### SUBMITTAL TO THE BOARD OF SUPERVISORS COUNTY OF RIVERSIDE, STATE OF CALIFORNIA



FROM: TLMA - Transportation Department

**SUBMITTAL DATE:** May 26, 2010

SUBJECT:

Modification of Financial Assurance Mechanism Required by the Surface Mining

and Reclamation Act (SMARA).

**RECOMMENDED MOTION:** That the Board of Supervisors approve Resolution 2010-157, which amends Resolution 97-261 that established a Pledge of Revenue to satisfy requirements of Section 2773.1 of the Public Resources Code for Financial Assurance to Reclaim Open Pit Mines.

BACKGROUND: The Board previously established a Pledge of Revenue as a Financial Assurance Mechanism to Reclaim Surface Mining Operations, as required by the Public Resources Code for County-operated mining sites or borrow pits used by the Transportation Department for road construction and maintenance. SMARA requires that the Financial

> Juan C. Perez Director of Transportation

JCP:dkd

(Continued On Attached Page)

**Current F.Y. Total Cost:** in Current Year Budget: \$ 0 N/A **FINANCIAL Budget Adjustment: Current F.Y. Net County Cost:** \$ 0 N/A DATA For Fiscal Year: 2009/2010 **Annual Net County Cost:** \$0 Positions To Be

SOURCE OF FUNDS: Road Funds (100%)

**Deleted Per A-30** Requires 4/5 Vote

C.E.O. RECOMMENDATION:

**County Executive Office Signature** 

#### MINUTES OF THE BOARD OF SUPERVISORS

On motion of Supervisor Buster, seconded by Supervisor Stone and duly carried, IT WAS ORDERED that the above matter is approved as recommended.

Ayes:

Buster, Tavaglione, Stone and Ashley

Nays:

None

Kecia Harper-Ihem

Absent:

Benoit

Date:

June 8, 2010

XC:

Transp.

Prev. Agn. Ref. 3.46 of 6/23/09

**District:** 1,3,4,5

Agenda Number:

Z Policy

Consent

Exec. Ofc.:

Policy

 $\boxtimes$ 

Consent

Dep't Recomm.

The Honorable Board of Supervisors

RE: Modification of Financial Assurance Mechanism Required by the Surface Mining and Reclamation Act (SMARA).

May 26, 2010 Page 2 of 2

Assurances be adjusted annually. The adjustments account for new lands disturbed, inflation and for reclamation of lands accomplished in accordance with the approved reclamation plan (PRC 2773.1(a)(3).

The original Resolution 97-261 must be modified to adjust the reclamation costs of the individual County's sites, as contained in the Pledge of Revenue, from \$1,022,625.00 to \$994,000.00. The actual reclamation cost for each mining site or borrow pit is shown on Attachment A. Resolution 2010-157 supersedes any previously approved modification to Resolution 97-261 made by Resolution 98-323, Resolution 2003-178, Resolution 2006-118, Resolution 2007-388, Resolution 2008-196 and Resolution 2009-184. There is no current fiscal year cost associated with the future reclamation. A future expense would be incurred at the point that existing mining sites are closed. Currently, no estimated date is known or projected for the closure of any of the County's existing mining sites.

Project No. ZTR 9000

### Board of Supervisors

### County of Riverside

2

1

3

9

12

13

**RESOLUTION NO. 2010-157** 

**AMENDED** 

RESOLUTION 97-261

ESTABLISHING A PLEDGE OF REVENUE

FOR RECLAMATION OF COUNTY MINED LANDS

WHEREAS, the Board of Supervisors on November 4, 1997 adopted Resolution No. 97-261, which established a pledge of revenue for reclaiming County mined lands; and

WHEREAS, the pledge of revenue established by Resolution No. 97-261, was increased by Resolution No. 98-323 on November 11, 1998 for the reclamation of two additional mining sites; and

WHEREAS, the pledge of revenue established by Resolution No. 97-261 was increased by Resolution No. 2003-178 on April 29, 2003 for the reclamation of two additional mining sites, and for the removal of two former mining sites; and

WHEREAS, the pledge of revenue established by Resolution No. 97-261 was increased by Resolution No. 2006-118 on August 15, 2006 for the reclamation of the expansion of one current mining site; and

WHEREAS, the pledge of revenue established by Resolution No. 97-261 was increased by Resolution No. 2007-388 on September 4, 2007 to reflect adjustments to account for new lands disturbed, inflation and for reclamation of lands accomplished in accordance with the approved reclamation plan; and

**WHEREAS**, the pledge of revenue established by Resolution No. 97-261 was increased by Resolution No. 2008-196 on June 3, 2008 to reflect adjustments to account for new lands disturbed, inflation and for reclamation of lands accomplished in accordance with the approved reclamation plan; and

WHEREAS, the pledge of revenue established by Resolution No. 97-261 was increased by Resolution No. 2009-184 on June 23, 2009 to reflect adjustments to account for new lands disturbed, inflation and for reclamation of lands accomplished in accordance with the approved reclamation plan; and

WHEREAS, the pledge of revenue needs to be modified to reflect annual adjustments to account for new lands disturbed, inflation and for reclamation of lands accomplished in accordance with the approved reclamation plan.

