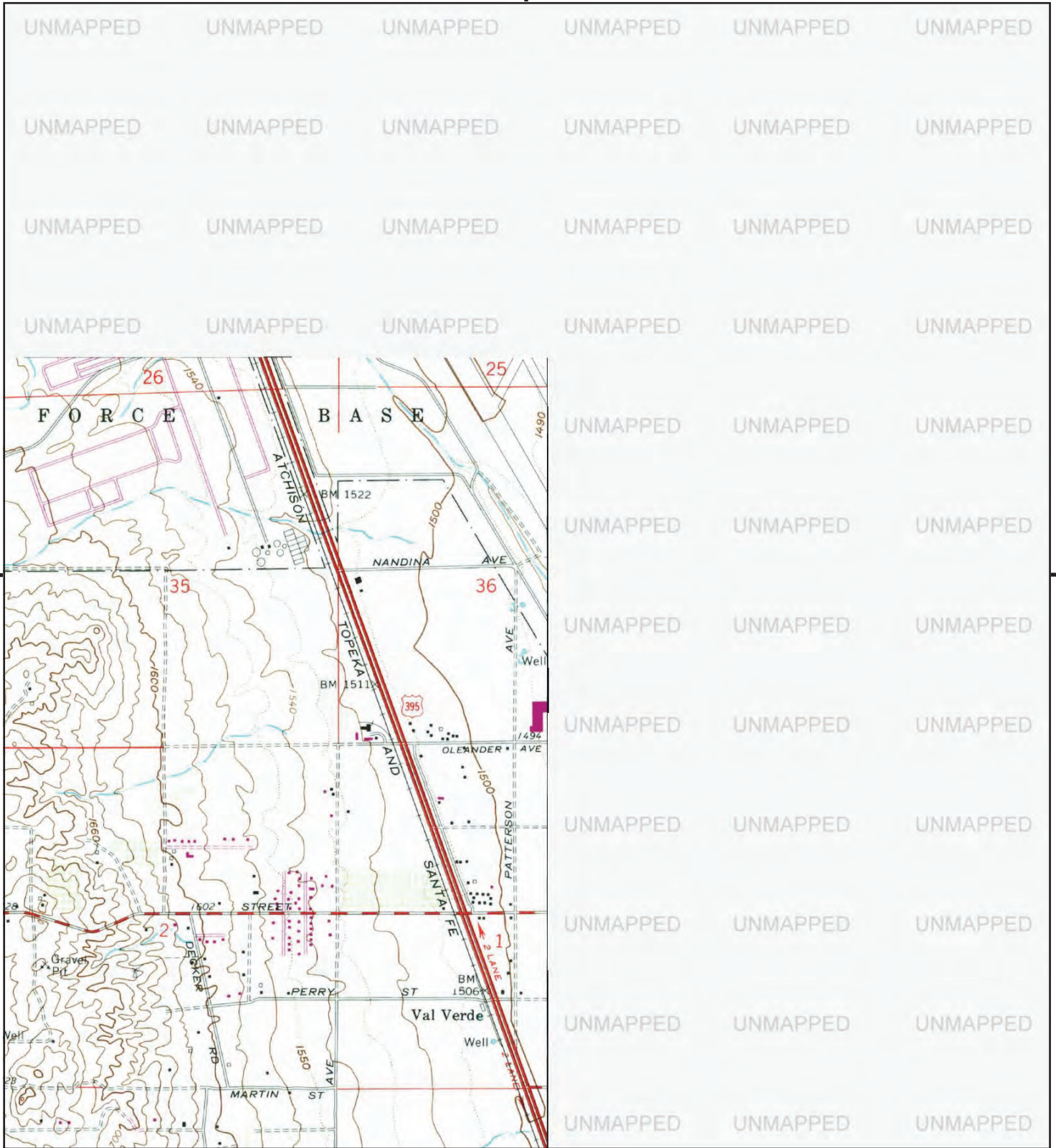
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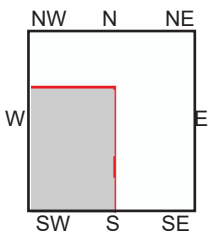
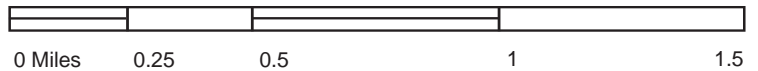
NE, Sunnymead, 1980, 7.5-minute
 SE, Perris, 1979, 7.5-minute
 NW, Riverside East, 1980, 7.5-minute

