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

FROM: Community Health Agency-Environmental Health

SUBMITTAL DATE: March 24, 2010

SUBJECT: Approval for the Department to make budget adjustment to implement a needed Information Management System upgrade and enhancement

RECOMMENDED MOTION: That the Board of Supervisors:

1) Direct the Auditor Controller to make budget adjustment as detailed in Schedule A

BACKGROUND:

The Department of Environmental Health is projected to end the 2009/2010 Fiscal Year considerably below budget. Furloughs have resulted in significant salary savings for the Department. The cost savings generated by the furlough program do not result in a Net County Cost (NCC) savings and is a one-time opportunity for the Department to implement a needed Information Management System upgrade and enhancement. These savings come primarily from permit fee revenue, which must be used in those program areas.

The Department requests to shift $1,400,000 from Appropriation 1 as outlined in Schedule A to cover the system upgrade cost. The requested budget shift will allow the Department to upgrade the current data management system, used by the Department for billing and permitting, and the associated computer equipment at the Department's nine offices throughout the County. Related equipment purchases will be split between the Department and the Agency.

(To be continued)

Steve Van Stockum, Director
Environmental Health

RCIT
Matthew Flynn, CIO
Departmental Concurrence

FISCAL PROCEDURES APPROVED
ROBERT E. BYRD, AUDITOR-CONTROLLER
BY SAMUEL WONG 3/24/10

FINANCIAL DATA				
	Current F.Y. Total Cost:	$ 1,400,000	In Current Year Budget:	Yes
	Current F.Y. Net County Cost:	$ 0	Budget Adjustment:	Yes
	Annual Net County Cost:	$ 0	For Fiscal Year:	09/10

SOURCE OF FUNDS: Department Budget

Positions To Be Deleted Per A-30 ☐

Requires 4/5 Vote ☒

C.E.O. RECOMMENDATION:

APPROVE
BY: Debra Cournoyer

County Executive Office Signature

Dep't Recomm.: ☒ Policy ☐ Consent
Per Exec. Ofc.: ☒ Policy ☐ Consent

Prev. Agn. Ref.: | **District:** All | **Agenda Number:** 3.30

Funds transferred from the Agency would purchase the necessary computer infrastructure to support the project. Staff time from Agency Support Services will be needed to implement the changes and would be paid with these funds.

Key drivers of the upgrade:

1) The vendor provided notice that the current software version will sunset, and they will no longer provide full support.
2) The new software version will provide additional functionality required by the Department. The most significant enhancements will allow Department field staff to enter inspection data directly and provide inspectors with access to historical data in the field.
3) The system upgrade includes consolidation of records that are currently distributed at numerous sites throughout the county which will allow the Department to respond more quickly to data requests from the public and other agencies.
4) The software upgrade will allow the Department to comply with State reporting requirements.

Key components of the upgrade:

1) Upgrade the current data management software to a newer version.
2) Upgrade/replace the system equipment to support the new version of the software, and expand storage capacity.
3) Acquire mobile computing devices (tablet PC's) for use by the Department's inspectors in the field.

Data Management Software Upgrade: The current data management software will no longer be supported by the Vendor in the near future. The Department must upgrade this software to stay up with current standards and to allow the Department the capacity to expand into newer functions. Some of these newer functions, such as electronic reporting of hazardous material information to a unified State database, are required by the State of California. The upgrade will also allow the Department to capture all inspection data via laptop computers in the field which will increase the departmental data quantity and quality.

System Equipment Upgrade/Replacement: The system hardware consists of servers, storage devices, tape back-ups, network ports, and backup power switches that are either in need of replacement because it is end of life, or in need of upgrade to provide capacity for the new software.

Replacing the servers for the newer data management software provides a more reliable platform for that software and field inspections. Upgrading storage provides capacity for a centralized repository for all important information that would be readily accessible to all staff regardless of their office location. Providing additional network ports at each field office allows for docking the laptops to load data to the main system.

Acquisition of Mobile Devices: Mobile computers and printers for regulatory staff in all DEH programs will allow the Department to capture field inspection data efficiently at the point of inspection. The Department has about 74 inspectors in the field. Each inspector generates multiple paper reports per day. The inspection report data is not currently captured electronically. The Mobile computers and printers will provide the capability to issue reports and/or receipts to operators at the inspection site and then provide an efficient vehicle to deposit that same information into the data management system. It will improve the Department's ability to provide more transparency to the public by making more information available electronically (via the web) and allows the Department to respond to information requests more quickly.

Procurement Process: All purchases related to this project will occur through an existing contract, award vendor bids and competitive bid.

Return on Investment: With the implementation of this Field Inspection System, considerable added efficiency will be realized. The savings in data entry time alone is estimated to result in a savings of $510,000 annually to the Department. The project payback period will be less than 1.5 years.