- 1. Section 1 of Resolution No. 97-261 is hereby amended to read: Road Fund revenue, located in an account known as Transportation Department Fund 20000, Department ID 3130100000 in the amount of \$994,000.00 is hereby pledged to reclaim each mine site identified in Attachment A, dated April 30, 2010, which is incorporated herein by this reference.
- 2. Attachment A to Resolution No 97-261 is hereby replaced by said
  Attachment A, dated April 30, 2010, which is attached and incorporated herein

1	by this reference.
2	
	ROLL CALL: Ayes: Buster, Tavaglione, Stone and Ashley Nays: None Absent: Benoit
	The foregoing is certified to be a true copy of a resolution duly adopted by said Board of Supervisors on the date therein set forth.  KECIA HARPER-IHEM, Clerk of said I

Page 3 of 3

of said Board

Deputy

# County Mining Sites Transportation Department April 30, 2010

Name	California Mine I.D Number	Reclamation Cost Estimates
Bradshaw Pit	91-33-0046	\$55,500.00
Brookside Materials Yard	91-33-0094	\$328,000.00
Bundy Canyon Pit	91-33-0049	\$108,375.00
East Benton Pit	91-33-0052	\$39,250.00
Juniper Flats Pit	91-33-0053	\$78,125.00
Little Lake Pit	91-33-0055	\$33,375.00
Markham Pit	91-33-0054	\$137,875.00
Midland Pit	91-33-0051	\$84,875.00
Mountain View Pit	91-33-0048	\$34,875.00
Terwilliger Pit	91-33-0047	\$37,875.00
Thermal Pit	91-33-0090	\$55,875.00
	TOTAL	\$994,000.00

## Bradshaw Material Site Financial Assurance Calculations for Reclamation California Mine I.D Number 91-33-0046 4/30/2010

This cost estimate is based on the following assumptions:

- 1) The maximum amount of disturbance (acres) =
- 2) Slopes will be recontoured and graded to blend with the surrounding area.
- 3) The finished slopes and floor of the material site will be furrowed to retain rainfall and seeds to promote revegetation.
- 4) The finished slopes and floor of the site will be reseeded by pressure spraying with a seed mix of plants native to the area.
- 5) Labor & equipment rates were based on current general prevailing wage rates issued by California Department
- of Industrial Relations, and Caltrans Labor Surcharge and Equipment Rental Rates.
- 6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 34)

## I. Unit costs for equipment, material and labor to be used for reclamation: (equipment hourly rate includes driver/operator)

	н	ourly Rate	
	Equipment	Labor	Total
D-8R Dozer w/operator	192.20	81.65	273.85
Water Truck w/driver	62.95	68.68	131.63
CAT 120G Grader w/operator	70.15	82.08	152.23
5-axle Low Bed Truck & Trailer w/driver	108.45	69.76	178.20
Foreman		89.87	89.87
Laborer		42.67	42.67
Seed Mix @ \$35/lb			35.00

#### II. Reclamation Tasks

#### Task 1 Regrade & Finish Slopes

Regrade and recontour area to a gradient no steeper than 2:1

Regrade and finish slopes to blend with surrounding area, including

furrowing of slopes and ripping pit floor: Estimated manhours--->>>>>

35

				No. Man		
Labor & Equipment	Qty	Unit	Rate	Hrs	Total	
D-8R Dozer w/operator	1	ea	273.85	9	2,465	
Motor Grader w/operator	1	ea	152.23	9	1,370	
Low Bed Truck w/driver	1	ea	178_20	8	1,426	
Water Truck w/driver	- 1	ea	131.63	9	1,185	
Task 1 Total			_	35	6,445	say

#### Task 2 Broadcast Seeding

Distribute native plant mix over finished slopes and mine floor. Seed mix will be distributed at a rate of 30 pounds per acre by broadcasting with an automatic pressure sprayer.

Mix seed into soil by dragging a chain over the area. Estimated manhours ---->>>> 48

				No. Man			
Labor & Equipment	Qty	Unit	Rate	Hrs	Total		
Foreman	1	ea	89.87	8	719		
Laborer	2	ea	42.67	20	1,707		
Water Truck w/driver	1	ea	131,63	20	2,633		
Seed mix application	435,600	sf	0.04	na	17,424		
Task 4 Total	0			48	22,482	say	22,500

#### Task 3 Monitoring

Perform a field investigation of the site each spring to monitor revegetation. Monitoring will take place for up to four years following reclamation to verify the success standards are being met.

for up to four years following	reclamation to	verify the s	uccess stand	dards are bein	g met.	
Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total	
Report Preparation Task 5 Total	4	years	120.00	24	11,520 11,520	say 11,500
185K 5 Total					11,020	11,000
SUBTOTAL						40,400
<b>-</b>						
Bond Amount						
Subtotal						40,400
						,
Supervision (5%)						2,020
						5 000
Mobilization & Demobili	ization (lun	np sum)				5,000

### Profit & Overhead (included in Hrly rates for Labor & Equipment)

Contingency (10%)	4,040

Lead Agency Administrative Cost (10%) 4,040

Total Bond Amount 55,500

## Brookside Material Site Financial Assurance Calculations for Reclamation California Mine I.D Number 91-33-0094 4/30/2010

This cost estimate is based on the following assumptions:

- 1) The maximum amount of disturbance 29.81 acres
- 2) Slopes will be recontoured and graded to blend with the surrounding area.
- 3) The finished slopes and floor of the material site will be furrowed to retain rainfall and seeds
- to promote revegetation.
- 4) The finished slopes and floor of the site will be reseeded by pressure spraying with a seed mix of plants native to the area.
- 5) Labor & equipment rates were based on current general prevailing wage rates issued by California Department
- of Industrial Relations, and Caltrans Labor Surcharge and Equipment Rental Rates.
- 6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 34)

Unit costs for equipment, material and labor to be used for reclamation: (equipment hourly rate includes driver/operator)