SITE NAME: Perris Valley Channel
 ADDRESS: Nandina Avenue and Patterson Avenue
 March Air Reserve Ba, CA 92518
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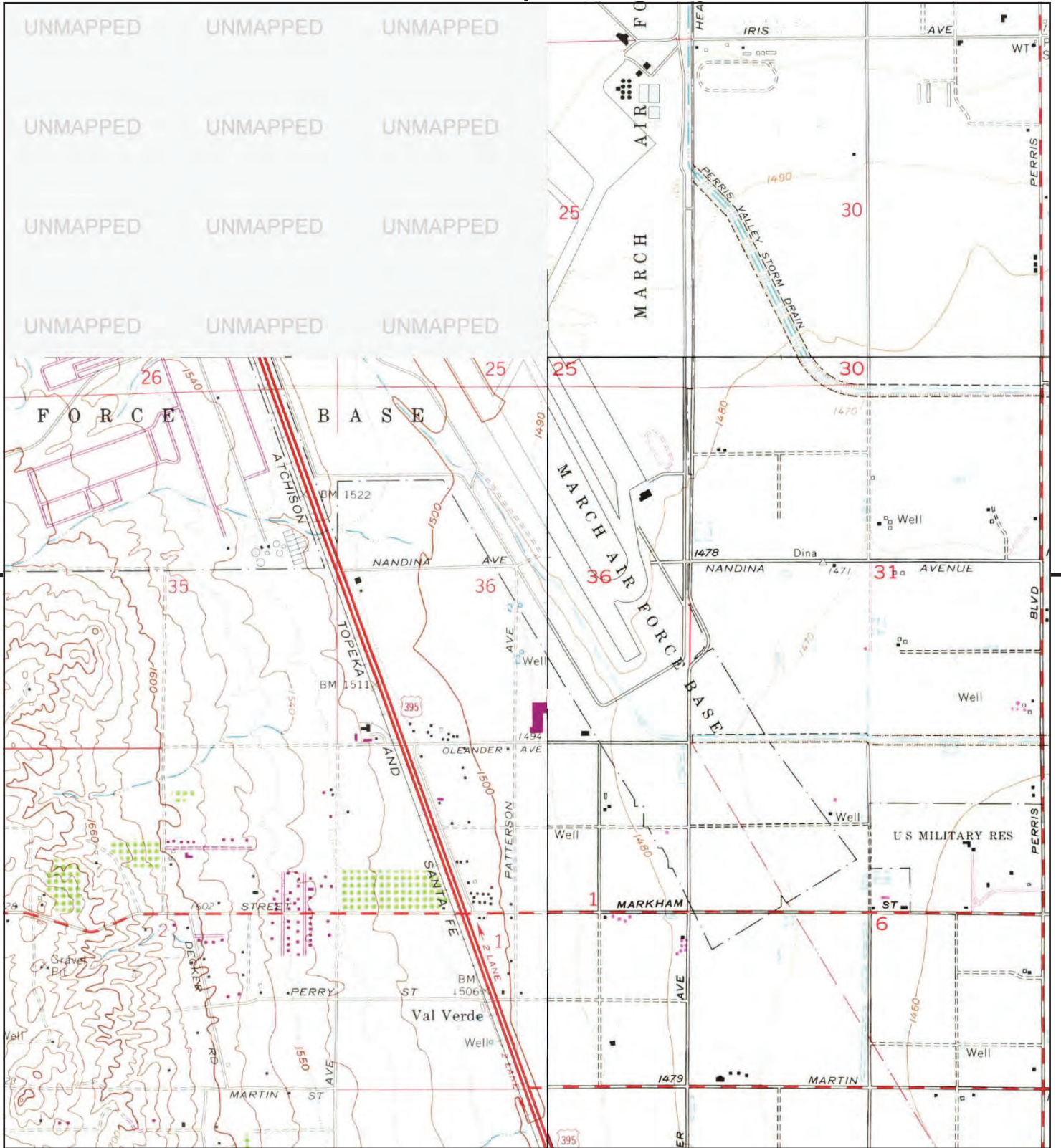
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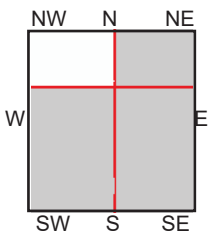
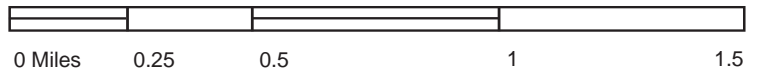
TP, Steele Peak, 1978, 7.5-minute

SITE NAME: Perris Valley Channel
 ADDRESS: Nandina Avenue and Patterson Avenue
 March Air Reserve Ba, CA 92518
 CLIENT: Group Delta Consultants





