

BOARD MEETING DATE: March 4, 2022

AGENDA NO. 10

PROPOSAL: Transfer and Appropriate Funds from Interest Earned from Special Revenue Funds to General Fund and Transfer Funds to Information Management's Budget to Support South Coast AQMD Operations, and Close Special Revenue Fund

SYNOPSIS: Information Management (IM) provides a wide range of information technology systems and services in support of South Coast AQMD operations to achieve the agency mission, goals, and objectives. Many components of the agency's critical information technology infrastructure are aging and in need of upgrade and/or replacement to maintain staff effectiveness and improve efficiency. The funding would be used to support critical projects in the areas of cybersecurity, and critical system upgrades and support. This action is to transfer \$2,529,500 from four Special Revenue Funds to the General Fund, transfer funds to Information Management's Budget and close the El Monte Park Settlement Fund (57).

COMMITTEE: Administrative, February 11, 2022; Recommended for Approval

RECOMMENDED ACTIONS:

1. Transfer interest earned of \$2,529,500 from the following funds to the General Fund:
 - a. AES Settlement Projects Fund (35), \$26,000;
 - b. Health Effects Research Fund (48), \$220,000;
 - c. El Monte Park Project Settlement Fund (57), \$5,800; and
 - d. BP ARCO Settlement Projects Fund (46), \$2,277,700.
2. Appropriate \$2,529,500 from the General Fund Undesignated (Unassigned) Fund Balance to Information Management's FY 2021-22 and/or FY 2022-23 Budget for Services & Supplies and/or Capital Outlays Major Objects for the following projects:
 - a. \$190,000 for services and supplies related to cybersecurity;
 - b. \$500,500 for services and supplies related to critical system upgrades; and
 - c. \$1,839,000 for capital outlays related to critical system upgrades.

3. Close the El Monte Park Project Settlement Fund (57) and transfer any residual interest to the General Fund.

Wayne Natri
Executive Officer

RMM:MH:XC:dc

Background

Information Management (IM) provides a wide range of information management systems and services in support of all South Coast AQMD operations to achieve the South Coast AQMD mission, goals and objectives. Many components of the critical Information Technology (IT) infrastructure are aging and in need of upgrade and/or replacement to maintain staff effectiveness and improve efficiency. This request includes projects to address cybersecurity enhancements and critical system upgrades and support for many of South Coast AQMD's critical IT infrastructure components, along with projects to replace outdated software applications. Many of these projects are recommended action items from the IT Review which was completed in FY 2018-19 and the Cybersecurity Assessment completed in FY 2021-22. The remaining additions are the results of the need to support all IT efforts within South Coast AQMD on both enterprise- and departmental-wide levels. These projects are required to support increased workload related to AB 617 implementation, evolution in regulatory programs over the decades, and teleworking due to COVID-19. As confirmed in the recently completed IT Review, much of the proposed system replacements are overdue compared to best practices for scheduled replacement. This proposal seeks to proactively plan for system replacements that will be architected according to industry best practices to ensure their future viability with a minimum shelf life of 15 years without the need for another major overhaul. Ignoring planned replacements could result in hectic spur-of-the-moment actions due to system failures or obsolescence which will ultimately be more costly.

Cybersecurity

The cybersecurity solutions will enable South Coast AQMD to align with industry cybersecurity frameworks and best practices to ensure the availability, integrity and confidentiality of information systems and data. These items are necessary to mitigate the risks associated with cyberthreats, and protect the information, people, and reputation of South Coast AQMD. Inaction could risk a cybersecurity breach which would significantly impact the operation of South Coast AQMD, with potential loss of data, damage to our reputation, legal liability, and increased costs to recover from a breach. A cybersecurity assessment completed during FY 2021-22 includes recommendations to mitigate the impacts of cyberthreats.

Critical System Upgrades and Support

The replacement and/or upgrade of many of South Coast AQMD's critical IT infrastructure components are necessary to ensure continuity of business operations for

South Coast AQMD. Over the past several years, especially during the pandemic, there has been a dramatic increase in demand for IT related projects. IT infrastructure is relied on as critical components to support the daily operations of the agency.

Services and Supplies Request for Critical System Upgrade and Support

South Coast AQMD has been very successful in deploying multiple systems which are critical for supporting the agency's mission of achieving Clean Air standards, enhancing public education and equitable treatment of all communities and operating efficiently and transparently. Many of these mission-critical systems require 24/7 uptime and require frequent enhancement and support to ensure their continued operation as well as to be responsive to feedback from the public.