	Н	lourly Rate	
	Equipment	Labor	Total
D-8R Dozer w/operator	192.20	81.65	273.85
963 Loader w/operator	123.06	71.76	194.82
Water Truck w/driver	62.95	68.68	131.63
Low Bed Truck w/driver	62.95	69.76	132.71
3-axle End Dump Truck w/driver	62.95	69.76	132.71
Truck mounted crane w/operator	81.80	68.68	150.48
Foreman		89.87	89.87
Laborer		42.67	42.67
Seed Mix @ \$35/lb			35.00

#### I. Reclamation Tasks

Task 1 Regrade & Finish Slopes

Regrade and recontour area to a gradient no steeper than 3:1 (2000 cy/ac) Estimated time to regrade and finish slopes to blend with surrounding area, including furrowing of slopes and ripping pit floor: 685 hours.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total		
D-8R Dozer w/operator	2	ea	273.85	343	93,795		
Water Truck w/driver	1	ea	131.63	171_	22,541		
Task 1 Total				-	116,336	say	116,300

#### Task 2 Construct Drainage Structures

Construct interceptor drain, down drain, install rip rap, install chain link fence and gate.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total		
Interceptor Drain	2,875	LF	5.00	na	14,375		
Down Drain	130	LF	5.00	na	650		**
Rip Rap Pad	2	ea	500.00	na	1,000		
Install Chain Link Fence & Gate	3,275	LF	10.00	na	32,750		
Task 2 Total					48,775	say	48,800

#### Task 3 Remove Mining Equipment

Remove non-mobile mining equipment, processing equipment, equipment boneyard, storage sheds, and other structures or equipment which was not at the site prior to mining.

5 working days are estimated to complete this task.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total		
Foreman	1	ea	89.87	40	3,595		
Laborer	2	ea	42.67	40	3,414		
966 Loader w/operator	1	ea	194.82	40	7,793		
Truck mounted crane w/operator	1	ea	150.48	40	6,019		
Low Bed Truck w/driver	0	ea	132.71	24	0		
End Dump Truck w/driver	1	ea	132.71	24	3,185		
Task 3 Total				_	24,005	say	24,00

### **Brookside Material Site Financial Assurance Calculations for Reclamation**

	Task	4	Broad	cast	Seeding
--	------	---	-------	------	---------

Distribute native plant mix over finished slopes and mine floor. Seed mix will be distributed at a rate of 57 pounds per acre (29.81 acres) by broadcasting with an automatic pressure sprayer. Mix seed into soil by dragging a chain over the area.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total		
Foreman	1	ea	89.87	24	2,157		
Laborer	2	ea	42,67	40	3,414		
Water Truck w/driver		ea	131.63	24	3,159		
Seed mix application	1,298,524	sf	0,04	na _	51,941		
Task 4 Total					60,671	say	60,70 <b>0</b>

#### Task 5 Monitoring

**Total Bond Amount** 

#### Profit & Overhead (included in Hrly rates for Labor & Equipment)

Perform a field investigation of the site each spring to monitor revegetation. Monitoring will take place for three years following reclamation to verify the success standards are being met.

,	-			_				
Labor & Equipment Report Preparation Task 5 Total	Qty 3	Unit years	Rate 120.00	No. Hrs	Total 8,640 8,640	say	8,60 <b>0</b>	
SUBTOTAL						2	58,4 <b>00</b>	
<b>Bond Amount</b>								
Subtotal						2	58,40 <b>0</b>	
Supervision (5%)							12,9 <b>20</b>	
Mobilization & Demobilization	ı (lump sun	1)					5,000	
Profit & Overhead (included in Hrly rates for Labor & Equipment)								
Contingency (10%)							25,840	
Lead Agency Administrative (	ost (10%)						25,84 <b>0</b>	

328,000

## Bundy Canyon Material Site Financial Assurance Calculations for Reclamation California Mine I.D Number 91-33-0049 4/30/2010

This cost estimate is based on the following assumptions:

- 1) The maximum amount of disturbance (acres) = 5
- 2) Slopes will be recontoured and graded to blend with the surrounding area
- 3) The finished slopes and floor of the material site will be furrowed to retain rainfall and seeds
- to promote revegetation.
- 4) The finished slopes and floor of the site will be reseeded by pressure spraying with a seed mix of plants native to the area.
- 5) Labor & equipment rates were based on current general prevailing wage rates issued by California Department
- of Industrial Relations, and Caltrans Labor Surcharge and Equipment Rental Rates.
- 6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 34)

## I. Unit costs for equipment, material and labor to be used for reclamation: (equipment hourly rate includes driver/operator)

	Hourly Rate					
	Equipment	Labor	Total			
D-8R Dozer w/operator	192.20	81.65	273.85			
Water Truck w/operator	62.95	68.68	131.63			
Motor Grader w/operator	70.15	82.08	152.23			
Low Bed Truck w/driver	108.45	69.76	178.20			
Foreman		89.87	89.87			
Laborer		42.67	42.67			
Seed Mix @ \$35/lb			35.00			

#### II. Reclamation Tasks

Task 1 Regrade & Finish Slopes

Regrade and recontour area to a gradient no steeper than 2:1

Regrade and finish slopes to blend with surrounding area, including

furrowing of slopes and ripping pit floor: Estimated manhours---->>>>

58

10,800

108,375

say

Labor & Equipment	Qty	Unit	Rate	Hrs	Total
D-8R Dozer w/operator	1	ea	273.85	18	4,929
Motor Grader w/operator	1	ea	152.23	18	2,740
Low Bed Truck w/driver	1	ea	178.20	4	713
Water Truck w/operator	1	ea	131.63	18	2,369
Task 1 Total				58	10,752

Task 2 Broadcast Seeding

Distribute native plant mix over finished slopes and mine floor. Seed mix will be distributed at a rate of 30 pounds per acre by broadcasting with an automatic pressure sprayer.