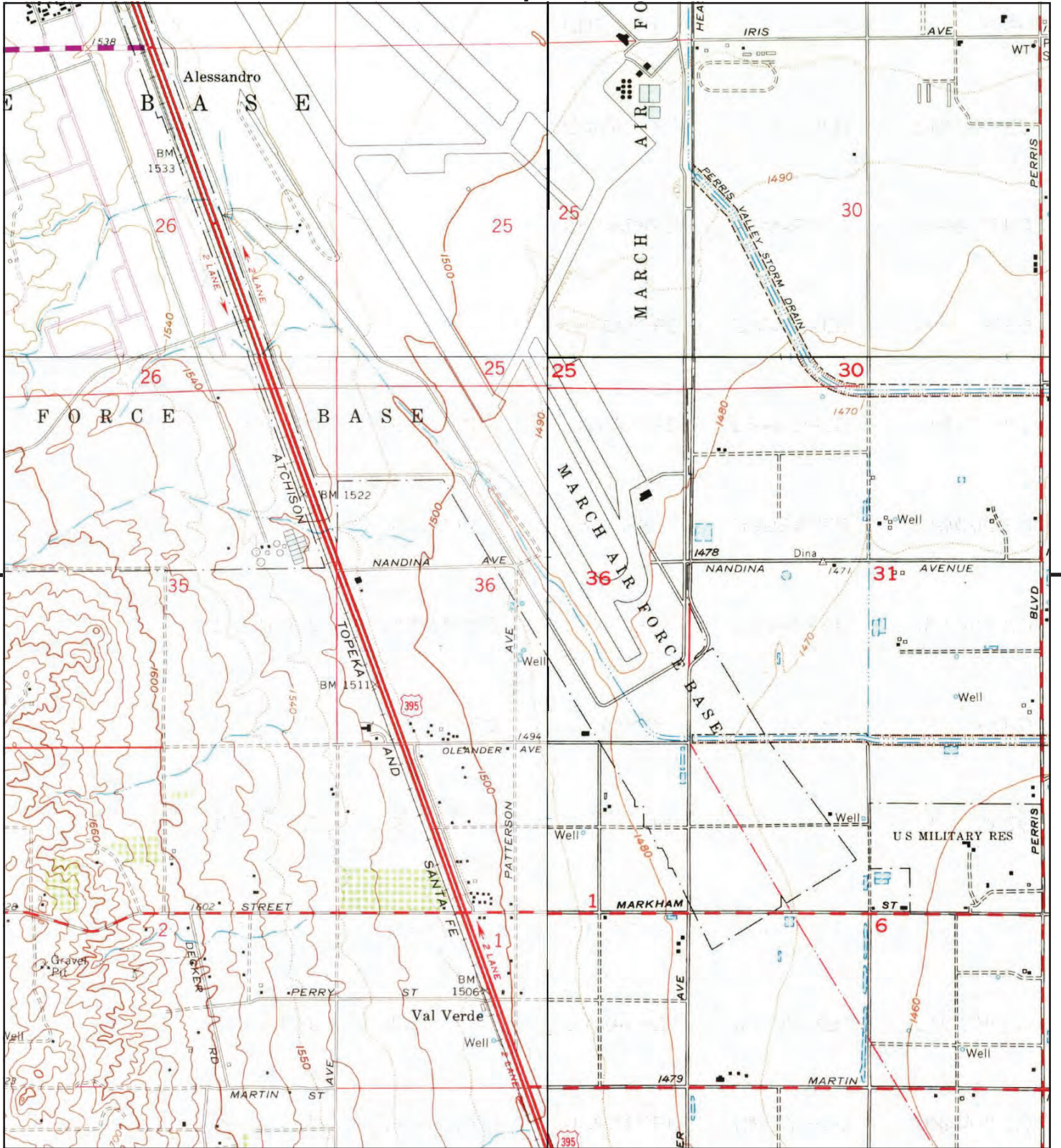
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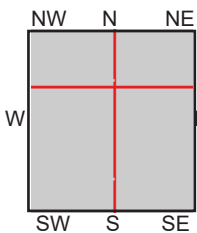
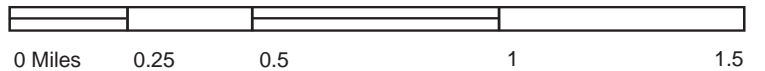
TP, Steele Peak, 1973, 7.5-minute
 NE, Sunnymead, 1973, 7.5-minute
 SE, Perris, 1973, 7.5-minute

SITE NAME: Perris Valley Channel
 ADDRESS: Nandina Avenue and Patterson Avenue
 March Air Reserve Ba, CA 92518
 CLIENT: Group Delta Consultants





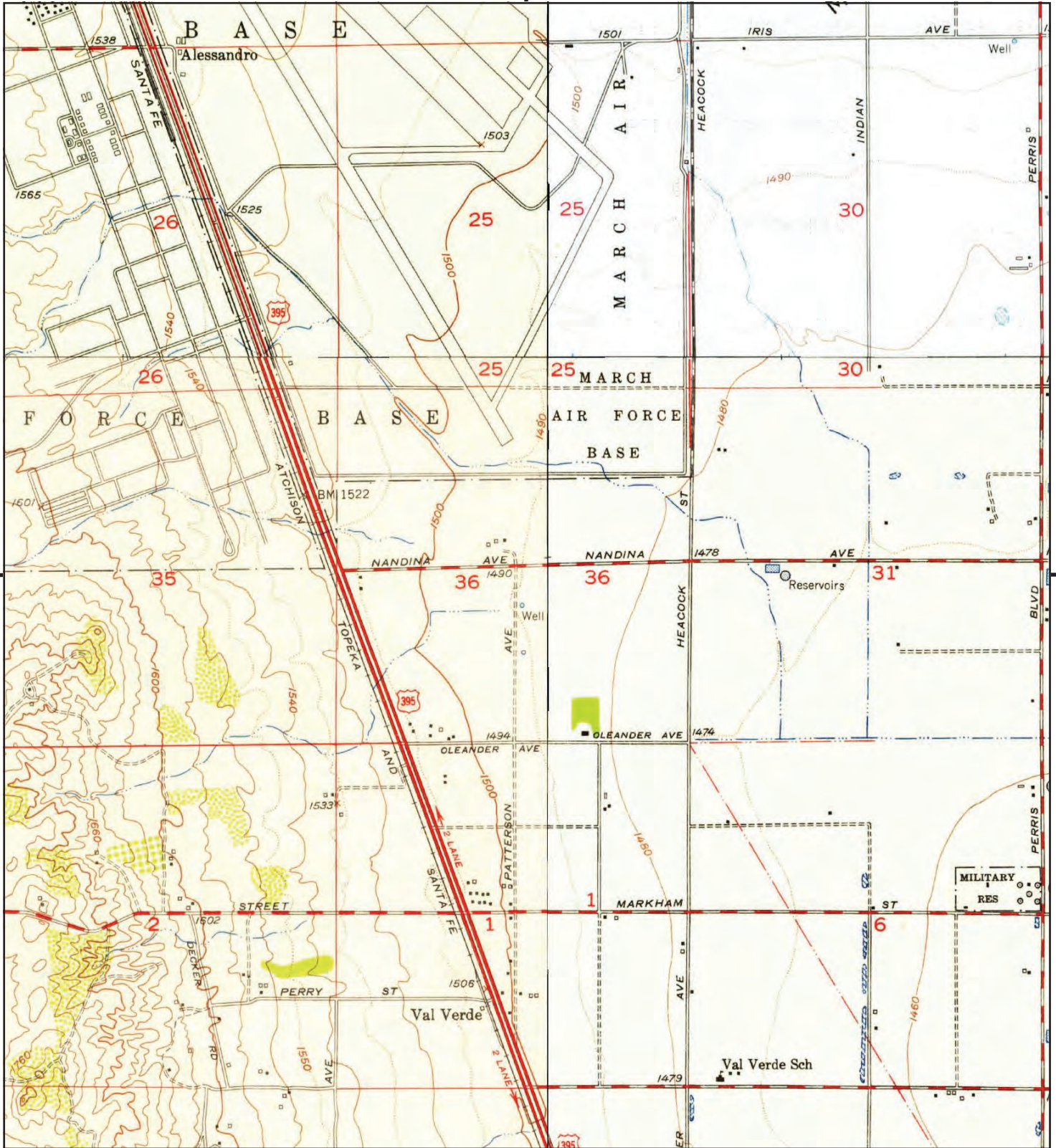
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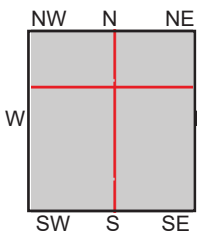
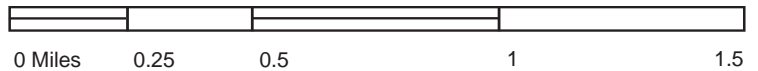
TP, Steele Peak, 1967, 7.5-minute
 NE, Sunnymead, 1967, 7.5-minute
 SE, Perris, 1967, 7.5-minute
 NW, Riverside East, 1967, 7.5-minute