Several of the projects requested for funding in this category are necessary to ensure the continued operations of the IT infrastructure that supports a wide range of business functions. Inaction will result in IT infrastructure failures, business function disruption, data loss, and costly unplanned system replacements.

The Website Content Management System and Intranet SharePoint both serve as the central point to facilitate communication with both the public and staff, respectively. These systems are operating using outdated versions that are no longer supported by the vendor. It is essential to upgrade these systems to the latest version to continue receiving security and functional enhancements. Inaction could expose South Coast AQMD's main websites, including the homepage, to risk of potential downtime due to cybersecurity threats or failure due to unsupported software.

The Web Application .Net infrastructure migration item is necessary to replace the framework of existing custom web applications that will soon be obsolete. This framework serves as the backbone of the entire suite of South Coast AQMD applications including Online Application Filing, FIND, Online Payment, Rule 1403, Rule 1180 monitoring, and other programs. Inaction could result in potential disruption of critical business functions due to software obsolescence.

The Cloud Based System Development Support solution will allow IM to adopt an automated cloud-based development and deployment methodology for software development. This industry best practice will greatly shorten the development, testing and deployment cycles of web applications, which will ultimately result in enhanced staff efficiency while improving project completion time. It is estimated this will help to increase IM's capacity to handle new application testing and deployment by 30 percent.

Capital Outlay Request for Critical System Upgrades and Support

A set of critical enterprise-wide IT systems also require immediate action to address obsolete support, degraded functionality and/or to add critical enhancements to effectively serve the IT needs of South Coast AQMD.

- Mass Email and Notification System Replacement
California Senate Bill (SB) 1502 was approved in June 2018 and allows air districts to modernize notification methods for permitting, rulemaking, and fee

rules and allows electronic mail (email) public notices in lieu of mail for any person who requests noticing by email. With increased reliance on electronic notifications for South Coast AQMD public notifications, information sharing, and alerts/advisories, the agency's mass email system is not capable of handling current requirements. The existing system is cumbersome, and it is difficult to manage database lists and share across departments. The current system also cannot handle non-English language characters which poses challenges for outreach. The proposed cloud-based system will be able to greatly improve the mass email capabilities. Inaction could result in failure to send required emails and notices, and unplanned replacement at greater cost. An updated system will enable staff to work more efficiently to send mass emails while managing South Coast AQMD databases for more effective outreach, as well as communicating in the spectrum of languages spoken/read in our region.

- CLASS System Migration (Compliance, Finance, and Ingres Database)
The Clean Air Support System (CLASS system) is a suite of legacy software applications developed over 20 years ago to handle South Coast AQMD's core business functions including permitting, New Source Review (NSR), compliance and accounts receivable. An overhaul of the entire system, including the database will implement an industry best practice architecture that will enable paperless permit processing, better integration of compliance with Geographical Information System (GIS), field automation and seamless integration with Finance.

Moving to a GIS-integrated system will improve inspections by allowing staff to assess a facility, area, or complaint locations remotely, with significant efficiency gains. This will have important applications in AB 617 communities, by assisting community members' identification of facilities/sites of concern, aiding in data searches and reporting, and allowing enhanced transparency for the public. The project will enable the electronic submittal of all compliance forms and reports directly into the CLASS system. For example, South Coast AQMD receives hundreds of breakdown reports from refineries and other major sources in hard copy form, and those lengthy reports must be retrieved from the mail, evaluated for completeness and accuracy, and manually scanned into the system for assignment. Last year approximately 600 breakdown reports were received. Review of these reports can take up to 30 minutes each to process, the proposed upgrade could immediately save 300 hours of staff time per year.

The proposed upgrade would also significantly improve the accuracy of data maintained for the Title V Compliance Monitoring Program, which is currently input manually from handwritten forms. This would help facilitate meeting federal reporting deadlines by eliminating the need for data entry and by transmitting daily system updates directly from CLASS to the U.S. EPA database. In addition, this project will increase staff efficiency through improved workflow, tracking and decision support. Inspectors will be able to submit all reports directly into the system, and supervisors and managers will be able track the status of investigations and violation reports, as well as provide digital

approvals, in real time. Similarly, the project will increase accuracy of reports on compliance activities, whether routine periodic reports or responses to ad-hoc high-priority queries and reduce response times by maintaining all data in one place and obviating the need for duplicative searches across multiple platforms. All calculations and data reports will also be automated, reducing the time spent preparing reports and reducing the potential for errors. Compliance reports and data (such as for public complaints) could become available in near-real time, removing the current, often 24-hour delay for CLASS to be updated. Having key permitting, inspection and violation data that is searchable will reduce hundreds of hours of staff time for an individual rule development effort. The new proposed system will be more agile to adapt to future rule changes.