Mix seed into soil by dragging a chain over the area, Estimated manhours ---->>>

				No. Man		
Labor & Equipment	Qty	Unit	Rate	Hrs	Total	
Foreman	1	ea	89,87	4	359	
Laborer	2	ea	42,67	9	768	
Water Truck w/operator	1	ea	131,63	9	1,185	
Seed mix application	1,452,000	sf	0.04	na	58,080	
Task 4 Total	0			22	60,392	say

Task 3 Monitoring

**Total Bond Amount** 

Perform a field investigation of the site each spring to monitor revegetation. Monitoring will take place for up to four years following reclamation to verify the success standards are being met.

Labor & Equipment Report Preparation Task 5 Total	Qty 4	Unit years	Rate 120,00	No. Hrs 24_	Total 11,520 11,520	say 11,500	
SUBTOTAL					11,520	82,700	
Bond Amount							
Subtotal						82,700	
Supervision (5%)						4,135	
Mobilization & Demobili	ization (lum	p sum)				5,000	
Profit & Overhead (included in Hrly rates for Labor & Equipment)							
Contingency (10%)						8,270	
Lead Agency Administra	ative Cost (	10%)				8,270	

#### East Benton Material Site Financial Assurance Calculations for Reclamation California Mine I.D Number 91-33-0052 4/30/2010

This cost estimate is based on the following assumptions:

- 1) The maximum amount of disturbance (acres) =
- 2) Slopes will be recontoured and graded to blend with the surrounding area.
- 3) The finished slopes and floor of the material site will be furrowed to retain rainfall and seeds to promote revegetation.
- 4) The finished slopes and floor of the site will be reseeded by pressure spraying with a seed mix of plants native to the area.
- 5) Labor & equipment rates were based on current general prevailing wage rates issued by California Department
- of Industrial Relations, and Caltrans Labor Surcharge and Equipment Rental Rates.
- 6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 34)

#### I. Unit costs for equipment, material and labor to be used for reclamation: (equipment hourly rate includes driver/operator)

	Hourly Rate					
	Equipment	Labor	Total			
D-8R Dozer w/operator	192,20	81.65	273.85			
Water Truck w/driver	62.95	68.68	131.63			
Motor Grader w/operator	70.15	82.08	152.23			
Low Bed Truck w/driver	108.45	69.76	178.20			
Foreman		89.87	89.87			
Laborer		89.87	89.87			
Seed Mix @ \$35/lb		42.67	35.00			

#### II. Reclamation Tasks

#### Task 1 Regrade & Finish Slopes

Regrade and recontour area to a gradient no steeper than 2:1

Regrade and finish slopes to blend with surrounding area, including

furrowing of slopes and ripping pit floor: Estimated manhours--->>>>>

sav

say

5 700

10,200

			No. Man				
Labor & Equipment	Qty	Unit	Rate	Hrs	Total		
D-8R Dozer w/operator	1	ea	273.85	9	2,465		
Motor Grader w/operator	1	ea	152,23	9	1,370		
Low Bed Truck w/driver	1	ea	178.20	4	713		
Water Truck w/driver	1	ea	131.63	9	1,185		
Task 1 Total				31	5,732		

<u>Task 2 Broadcast Seeding</u>
Distribute native plant mix over finished slopes and mine floor. Seed mix will be distributed at a rate of 30 pounds per acre by broadcasting with an automatic pressure sprayer.

Mix seed into soil by dragging a chain over the area. Estimated manhours ——>>>> 24

				No. Man	
Labor & Equipment	Qty	Unit	Rate	Hrs	Total
Foreman	1	ea	89.87	8	719
Laborer	2	ea	89.87	8	1,438
Water Truck w/driver	1	ea	131.63	8	1,053
Seed mix application	174,240	sf	0.04	na	6,970
Task 4 Total			~_	24	10,180

Task 3 Monitoring

Perform a field investigation of the site each spring to monitor revegetation. Monitoring will take place for up to four years following reclamation to verify the success standards are being met.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total	
Report Preparation		4 years	120.00	24	11,520	
Task 5 Total				_	11,520	say <u>11,500</u>
SUBTOTAL						27,400

SUBTOTAL	27,400
Bond Amount	
Subtotal	27,400
Supervision (5%)	1,370
Mobilization & Demobilization (lump sum)	5,000
Profit & Overhead (included in Hrly rates for Labor & Equipment)	
Contingency (10%)	2,740
Lead Agency Administrative Cost (10%)	2,740
Total Bond Amount	39,250

#### Juniper Material Site Financial Assurance Calculations for Reclamation California Mine I.D Number 91-33-0053 4/30/2010

This cost estimate is based on the following assumptions:

- The maximum amount of disturbance (acres) = 30
   Slopes will be recontoured and graded to blend with the surrounding area.
   The finished slopes and floor of the material site will be furrowed to retain rainfall and seeds
- to promote revegetation.
- 4) The finished slopes and floor of the site will be reseeded by pressure spraying with a seed mix of plants native to the area.
- 5) Labor & equipment rates were based on current general prevailing wage rates issued by California Department of Industrial Relations, and Caltrans Labor Surcharge and Equipment Rental Rates.
  6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 34)

#### I. Unit costs for equipment, material and labor to be used for reclamation: (equipment hourly rate includes driver/operator)

	Hourly Rate					
	Equipment	Labor	Total			
D-8R Dozer w/operator	192.20	81.65	273.85			
Water Truck w/driver	62.95	68.68	131,63			
Motor Grader w/operator	70.15	82.08	152.23			
Low Bed Truck w/driver	108.45	69.76	178.20			
Foreman		89.87	89.87			
Laborer		42.67	42.67			
Seed Mix @ \$35/lb			35.00			