SITE NAME: Perris Valley Channel
 ADDRESS: Nandina Avenue and Patterson Avenue
 March Air Reserve Ba, CA 92518
 CLIENT: Group Delta Consultants





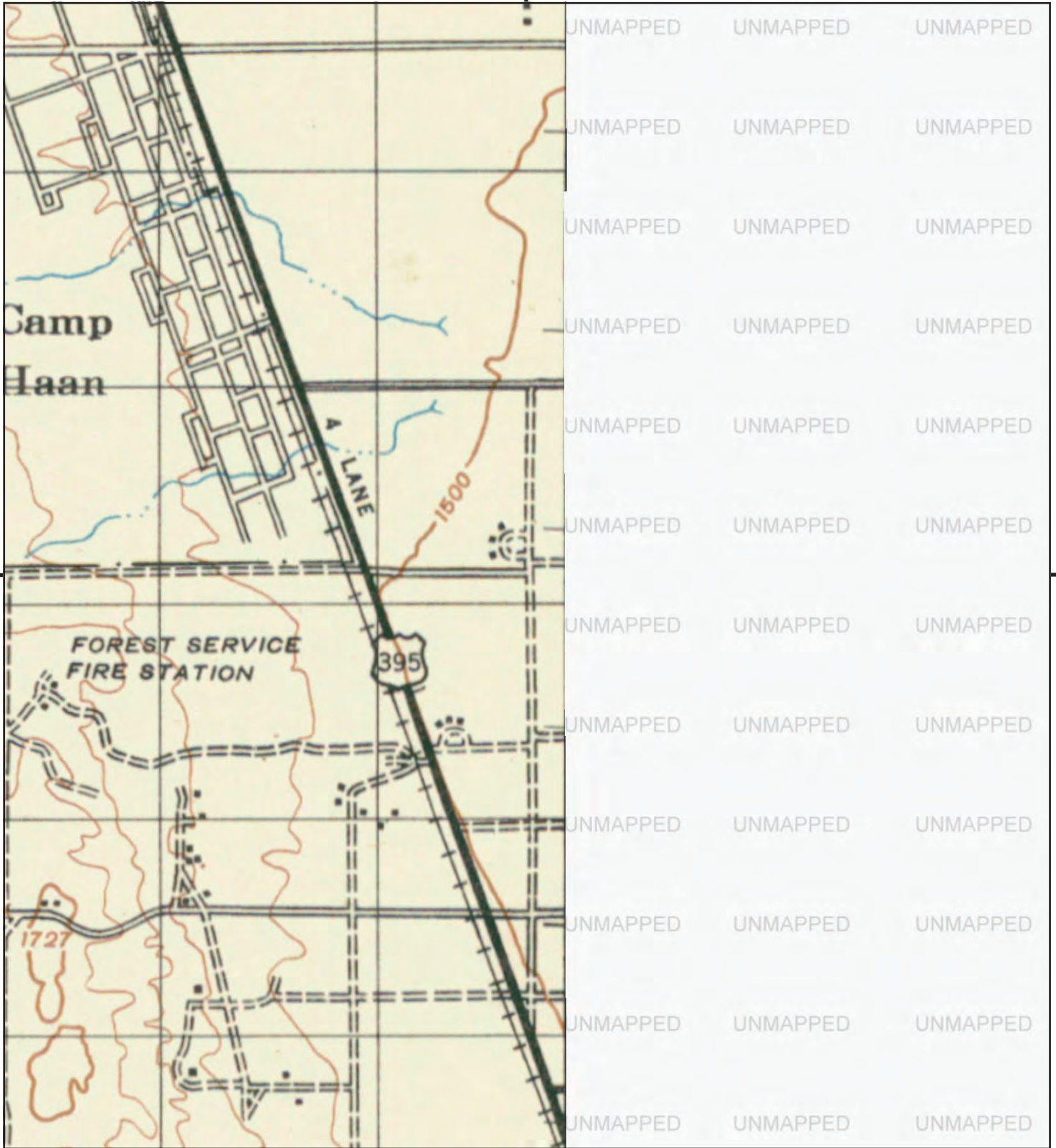
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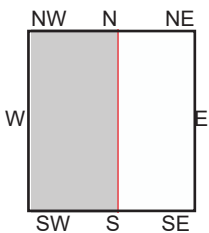
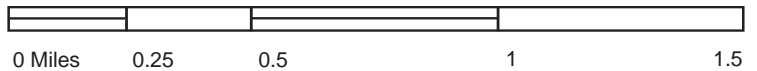
TP, Steele Peak, 1953, 7.5-minute
 NE, Sunnymead, 1953, 7.5-minute
 SE, Perris, 1953, 7.5-minute
 NW, Riverside East, 1953, 7.5-minute