Staff are currently working to streamline permitting opportunities with the current infrastructure as part of the “Workflow” project. Opportunities have been identified for moving to paperless processing for incoming applications and for final processing, permit issuance and archiving to avoid handling incoming paper applications and printing paper permits for distribution by mail. Enhancements to allow for electronic submittals can improve the ability for applicants to provide complete applications and reduce the need for follow-up requests for additional information which causes delays in permit processing that can last days or weeks. In addition, increased teleworking by permit processing engineers has required supervising and administrative staff to divert resources from their normal duties to scan and print in the office to transfer application information and archive permit application documentation. Improvements to electronic processing could reduce the time spent on these manual paper-based steps by at least 80 percent and would allow staff to redirect resources to support other permit processing and supervisory duties.

At the core of many rule development projects is the evaluation of existing equipment to establish an emissions baseline. In the initial phase of rule development projects, staff manually review each permit extracting specific information such as unit size, emission limitations, unit age, and other equipment details. Depending on the number of units associated with a rule development, this process can take hundreds of hours. Upgrading the permit database to allow for key parameters to be electronically extracted will save staff hundreds of hours for many rule development processes.

The current CLASS system also would be facing a potentially major overhaul to accommodate anticipated significant amendments to Regulation XIII – New Source Review, as well as significant workload associated with the RECLAIM sunset. Without upgrades to CLASS, use of manual procedures affecting staff resources would result. Upgrades to the CLASS system would help facilitate reporting of aggregate application, emission, and other facility related information that is requested as part of public records requests that requires significant staff resources and be useful for planning and rule development purposes. With proper updates, the data could be refined to the point where direct access through F.I.N.D. or integration with the Pending Application Status

Dashboard would greatly improve transparency and assist with community relations linked to AB 617 efforts.

Updates to CLASS will assist in identifying and documenting the basis for emissions calculations for permit applications and provide better tracking of standardized emissions calculation methodologies. This would result in decreased times to evaluate, track, and process permits. Anticipated changes to NSR rules will necessitate updates to the program as well.

The proposed database migration will save over \$150,000 in annual database license costs. The proposed new user centered designs could bring a 25 percent increase in efficiency compared to the traditional client/server system. Inaction could mean the current client server applications built on 20 plus year old technology will not be supported by subsequent versions of Windows and South Coast AQMD will lose its core permitting, compliance and accounts receivable applications.

- Business Intelligence Ad-Hoc Reporting System Upgrade
Business Intelligence system allows staff to perform ad-hoc reporting. The existing system version is no longer supported by the vendor and has reached its limit for maximum number of user licenses. There has been a dramatic increase for access to the ad-hoc reporting system to support rule making, compliance actions, permitting and finance. An upgrade to the latest version and increased user access will increase efficiency across all divisions by allowing staff to generate reports on as-needed basis, reducing their reliance on IM resources to generate reports. With the proposed new license upgrade, there will be a 100 percent increase in use of self-service business intelligence data. Based on a Catalyst Media's Better Buys technology research study, self-service Business Intelligence data will help to increase speed of decision making by up to 500 percent, resulting in reports being generated in minutes rather than hours.
- PeopleSoft Finance and Human Capital Management Upgrade
The PeopleSoft system serves as the South Coast AQMD's Enterprise Resource Planning (ERP) and was last upgraded in 2016 (Human Resources and Payroll) and 2018 (Finance). An upgrade is necessary to ensure the agency continues to receive needed legislative, functional and security updates to stay in compliance with Federal and State regulations. Inaction will eventually make it impossible to update the agency's Payroll and Financial systems and risk incurring liabilities and penalties.
- WAIRE Web Portal Enhancements
This funding is necessary to complete the development of the Warehouse Actions and Investments to Reduce Emissions (WAIRE) Web Portal to ensure compliance of Rule 2305.

Proposal

Cybersecurity

The list of recommended cybersecurity projects in the amount of \$190,000 for the first phase of these improvements are indicated below. These are all ongoing annual costs.

Description	Amount	One time	Ongoing
Patch Management Solution	\$15,000		X
Change Management Solution	\$75,000		X
South Coast AQMD users Cybersecurity Awareness Program	\$40,000		X
Virus Scan Support Increase	\$60,000		X
Total	\$190,000		

Additional projects for approximately \$410,000 may be requested in subsequent future budgets.