#### II. Reclamation Tasks

#### Task 1 Regrade & Finish Slopes

Regrade and reconlour area to a gradient no steeper than 2:1
Regrade and finish stopes to blend with surrounding area, including

furrowing of slopes and ripping pit floor: Estimated manhours--->>>>

Labor & Equipment				No. Man			
	Qty	Unit	Rate	Hrs	Total		
D-8R Dozer w/operator	1	ea	273.85	20	5,477		
Motor Grader w/operator	1	ea	152.23	10	1,522		
Low Bed Truck w/driver	1	ea	178.20	8	1,426		
Water Truck w/driver	-1	ea	131.63_	10	1,316		
Task 1 Total				48	9,741	say	9,7

#### Task 2 Broadcast Seeding

Distribute native plant mix over finished slopes and mine floor. Seed mix will be distributed at a rate

of 30 pounds per acre by broadcasting with an automatic pressure sprayer.

Mix seed into soil by dragging a chain over the area. Estimated manhours ---->>>>

				No. Man			
Labor & Equipment	Qty	Unit	Rate	Hrs	Total		
Foreman	1	ea	89.87	8	719		
Laborer	2	ea	42.67	8	683		
Water Truck w/driver	1	ea	131.63	8	1,053		
Seed mix application	871,200	sf	0.04	na	34,848		
Task 4 Total	0			24	37,303	say	37,300

<u>Task 3 Monitoring</u>
Perform a field investigation of the site each spring to monitor revegetation. Monitoring will take place for up to four years following reclamation to verify the success standards are being met.

Labor & Equipment Report Preparation Task 5 Total	Qty Unit 4 years	Rate 120,00	No. Hrs 24	Total 11,520 11,520	say <u>11,500</u>
SUBTOTAL					58,500
Bond Amount					
Subtotal					58,500
Supervision (5%)					2,925
Mobilization & Demo	bilization (lump sum)				5,000
Profit & Overhead (in	cluded in Hrly rates f	or Labor & Eq	uipment)		
Contingency (10%)					5,850
Lead Agency Admini	strative Cost (10%)				5,850
Total Bond Amount					78,125

#### Little Lake Material Site Financial Assurance Calculations for Reclamation California Mine I.D Number 91-33-0055 4/30/2010

This cost estimate is based on the following assumptions:

- 1) The maximum amount of disturbance (acres) =
- 2) Slopes will be recontoured and graded to blend with the surrounding area.
- 3) The finished slopes and floor of the material site will be furrowed to retain rainfall and seeds
- to promote revegetation.
- 4) The finished slopes and floor of the site will be reseeded by pressure spraying with a seed mix of plants native to the area.
- 5) Labor & equipment rates were based on current general prevailing wage rates issued by California Department of Industrial Relations, and Caltrans Labor Surcharge and Equipment Rental Rates.
  6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 34)

#### I. Unit costs for equipment, material and labor to be used for reclamation: (equipment hourly rate includes driver/operator)

	Hourly Rate					
	Equipment	Labor	Total			
D-8R Dozer w/operator	192,20	81,65	273.85			
Water Truck w/driver	62,95	68,68	131_63			
Motor Grader w/operator	70.15	82,08	152.23			
Low Bed Truck w/driver	108,45	69.76	178.20			
Foreman		89,87	89.87			
Laborer		42,67	42.67			
Seed Mix @ \$35/lb			35.00			

#### II. Reclamation Tasks

<u>Task 1 Regrade & Finish Slopes</u>
Regrade and recontour area to a gradient no steeper than 2:1
Regrade and finish slopes to blend with surrounding area, including

furrowing of slopes and ripping pit floor: Estimated manhours---->>>>

31

33,375

				No. Man			
Labor & Equipment	Qty	Unit	Rate	Hrs	Total		
D-8R Dozer w/operator	1	ea	273.85	9	2,465		
Motor Grader w/operator	1	ea	152,23	9	1,370		
Low Bed Truck w/driver	1	ea	178.20	4	713		
Water Truck w/driver	1	ea	131,63	9	1,185		
Task 1 Total				31	5,732	say	5,700

#### Task 2 Broadcast Seeding

Distribute native plant mix over finished slopes and mine floor. Seed mix will be distributed at a rate

of 30 pounds per acre by broadcasting with an automatic pressure sprayer.

Mix seed into soil by dragging a chain over the area. Estimated manhours ---->>>> 20

Labor & Equipment				No. Man			
	Qly	Unit	Rate	Hrs	Total		
Foreman	1	ea	89.87	4	359		
Laborer	2	ea	42,67	9	768		
Water Truck w/driver	1	ea	131.63	7	921		
Seed mix application	87,120	sf	0.04	na	3,485		
Task 4 Total	0		-	20	5,534	say	5,50

**Total Bond Amount** 

<u>Task 3 Monitoring</u>
Perform a field investigation of the site each spring to monitor revegetation. Monitoring will take place for up to four years following reclamation to verify the success standards are being met.

Labor & Equipment Report Preparation Task 5 Total	Qty 4	Unit years	Rate 120,00	No. Hrs	Total 11,520 11,520	say <u>11,500</u>
SUBTOTAL						22,700
Bond Amount						
Subtotal						22,700
Supervision (5%)						1,135
Mobilization & Demobilization	zation (lum	ıp sum)				5,000
Profit & Overhead (inclu	ded in Hrly	rates for	Labor & E	quipment)	)	
Contingency (10%)						2,270
Lead Agency Administra	itive Cost (	10%)				2,270

#### Markham Material Site Financial Assurance Calculations for Reclamation California Mine I.D Number 91-33-0054 4/30/2010

This cost estimate is based on the following assumptions:

- 1) The maximum amount of disturbance (acres) =
- 2) Slopes will be recontoured and graded to blend with the surrounding area.