SCHEDULE A

COMMUNITY HEALTH AGENCY
DEPARTMENT OF ENVIRONMENTAL HEALTH

DECREASE IN DEPARTMENT APPROPRIATIONS:

10000-4200400000-510040	Regular Salaries	($800,000)
10000-4200400000-518100	Budgeted Benefits	($600,000)
TOTAL DECREASE IN APPROPRIATIONS 1:		($1,400,000)

INCREASE IN DEPARTMENT APPROPRIATIONS:

10000-4200400000-523640	Computer Equip-Non Fixed Asset	$ 400,000
10000-4200400000-524500	Administrative Support-Direct	$1,000,000
TOTAL INCREASE IN APPROPRIATIONS 2:		$1,400,000

INCREASE IN AGENCY APPROPRIATIONS:

10000-4200300000-523640	Computer Equip-Non Fixed Asset	$316,400
10000-4200300000-546080	Equipment Computer	$108,600
TOTAL INCREASE IN APPROPRIATIONS 2 & 4:		$425,000

INCREASE IN AGENCY APPROPRIATIONS:

10000-4200300000-572800	Intra-Miscellaneous	($425,000)
TOTAL INCREASE IN APPROPRIATION 7:		($425,000)

SCHEDULE A

COMMUNITY HEALTH AGENCY
DEPARTMENT OF ENVIRONMENTAL HEALTH
(INTERNAL)

DECREASE IN DEPARTMENT APPROPRIATIONS:

10000-4200400000-510040	Regular Salaries	($800,000)
10000-4200400000-518100	Budgeted Benefits	($600,000)
TOTAL DECREASE IN APPROPRIATIONS 1:		($1,400,000)

INCREASE IN DEPARTMENT APPROPRIATIONS:

10000-4200400000-523640	Computer Equip-Non Fixed Asset	$ 400,000
10000-4200400000-524500	Administrative Support-Direct	$1,000,000
TOTAL INCREASE IN APPROPRIATIONS 2:		$1,400,000

INCREASE IN AGENCY APPROPRIATIONS:

10000-4200300000-523640	Computer Equip-Non Fixed Asset	$316,400
10000-4200300000-546080	Equipment Computer	$108,600
TOTAL INCREASE IN APPROPRIATIONS 2 & 4:		$425,000

INCREASE IN AGENCY APPROPRIATION:

10000-4200300000-572800	Intra-Miscellaneous	($425,000)
TOTAL INCREASE IN APPROPRIATION 7:		($425,000)

TECHNOLOGY PURCHASE INFORMATION FORM

(To be completed for purchases of IT systems or services that exceed $100,000 and purchases of new IT systems or services that will impact multiple departments)

PROJECT NAME: DEH SYSTEMS UPGRADE	DEPARTMENT/AGENCY: ENVIRONMENTAL HEALTH/CHA
BUSINESS SPONSOR: STEVE VAN STOCKUM	EST COMPLETION DATE: JUNE 2011

EXECUTIVE OVERVIEW

PROJECT OBJECTIVES	Upgrade and enhance the current Information Management system that is being used by the Riverside County Department of Environmental Health (DEH).
BUSINESS PROBLEM & OPPORTUNITY	➢ Sun-setting Product: The vendor, Decade Software, is in the process of sun-setting the client-server version of the software (Envision 3.4) that is currently being used by the Department, and it no longer provides full support for this version. A new software version, EnvisionConnect, is available. It includes full support from the vendor, uses web-based technology, is more user-friendly and provides expanded functionality. ➢ Support System Replacement: The Department's infrastructure that supports the application has many components which are past life cycle. These components will have to be replaced even if this project does not go forward. We will take this opportunity to use tablet PCs to replace obsolete desktop PCs that can no longer be serviced. We will also purchase some devices as hot spares to keep field staff productive when tablet PCs break or require maintenance. ➢ Inspection Functionality: Due to technical limitations imposed by the current version of the software, the Department is not able to implement electronic field inspection services, an important customer service and efficiency goal of the Department . The new software version, EnvisionConnect, overcomes the technical limitations. This will give the inspectors the ability to conduct site inspections locally with access to historical data and enter inspection results on their tablet PCs while onsite. These data updates are uploaded onto the central server once the inspectors return to the office, thus synchronizing data more efficiently. ➢ Consolidation of Records: The Department's inspection records are currently distributed at numerous sites throughout the County. This makes it difficult to respond to information requests from other County departments and the public. Having the records available electronically in one location that is easily accessible to employees regardless of the site they are working from, will create operational efficiencies and help the Department respond more quickly and fully to data requests from the public and other County departments.

BUSINESS CASE ANALYSIS

PROPOSED SOLUTION	Proposed Solutions ➢ Upgrade the current data management software to a newer version and implement the field inspection module as per the terms of the existing contract . ➢ Upgrade/replace the system equipment to support the new version of the software, and expand storage capacity through existing County award vendors. ➢ Acquire mobile computing devices (tablet PC's) through competitive bid for use by the Department's inspectors in the field.

Data Management Software Upgrade: The current data management software will no longer be supported by the Vendor in the near future. This upgrade will be handled through the current software vendor under an existing service contract. The Department must upgrade its current software package to keep up with current standards and allow the Department the capacity to expand into newer functions.