Critical System Upgrades and Support

Services and Supplies Request for Critical System Upgrade and Support

Critical System Upgrade and Support projects in Services and Supplies include the following with estimated total cost of \$500,500. Most of these are one-time expenses.

Description	Amount	One time	Ongoing
Server Upgrades	\$150,000	X	
Website Content Management System (Sitefinity) Upgrade ¹	\$100,000	X	
Backup Tape Reader	\$4,500	X	
Cloud Based Offsite Backup Storage	\$15,000		X
Peoplesoft Server Upgrade and Quarterly Patching ¹	\$31,000	X	
Intranet (Airnet) Upgrade from SharePoint 2010 to SharePoint Online ¹	\$80,000	X	
Web Application .Net Infrastructure Migration ¹	\$80,000	X	
Cloud Based System Development Support ¹	\$40,000		X
Total	\$500,500		

Capital Outlay Request for Critical System Upgrades and Support

Critical System Upgrade and Support projects in Capital Outlays include the following with estimated total cost of \$1,839,000. These are all one-time expenses.

Description	Amount	One time	Ongoing
Mass Email and Notification System Replacement ¹	\$24,000	X	
Migrate CLASS Compliance to Web Based Application ¹	\$250,000	X	
Migration of CLASS Finance to Web Based Application ¹	\$250,000	X	
Migration of CLASS Ingres Database to SQL Server ¹	\$750,000	X	
Business Intelligence Ad-Hoc Reporting System Upgrade ¹	\$150,000	X	
PeopleSoft Finance and Human Capital Management Upgrade ¹	\$200,000	X	
WAIRE Web Portal Enhancements ¹	\$215,000	X	
Total	\$1,839,000		

Resource Impacts

To support critical operational needs, staff recommends using interest earned and/or the remaining balances in some special revenue funds (which are also interest earned). Staff recommends transferring \$2,529,500 from four Special Revenue Funds (AES Capital Settlement Projects Fund (35), \$26,000; Health Effects Research Fund (48), \$220,000; El Monte Park Project Settlement Fund (57), \$5,800; and BP ARCO Settlement Projects Fund (46), \$2,277,700) to the General Fund and closing the El Monte Park Project Settlement Fund (57). These funds would be appropriated to Information Management’s FY 2021-22 and/or FY 2022-23 Budget. \$190,000 of these funds would be used for services and supplies related to cybersecurity, \$500,500 would be used for services and supplies related to critical system upgrades, and \$1,839,000 would be used for capital outlays related to critical system upgrades.

Sufficient funds are available to transfer \$2,529,500 from the interest in four Special Revenue Funds (AES Capital Settlement Projects Fund, Health Effects Research Fund, El Monte Park Project Settlement Fund, and BP ARCO Settlement Projects Fund) to the General Fund Undesignated (Unassigned) Fund Balance, and then transfer to Information Management’s budget.

AES Settlement Projects Fund

This fund was established in fiscal year 2001 for the purpose of accounting for the one-time penalty settlement with AES Corporation for air pollution violations. There is approximately \$26,000 of available interest earnings remaining.

¹ Project work may be completed through System Development, Maintenance and Support Services Contracts

BP ARCO Settlement Projects Fund

This fund was established in fiscal year 2005 to account for the \$25 million civil penalties received in 2005 as part of the settlement with BP ARCO for air pollution violations. There is approximately \$3,848,693 of available interest earnings remaining.

Health Effects Research Fund

The Health Effects Research Fund was established in fiscal year 2008 to receive 20 percent of all penalty/settlement monies in excess of \$4 million recognized annually in South Coast AQMD's General Fund beginning in fiscal year 2009, subject to annual Board approval. There is approximately \$4,267,562 remaining of which \$222,380 is interest earnings.

EL Monte Park Project Settlement Fund

This fund was established in fiscal year 2011 for the purpose of accounting for the \$1.1 million received from Gregg Industries bankruptcy estate as part of a settlement agreement to finance the construction of park improvements in the City of El Monte. The project and all of funds have been paid to El Monte. The fund has interest earnings of \$5,814 remaining and this fund will be closed out. Any residual interest will be transferred to the General Fund.

Sufficient funding will be available in Information Management's FY 2021-22 and/or FY 2022-23 Budget upon approval of the transfer and appropriation of \$2,529,500 from the General Fund Undesignated (Unassigned) Fund Balance.