  3) The finished slopes and floor of the material site will be furrowed to retain rainfall and seeds
- to promote revegetation.
- 4) The finished slopes and floor of the site will be reseeded by pressure spraying with a seed mix of plants native to the area.
- 5) Labor & equipment rates were based on current general prevailing wage rates issued by California Department
- of Industrial Relations, and Caltrans Labor Surcharge and Equipment Renlal Rates.
  6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 34)

#### I. Unit costs for equipment, material and labor to be used for reclamation: (equipment hourly rate includes driver/operator)

	н	Hourly Rate				
	<ul> <li>Equipment</li> </ul>	Labor	Total			
D-8R Dozer w/operator	192,20	81,65	273,85			
Water Truck w/driver	62,95	68,68	131_63			
Motor Grader w/operator	70.15	82.08	152 23			
Low Bed Truck w/driver	108,45	69.76	178.20			
Foreman		89,87	89.87			
Laborer		89.87	89.87			
Seed Mix @ \$35/lb		42.67	35.00			

#### II. Reclamation Tasks

#### Task 1 Regrade & Finish Slopes

Regrade and recontour area to a gradient no steeper than 2:1

Regrade and finish slopes to blend with surrounding area, including furrowing of slopes and ripping pit floor: Estimated manhours--->>>>

233

Labor & Equipment				No. Man			
	Qty	Unit	Rate	Hrs	Total		
D-8R Dozer w/operator	2	ea	273,85	120	32,862		
Molor Grader w/operator	1	ea	152.23	40	6,089		
Low Bed Truck w/driver	1	ea	178,20	8	1,426		
Water Truck w/driver	1	ea	131,63	65	8,556		
Task 1 Total			-	233	48,933	say	48,

<u>Task 2 Construct Drainage Structures</u> Construct interceptor drain, down drain & install rip rap.

Labor & Equipment				No. Mar	n		
	Qty	Unit	Rate	Hrs	Total		
Interceptor Drain	1,150	LF	10,00	na	11,500		
Down Drain	60	LF	10.00	na	600		
Rip Rap Pad	3	ea	500.00	na	1,500		
Task 2 Total					13,600	say	13,600

<u>Task 3 Broadcast Seeding</u>
Distribute native plant mix over finished slopes and mine floor. Seed mix will be distributed at a rate of 30 pounds per acre (6.8 acres total) by broadcasting with an automatic pressure sprayer. Mix seed into soil by dragging a chain over the area, Estimated manhours ---->>>>

				No. Man		
Labor & Equipment	Qty	Unit	Rate	Hrs	Total	
Foreman	1	ea	89.87	24	2,157	
Laborer	2	ea	89.87	36	6,471	
Water Truck w/driver	1	ea	131.63	24	3,159	
Seed mix application	514,008	sf	0.04	na	20,560	
Task 4 Total				84	32,347	say

<u>Task 4 Monitoring</u>
Perform a field investigation of the site each spring to monitor revegetation. Monitoring will take place for up to four years following reclamation to verify the success standards are being met.

Labor & Equipment Report Preparation Task 5 Total	Qty Unit 4 years	Rate 120_00	No. Hrs 24_	Total 11,520 11,520	say11,500_
SUBTOTAL					106,300
Bond Amount					
Subtotal					106,300
Supervision (5%)					5,315
Mobilization & Demobili	zation (lump sum)				5,000

#### Profit & Overhead (included in Hrly rates for Labor & Equipment)

Contingency (10%)	10,630
-------------------	--------

Lead Agency Administrative Cost (10%) 10,630

**Total Bond Amount** 137,875

#### Midland Material Site Financial Assurance Calculations for Reclamation California Mine I.D Number 91-33-0051 4/30/2010

This cost estimate is based on the following assumptions:

1) The maximum amount of disturbance (acres) =

2) Slopes will be recontoured and graded to blend with the surrounding area.

3) The finished slopes and floor of the material site will be furrowed to retain rainfall and seeds

to promote revegetation.

4) The finished slopes and floor of the site will be reseeded by pressure spraying with a seed

mix of plants native to the area.

5) Labor & equipment rates were based on current general prevailing wage rates issued by California Department of Industrial Relations, and Caltrans Labor Surcharge and Equipment Rental Rates.

6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 34)

#### I. Unit costs for equipment, material and labor to be used for reclamation: (equipment hourly rate includes driver/operator)

	H	ourly Rate	
	Equipment	Labor	Total
D-8R Dozer w/operator	192,20	81.65	273.85
Water Truck w/driver	62,95	68.68	131.63
Motor Grader w/operator	70.15	82.08	152.23
Low Bed Truck w/driver	108.45	69.76	178.20
Foreman		89.87	89.87
Laborer		42.67	42.67
Seed Mix @ \$35/lb			35,00

#### II. Reclamation Tasks

Task 1 Regrade & Finish Slopes

Regrade and recontour area to a gradient no steeper than 2:1 Regrade and finish slopes to blend with surrounding area, including

furrowing of slopes and ripping pit floor: Estimated manhours---->>>>>

say

13,700

38,700

6,390

84,875

		No. Man				
Labor & Equipment	Qty	Unit	Rate	Hrs	Total	
D-8R Dozer w/operator	1	ea	273.85	27	7,394	
Motor Grader w/operator	1	ea	152.23	9	1,370	
Low Bed Truck w/driver	1	ea	178.20	8	1,426	
Water Truck w/driver	1	ea	131.63	27	3,554	
Task 1 Total				71	13,744	

<u>Task 2 Broadcast Seeding</u>
Distribute native plant mix over finished slopes and mine floor. Seed mix will be distributed at a rate of 30 pounds per acre by broadcasting with an automatic pressure sprayer.