SITE NAME: Perris Valley Channel
 ADDRESS: Nandina Avenue and Patterson Avenue
 March Air Reserve Ba, CA 92518
 CLIENT: Group Delta Consultants





This report includes information from the following map sheet(s).



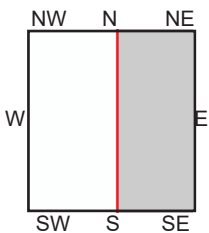
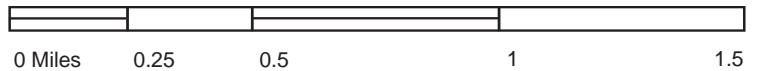
TP, RIVERSIDE, 1947, 15-minute

SITE NAME: Perris Valley Channel
 ADDRESS: Nandina Avenue and Patterson Avenue
 March Air Reserve Ba, CA 92518
 CLIENT: Group Delta Consultants





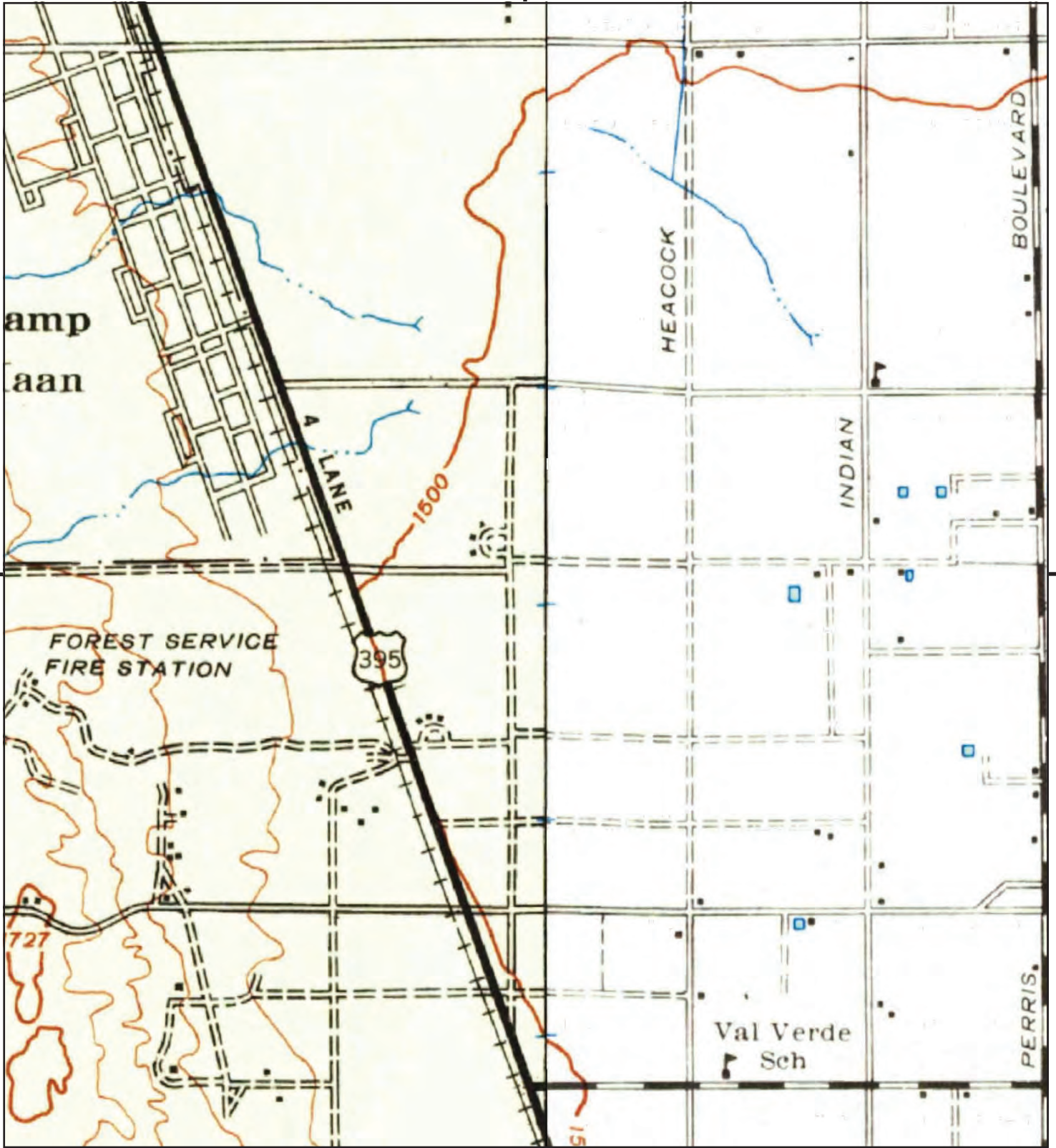
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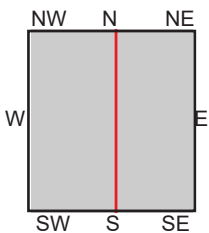
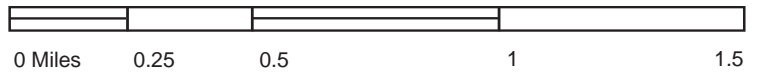
E, PERRIS, 1943, 15-minute