Some of these newer functions, such as electronic reporting of hazardous material information to the State, are required by the State of California. The upgrade will provide additional functionality such as electronic reporting to multiple State and Federal agencies, increase availability of information via the Intranet and Internet, improve integration of data with existing GIS based systems, more efficient data collection for regulated activities and increased capacity to respond quickly to requests for information from media, legal and other entities. The Department currently only collects about 30-40% of the total inspection information gathered on hard copy, handwritten reports. With the system upgrade the Department will collect all inspection related data. This will dramatically decrease the amount of time it takes the Department to respond to requests for information.

With the current software/hard copy system, requests for information take 3-4 weeks to fill with a combination of database information and searches across multiple offices through the hard copies. With the upgraded system, similar requests would be reduced to a handful of days to complete. This would also alleviate the problems associated with missing hard copies or whole site files. The increased data collection will allow the Department to post more and better information about regulated sites on both the Intranet and Internet.

An upgrade system will also allow the field inspectors to access historical data and capture all inspection data via tablet PCs in the field which will increase the quantity and quality of the Department's data. The regulated business will receive much higher quality inspection reports from the inspectors that will be easier to read and understand.

System Equipment Upgrade/Replacement: The system equipment which consists of servers, storage devices, tape back-ups, network ports, and backup power switches are either in need of replacement because it is end of life, or in need of upgrade to provide capacity for the new software. Replacing the servers for the new data management software provides a more reliable platform for that software and field inspections. Upgrading storage devices provides a capacity for a centralized repository for all important information that would be readily accessible to all staff regardless of their office location. Providing additional network ports at each field office allows for docking the tablet PCs to load data to the main system.

Hardware Required For The Upgrade To The Current Version = $234,000

Software Required For the Minimum Upgrade = $46,000

Hardware For Field Inspection = $500,000 mobile devices & $80,000 network

TECHNOLOGY PURCHASE INFORMATION FORM

(To be completed for purchases of IT systems or services that exceed $100,000 and purchases of new IT systems or services that will impact multiple departments)

Acquisition of Mobile Devices: Mobile computers and printers for regulatory staff in all DEH programs will allow the Department to capture field inspection data efficiently at the point of inspection. The Department has about 117 inspectors, lead positions, and supervisors, and they subsequently generate a large number of paper inspection reports that have information that currently is data entered after the fact and most is not captured electronically.

The mobile systems will allow inspection staff to create inspection data once at the point of inspection and deposit that complete inspection into the database without any further data entry required and as such will increase their efficiency by eliminating the extra data entry step. The mobile computers and printers provide the ability to issue reports and/or receipts to operators at the inspection site. The computer generated reports will also be clearer to read for the regulated sites and this should increase the overall understanding and compliance. It also improves the Department's ability to provide more transparency to the public by making more information available electronically and allows the Department to respond to information requests more quickly.

The Department will reduce the number of desktop units it currently has and allow staff to use the mobile systems as a combination desktop/field system. In the future if there is a need for immediate/current information the Field devices can be upgraded to include wireless data connections.

Cost Efficiency Estimates: With the Field Inspection System there is data entry time saved with inspectors entering once. The average field level inspector spends 45 minutes a day re-entering inspection data into the current data system. There are a total of 74 inspectors which results in approximately 10,656 hours of lost time at a cost of $510,000 to the Department.

BUSINESS CRITICALITY	**BUSINESS IMPACT (SELECT ALL THAT APPLY)**
☒ Run the business	☐ Reduce Expenses
☐ Grow the business	☒ Improve Customer Service
☒ Transform the business	☒ Improve Operational Efficiencies
	☐ Improve Employee Satisfaction
	☐ Expand Market Share

BUSINESS RISKS	Not upgrading to the new software version will limit software functionality and the necessary vendor support. There will be more resources required to do the manual data entry for inspections. Information will be prone to human error and loss due to extensive data handling. The Department will have a limited ability to respond to the State's requirements for electronic interface and reporting.

TECHNOLOGY PURCHASE INFORMATION FORM

(To be completed for purchases of IT systems or services that exceed $100,000 and purchases of new IT systems or services that will impact multiple departments)

ALTERNATIVE SOLUTIONS

1. Status Quo
   - 1.1. Continue using the current software version with functional deficiencies, and no technical support from the vendor and no application customizations
   - 1.2. Continue paper-based field inspections.
   - 1.3. Continue entering information after-the-fact through a separate data entry process.

PROJECT IMPLEMENTATION COST

Hardware for Upgrade: $234,000

Hardware for FIS: $580,000

Software for Upgrade: $46,000

Software for FIS: $60,000

Vendor Pro Fees for Upgrade: $11,000

Vendor Pro Fees For FIS: $10,000

TOTAL COST: 941,000

Internal Labor Cost: $492,000

COST BENEFIT ANALYSIS

	ALTERNATIVE 1 UPGRADE TO CURRENT VERSION	ALTERNATIVE 2 IMPLEMENT FIELD INSPECTION APPLICATION	ALTERNATIVE (RFP, DIFFERENT SYS)
Current Annual Cost	$ 120,000		
Ongoing Annual Cost		$180,000	Unknown at this time
Annual Cost Savings			
Net Annual Savings	N/A	$510,000	
Project Implementation Cost	$291,000	$650,000	
Project Payback Period? Yrs		1.5 years	

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