Mix seed into soil by dragging a chain over the area. Estimated manhours ---->>>>

				No. Man	
Labor & Equipment	Qty	Unit	Rate	Hrs	Total
Foreman	1	ea	89.87	8	719
Laborer	2	ea	42.67	8	683
Water Truck w/driver	1	ea	131.63	8	1,053
Seed mix application	906,048	sf	0.04	na	36,242
Task 4 Total			100	24	38,697

Lead Agency Administrative Cost (10%)

**Total Bond Amount** 

<u>Task 3 Monitoring</u>
Perform a field investigation of the site each spring to monitor revegetation. Monitoring will take place for up to four years following reclamation to verify the success standards are being met.

	•				
Labor & Equipment Report Preparation Task 5 Total	Qty Unit 4 years	Rate 120.00	No. Hrs 24	Total 11,520 11,520	say11,500
SUBTOTAL					63,900
<b>Bond Amount</b>					
Subtotal					63,900
Supervision (5%)					3,195
Mobilization & Demobil	ization (lump sum)				5,000
Profit & Overhead (inclu	uded in Hrly rates for	Labor & E	quipment)		
Contingency (10%)					6,390

#### Mountain View Road Material Site Financial Assurance Calculations for Reclamation California Mine I.D Number 91-33-0048 4/30/2010

This cost estimate is based on the following assumptions:

- 1) The maximum amount of disturbance (acres) =
- 2) Slopes will be recontoured and graded to blend with the surrounding area.
- 3) The finished slopes and floor of the material site will be furrowed to retain rainfall and seeds
- to promote revegetation.
- 4) The finished slopes and floor of the site will be reseeded by pressure spraying with a seed mix of plants native to the area.
- 5) Labor & equipment rates were based on current general prevailing wage rates issued by California Department
- of Industrial Relations, and Caltrans Labor Surcharge and Equipment Rental Rates. 6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 34)

#### I. Unit costs for equipment, material and labor to be used for reclamation: (equipment hourly rate includes driver/operator)

	Hourly Rate		
	Equipment	Labor	Total
D-8R Dozer w/operator	192.20	81.65	273.85
Water Truck w/driver	62.95	68.68	131.63
Motor Grader w/operator	70.15	82.08	152.23
Low Bed Truck w/driver	108.45	69.76	178.20
Foreman		89.87	89.87
Laborer		89.87	89.87
Seed Mix @ \$35/lb		42.67	35.00

#### II. Reclamation Tasks

<u>Task 1 Regrade & Finish Slopes</u>
Regrade and recontour area to a gradient no steeper than 2:1
Regrade and finish slopes to blend with surrounding area, including

furrowing of slopes and ripping pit floor: Estimated manhours---->>>>>

2	4
ು	۰

5,700

				No. Man	
Labor & Equipment	Qty	Unit	Rate	Hrs	Total
D-8R Dozer w/operator	1	ea	273,85	9	2,465
Motor Grader w/operator	1	ea	152.23	9	1,370
Low Bed Truck w/driver	1	ea	178,20	4	713
Water Truck w/driver	1	ea	131.63	9	1,185
Task 1 Total				31	5.732

<u>Task 2 Broadcast Seeding</u>
Distribute native plant mix over finished slopes and mine floor. Seed mix will be distributed at a rate of 30 pounds per acre by broadcasting with an automatic pressure sprayer.

Mix seed into soil by dragging a chain over the area. Estimated manhours --->>>>

				No, Man			
Labor & Equipment	Qty	Unit	Rate	Hrs	Total		
Foreman	1	ea	89.87	2	180		
Laborer	2	ea	89.87	4	719		
Water truck	1	ea	131.63	4	527		
Seed mix application	130,680	sf	0.04	na	5,227		
Task 4 Total				10	6,652	say	6,700
	0						

#### Task 3 Monitoring

Perform a field investigation of the site each spring to monitor revegetation. Monitoring will take place for up to four years following reclamation to verify the success standards are being met.

Labor & Equipment Report Preparation Task 5 Total	Qty 4	Unit years	Rate 120.00	No. Hrs	Total 11,520 11,520	say11,500
SUBTOTAL						23,900
Bond Amount						
Subtotal						23,900
Supervision (5%)						1,195
Mobilization & Demobil	lization (lum	sum)				5,000
Profit & Overhead (incl	uded in Hrly	rates for	Labor & E	quipment)		
Contingency (10%)						2,390
Lead Agency Administr	rative Cost (1	0%)				2,390
Total Bond Amount						34,875

#### Terwilliger Road Material Site Financial Assurance Calculations for Reclamation California Mine I.D Number 91-33-0047 4/30/2010

This cost estimate is based on the following assumptions:

- The maximum amount of disturbance (acres) = 10
   Slopes will be recontoured and graded to blend with the surrounding area.
   The finished slopes and floor of the material site will be furrowed to retain rainfall and seeds

to promote revegetation.

- 4) The finished slopes and floor of the site will be reseeded by pressure spraying with a seed mix of plants native to the area.
- 5) Labor & equipment rates were based on current general prevailing wage rates issued by California Department

of Industrial Relations, and Caltrans Labor Surcharge and Equipment Rental Rates.