SITE NAME: Perris Valley Channel
 ADDRESS: Nandina Avenue and Patterson Avenue
 March Air Reserve Ba, CA 92518
 CLIENT: Group Delta Consultants





This report includes information from the following map sheet(s).



TP, Riverside, 1942, 15-minute
E, Perris, 1942, 15-minute

SITE NAME: Perris Valley Channel
 ADDRESS: Nandina Avenue and Patterson Avenue
 March Air Reserve Ba, CA 92518
 CLIENT: Group Delta Consultants



Perris Valley Channel

Nandina Avenue and Patterson Avenue
March Air Reserve Ba, CA 92518

Inquiry Number: 6798685.10

December 28, 2021

The EDR-City Directory Image Report

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City Directory Images

Thank you for your business.

Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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Data by

infoUSA[®]

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

<u>Year</u>	<u>Target Street</u>	<u>Cross Street</u>	<u>Source</u>
2017	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
2014	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
2010	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
2005	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
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1995	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
1992	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
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1980	<input type="checkbox"/>	<input type="checkbox"/>	Haines Criss-Cross Directory
1976	<input type="checkbox"/>	<input type="checkbox"/>	Haines Criss-Cross Directory
1971	<input type="checkbox"/>	<input type="checkbox"/>	Haines Criss-Cross Directory

FINDINGS

TARGET PROPERTY STREET

Nandina Avenue and Patterson Avenue
March Air Reserve Ba, CA 92518

Year CD Image Source

NANDINA AVE

2017	pg A1	EDR Digital Archive	
2014	pg A3	EDR Digital Archive	
2010	pg A5	EDR Digital Archive	
2005	pg A7	EDR Digital Archive	
2000	pg A9	EDR Digital Archive	
1995	pg A11	EDR Digital Archive	
1992	pg A13	EDR Digital Archive	
1985	-	Haines Criss-Cross Directory	Target and Adjoining not listed in Source
1980	-	Haines Criss-Cross Directory	Target and Adjoining not listed in Source
1976	-	Haines Criss-Cross Directory	Target and Adjoining not listed in Source
1971	-	Haines Criss-Cross Directory	Street not listed in Source

PATTERSON AVE

2017	pg A2	EDR Digital Archive	
2014	pg A4	EDR Digital Archive	
2010	pg A6	EDR Digital Archive	
2005	pg A8	EDR Digital Archive	
2000	pg A10	EDR Digital Archive	
1995	pg A12	EDR Digital Archive	
1992	pg A14	EDR Digital Archive	
1985	-	Haines Criss-Cross Directory	Target and Adjoining not listed in Source
1980	-	Haines Criss-Cross Directory	Target and Adjoining not listed in Source
1976	-	Haines Criss-Cross Directory	Target and Adjoining not listed in Source
1971	-	Haines Criss-Cross Directory	Street not listed in Source

FINDINGS

CROSS STREETS

No Cross Streets Identified

City Directory Images

NANDINA AVE 2017

- 1345 INTEGRITY REBAR
- 1375 EKG ORGANICS
REW MATERIALS
- 1420 GREENSTONE MATERIALS
- 1480 EMPIRE TRACTOR CO INC
PEED EQUIPMENT
- 1530 CIRCLEPOINT TECHNOLOGY
JR PIPELINE
UNISAT INC
- 1535 PULLIAM
- 1569 FREEWAY BUILDING MATERIALS



-

PATTERSON AVE 2017

4210 J & J EQUIPMENT SALES CO
J & J EQUIPMENT SALES CO INC
4927 TAYLOR, SANDY
4982 ADVANCED DRAINAGE SYSTEMS
5008 L & R BUTLER AUTO DISMANTLING
5117 MORENO, ADAM
5137 DUQUE, JOSE

NANDINA AVE 2014

1375	REW MATERIALS
1420	GREENSTONE MATERIALS
1480	EMPIRE TRACTOR CO INC
	PEED EQUIPMENT
1530	J R PIPELINE CO INC
	JR PIPELINE
	UNISAT INC
1569	FREEWAY BUILDING MATERIALS
	PULLIAM

PATTERSON AVE 2014

4210 FOUR STAR FORKLIFT CO
J & J EQUIPMENT SALES CO
OCCUPANT UNKNOWN,
4927 TAYLOR, SANDY
5008 L & R BUTLER AUTO DISMANTLING
5026 OCCUPANT UNKNOWN,
5087 SANABRIA, JOSE
5117 OCCUPANT UNKNOWN,
5137 MACIAS, FRANCES

NANDINA AVE 2010

1345 INTEGRITY REBAR PLACERS
1375 REW MATERIALS
1420 EMERY MATERIALS INC
1480 EMPIRE TRACTOR CO INC
MAC BEATH HARDWOOD
1530 J R PIPELINE CO
UNISAT INC
1535 ADVANCE ELECTRICAL TECHNOLOGY
CALIFORNIA MAX HOME BUILDERS
1569 FREEWAY BUILDING MATERIALS
JOHN PULLIAM MASONRY CO

PATTERSON AVE 2010

4210 OCCUPANT UNKNOWN,
4927 TAYLOR, SANDY
4982 CALIFORNIA PRECAST STONE MFG
5008 L & R BUTLER AUTO DISMANTLING
5026 OCCUPANT UNKNOWN,
5122 B & B STEEL INC
5137 GRANADOS, ROSARIO
OCCUPANT UNKNOWN,
RPT PALLETS

NANDINA AVE 2005

1375 SWEDISH SPEED VOLVO REPAIR AND SERVI
1420 EMERY MATERIALS & RECYCLING INC
1530 J R PIPELINE CO INC
RENERIA DIANA ATTORNEY AT LAW
SERVICES AVAILABLE THROUGHOUT
UNISAT INC
UNIVERSAL SATELLITE COMMUNICATIONS
1569 FREEWAY BUILDING MATERIALS
JOHN PULLIAM MASONRY CO
OCCUPANT UNKNOWN,

PATTERSON AVE 2005

4927 OCCUPANT UNKNOWN,
4929 KEN EQUIPMENT
4982 CALIFORNIA PRECAST STONE MFG
5026 OCCUPANT UNKNOWN,
5122 B & B STEEL INC
5137 COOR, V
OCCUPANT UNKNOWN,



-

NANDINA AVE 2000

1480 EMPIRE TRACTOR COMPANY INCORPORATED
1530 J R PIPELINE CO INCORPORATED



-

PATTERSON AVE 2000

4927	MURRAY, THOMAS
4929	BREWER, MARY J KEN EQUIPMENT
5007	SCHALL, JEROME F
5008	L & R BUTLER AUTO DISMANTLING
5026	TEMPORARY UTILITY SERVICES
5122	B & B STEEL INCORPORATED



-

NANDINA AVE 1995

1375	EQUIPMENT CENTER
1480	EMPIRE TRACTOR CO
1530	J R PIPELINE CO
1569	NANDINA LIQUOR MINIMARKET

PATTERSON AVE 1995

4929 KEN EQUIPMENT
TAYLOR, KEN
5007 OCCUPANT UNKNOWNN
5008 L & R BUTLER AUTO DISMANTLING
5026 TEMPORARY UTILITY SVC
5030 HAMILTON, KERVIN V
IVAN REEK TRUCKING
5122 B & B STEEL INC



-

NANDINA AVE 1992

1375 EQUIPMENT CENTER
1425 ERNIES 24 HR TOWING
WELLS TOWING
1480 EMCO
1530 J R PIPELINE CO INC
1569 NANDINA LQR MNIMRKT

PATTERSON AVE 1992

4210 FOUR STAR FRKLFT CO
J&J EQUIP SALES CO
4929 KEN EQUIPMENT
TAYLOR, KEN
4982 GREY HILL ELEC INC
5008 L&R AUTO DISMANTLNG
5026 TEMPORARY UTLTY SVS
5030 REEK IVAN TRUCKING
REEK, IVAN A
5122 B&B STEEL INC