6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 34)

#### I. Unit costs for equipment, material and labor to be used for reclamation: (equipment hourly rate includes driver/operator)

	Н	lourly Rate	
	Equipment	Labor	Total
D-8R Dozer w/operator	192.20	81,65	273.85
Water Truck w/driver	62.95	68,68	131.63
Motor Grader w/operator	70.15	82,08	152,23
Low Bed Truck w/driver	108.45	69.76	178.20
Foreman		89.87	89.87
Laborer		42.67	42.67
Seed Mix @ \$35/lb			35.00

#### II. Reclamation Tasks

<u>Task 1 Regrade & Finish Slopes</u>
Regrade and recontour area to a gradient no steeper than 2:1

Regrade and finish slopes to blend with surrounding area, including

furrowing of slopes and ripping pit floor: Estimated manhours--->>>>>

26

5,000

37,875

				No. Man	
Labor & Equipment	Qty	Unit	Rate	Hrs	Total
D-8R Dozer w/operator	1	ea	273.85	9	2,465
Motor Grader w/operator	1	ea	152,23	4	609
Low Bed Truck w/driver	1	ea	178.20	4	713
Water Truck w/driver	1	ea	131.63	9	1,185
Task 1 Total			3	26	4,971

Task 2 Broadcast Seeding

Distribute native plant mix over finished slopes and mine floor. Seed mix will be distributed at a rate of 30 pounds per acre by broadcasting with an automatic pressure sprayer.

Mix seed into soil by dragging a chain over the area. Estimated manhours ---->>>

Labor & Equipment	No. Man							
	Qty	Unit	Rate	Hrs	Total			
Foreman	1	ea	89.87	2	180			
Laborer	2	ea	42.67	4	341			
Water Truck w/driver	1	ea	131.63	4	527			
Seed mix application	217,800	sf	0.04	na	8,712			
Task 4 Total	0			10	9,760	say	9,8	

Task 3 Monitoring

**Total Bond Amount** 

Perform a field investigation of the site each spring to monitor revegetation. Monitoring will take place for up to four years following reclamation to verify the success standards are being met.

Labor & Equipment Report Preparation Task 5 Total	Qty 4	Unit years	Rate 120,00	No. Hrs 24	Total 11,520 11,520	say <u>11,500</u>	
SUBTOTAL						26,300	
<b>Bond Amount</b>							
Subtotal						26,300	
Supervision (5%)						1,315	
Mobilization & Demobili	ization (lum	p sum)				5,000	
Profit & Overhead (inclu	uded in Hrly	rates for	Labor & E	quipment)			
Contingency (10%)						2,630	
Lead Agency Administr	ative Cost (	10%)				2,630	

## New Thermal Canyon Material Site Financial Assurance Calculations for Reclamation California Mine I.D Number 91-33-0090 4/30/2010

This cost estimate is based on the following assumptions:

- 1) The maximum amount of disturbance (acres) =
- 2) Slopes will be recontoured and graded to blend with the surrounding area.
- 3) The finished slopes and floor of the material site will be furrowed to retain rainfall and seeds
- to promote revegetation,
- 4) The finished slopes and floor of the site will be reseeded by pressure spraying with a seed mix of plants native to the area.
- 5) Labor & equipment rates were based on current general prevailing wage rates issued by California Department
- of Industrial Relations, and Caltrans Labor Surcharge and Equipment Rental Rates.
- 6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 34)

## I. Unit costs for equipment, material and labor to be used for reclamation: (equipment hourly rate includes driver/operator)

	Hourly Rate				
	Equipment	Labor	Total		
D-8R Dozer w/operator	192.20	81.65	273.85		
Water Truck w/driver	62.95	68.68	131.63		
Motor Grader w/operator	70.15	82.08	152,23		
Low Bed Truck w/driver	108.45	69.76	178.20		
Foreman		89.87	89.87		
Laborer		42.67	42,67		
Seed Mix @ \$35/lb			35.00		

#### II. Reclamation Tasks

#### Task 1 Regrade & Finish Slopes

Regrade and recontour area to a gradient no steeper than 2:1

Regrade and finish slopes to blend with surrounding area, including

furrowing of slopes and ripping pit floor: Estimated manhours---->>>>

80

15,100

14,100

sav

			No. Man				
Labor & Equipment	Qty	Unit	Rate	Hrs	Total		
D-8R Dozer w/operator	1	ea	273.85	27	7,394		
Motor Grader w/operator	1	ea	152.23	18	2,740		
Low Bed Truck w/driver	1	ea	178,20	8	1,426		
Water Truck w/driver	1	ea	131.63	27	3,554		
Task 1 Total				80	15,114		

Task 2 Broadcast Seeding

Distribute native plant mix over finished slopes and mine floor. Seed mix will be distributed at a rate of 30 pounds per acre by broadcasting with an automatic pressure sprayer.

Mix seed into soil by dragging a chain over the area. Estimated manhours --->>>

	No. Man						
Labor & Equipment	Qty	Unit	Rale	Hrs	Total		
Foreman	1	ea	89.87	8	719		
Laborer	2	ea	42,67	8	683		
Water Truck w/driver	1	ea	131,63	8	1,053		
Seed mix application	290,400	sf	0.04	na	11,616		
Task 4 Total	0			24	14.071		

Task 3 Monitoring

Perform a field investigation of the site each spring to monitor revegetation. Monitoring will take place for up to four years following reclamation to verify the success standards are being met.

Labor & Equipment Report Preparation Task 5 Total	Qty 4	Unit years	Rate 120.00	No. Hrs	Total 11,520 11,520	say <u>11,500</u>
SUBTOTAL						40,700
Bond Amount						
Subtotal						40,700
Supervision (5%)						2,035
Mobilization & Demobili	zation (lum	p sum)				5,000
Profit & Overhead (inclu	ded in Hrly	rates for	r Labor & E	quipment)	)	
Contingency (10%)						4,070
Lead Agency Administra	ative Cost (	10%)				4,070
Total Bond Amount						55,875