Appendix C

User-Provided Exhibits

EXHIBIT 1

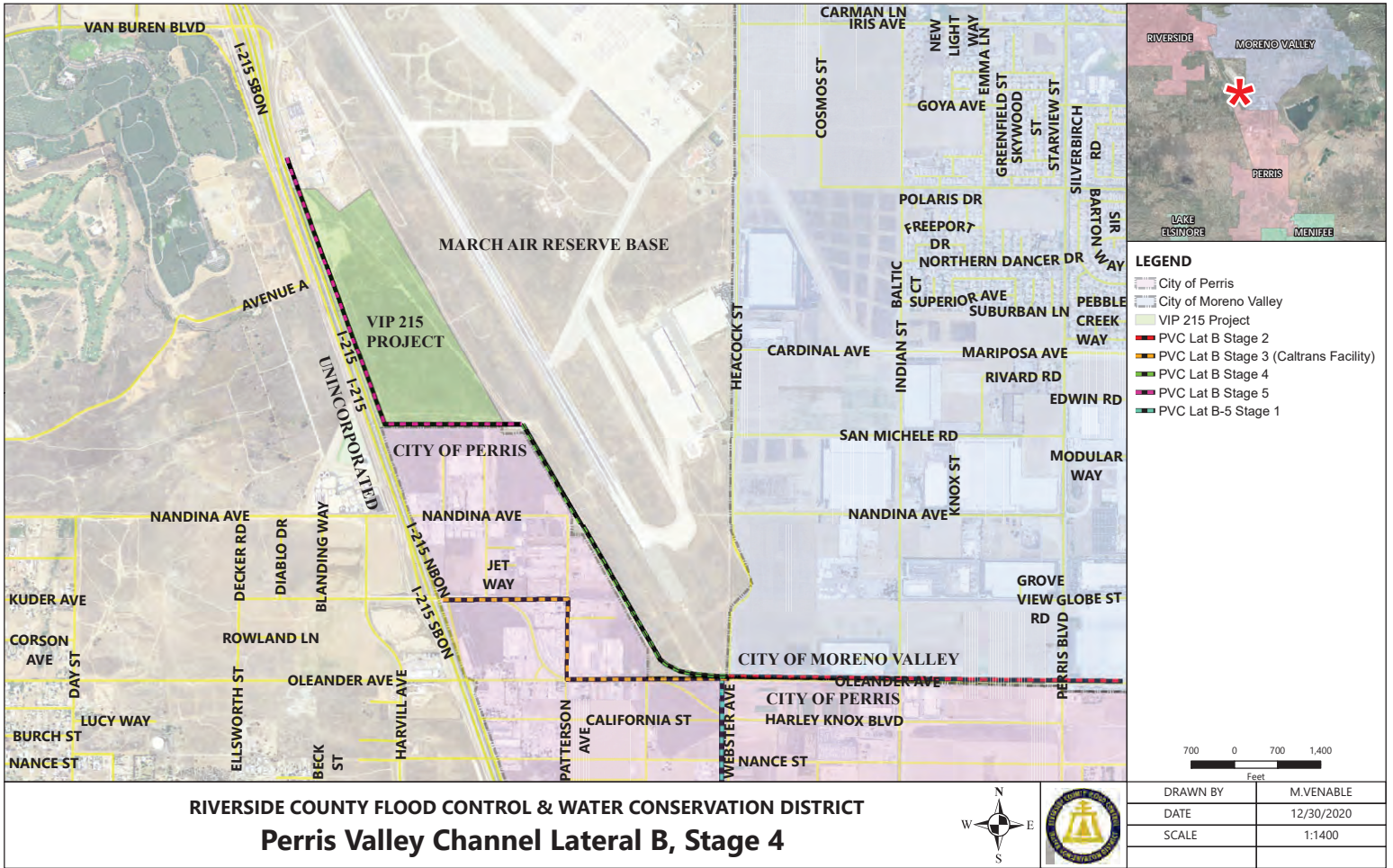


Exhibit 2 Project Components



NANDINA AVE

AIRPORT WAY

JET WAY

WESTERN WAY

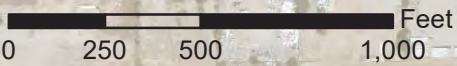
PATTERSON AVE

OLEANDER AVE

HARLEY KNOX BLVD

NEVADA AVE

HEACOCK ST



MITIGATED NEGATIVE DECLARATION

Project Title: Perris Valley Channel MDP Lateral B, Stage 4 **State Clearinghouse Number:** 2022090378

Contact Person: Kevin Cunningham **Telephone Number:** 951.955.1526 **Email:** kcuning@rivco.org

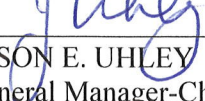
Lead Agency and Project Sponsor: Riverside County Flood Control and Water Conservation District

Address: 1995 Market Street **City:** Riverside **Zip:** 92501

Project Description: The Riverside County Flood Control and Water Conservation District (District), in partnership with the March Joint Powers Authority (MJPA) and March Air Reserve Base (MARB) is proposing to construct, operate and maintain the Perris Valley Channel (PVC) Lateral B, Stage 4 Project (project). PVC Lateral B-5, Stage 1 and Stage 2 and PVC Lateral B, Stage 2 and 3 have already been constructed between Heacock Street and Interstate 215 (I-215). The project would construct PVC Lateral B, Stage 4, which consists of approximately 6,000 ft. of reinforced concrete box (RCB) connecting the PVC Lateral B, Stage 5 facility to the existing PVC Lateral B, Stage 2 facility. The project's general alignment begins at the downstream terminus of PVC Lateral B, Stage 5 and continues south and east adjacent to the MARB west perimeter security fence before tying into the PVC Lateral B, Stage 2 facility at Heacock Street. The project would include three transition structures, four junction structures, twelve bolted down manholes for security, and two inlets along the southernmost end of the alignment to collect on-site flows from MARB. The project would also include two lateral stubouts and bulkheads for the future construction of Lateral B-7 and Lateral B-8 in the city of Perris. The project would be located mostly within MARB right of way but will require a 45-ft. permanent easement has been dedicated for the construction and maintenance of Stage 4 on APN 294-180-055 which is outside of the MARB.

Project Location: The project site is mostly located within the limits of MARB and the city of Perris in Western Riverside County, east of I-215. The proposed alignment would be located between the existing PVC Lateral B, Stage 2 facility at Heacock Street and the Perris Valley Channel Lateral B, Stage 5 facility. The project is located within Township 3 South, Range 4 West, Section 36 San Bernardino Baseline Meridian within APNs 294- 220-003, 294-200-002, 294-180-007, 294-180-006, 294-180-037, 294-180-055, and 294-180-017.

Lead Agency Finding: The General Manager-Chief Engineer of the Riverside County Flood Control and Water Conservation District has made a finding that the proposed Perris Valley Channel MDP Lateral B, Stage 4 Project will not have a significant adverse effect on the environment with mitigation incorporated. An Initial Study/Mitigated Negative Declaration supporting this finding is attached. This finding will become final upon adoption of this Mitigated Negative Declaration by the Board of Supervisors of the Riverside County Flood Control and Water Conservation District.

Signature: 
 JASON E. UHLEY
 General Manager-Chief Engineer

Dated: 12/20/2023

Board of Supervisors Action: The Board of Supervisors of the Riverside County Flood Control and Water Conservation District, assembled in regular session on January 9, 2024 has determined that the Perris Valley Channel MDP Lateral B, Stage 4 Project will not have a significant adverse effect on the environment and has adopted this Mitigated Negative Declaration.

Signature: _____
 KIMBERLY RECTOR
 Clerk of the Board

Dated: _____

Copies to: 1) County Clerk
 2) Flood Control