



**COMMISSION
AGENDA MEMORANDUM**

Item No. 8b

ACTION ITEM

Date of Meeting April 27, 2021

DATE: April 16, 2021

TO: Stephen P. Metruck, Executive Director

FROM: Arlyn Purcell, Interim Senior Director, Engineering, Environment & Sustainability
Sandra Kilroy, Director Maritime Environmental and Planning
Matt Breed, Chief Information Officer, Information and Communication Technology

SUBJECT: Environmental Data Management System (EDMS) Replacement (CIP#801136)

Amount of this request: \$1,215,000

Total estimated project cost: \$1,215,000

ACTION REQUESTED

Request Commission authorization for the Executive Director to (1) proceed with the EDMS replacement project; (2) execute contract(s) for software, equipment, and vendor implementation services; (3) use Port staff for implementation; and (4) execute a contract for up to ten years for software license, service, and/or maintenance fees estimated at \$800,000. The amount requested for project implementation is \$415,000 for a total authorization of \$1,215,000. Recurring fees will be funded in the annual operating budget.

EXECUTIVE SUMMARY

This project will competitively procure and implement a system that will serve as the Port's central repository of environmental information that includes chemistry data from soil, sediment, and surface and ground water sampling related to environmental compliance activities on Port properties. The new system will be used by Aviation and Maritime Environmental teams as well as Facility and Project Management teams that rely on accurate and timely data to meet regulatory obligations and support business needs and construction processes.

The current system, first implemented in 2001 with only minor improvements in the last twenty years, no longer meets Port requirements for environmental data management and vendor support for the system is ending due to an aging technology platform.

Information and Communication Technology (ICT) and Environment and Sustainability (ENV) organizations will complete this project with a vendor selected through a request for proposal (RFP) process. The capital project, originally estimated at \$350,000, was included in the 2021-2025 capital budget and plan of finance. The additional \$65,000 will be added to the capital

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budget and plan of finance for 2022. Recurring costs estimated at \$80,000 per year for up to ten years (\$800,000 total) will be budgeted in the Aviation Environment & Sustainability and Maritime Environment & Sustainability annual operating budgets.

JUSTIFICATION

In 2001, after finding no adequate off-the-shelf solutions, the Port designed, built, and implemented an Environmental Management Information System (EMIS) to meet Port Environmental Program business needs. EMIS is a relational database application based on Microsoft Access and SQL Server technology. It serves as the Port's central repository for environmental chemistry data generated from soil, sediment, surface water and groundwater sampling activities on Port properties. Staff use EMIS's data management, analysis, and reporting features to meet a broad range of environmental compliance tasks including regulatory agency submittals, contaminated site assessment and remediation, stormwater discharge permit compliance, and environmental monitoring and remediation budgeting for construction projects.

After two decades of use, EMIS is near the end of its functional lifespan. An ageing platform and history of ad-hoc additions to meet evolving needs has created a complicated and burdensome system to maintain. Retirement of the original system developer and a lack of adequate vendor support poses non-compliance risks in the event of system failure. The Port also seeks to evaluate modern technologies to gain efficiencies and support current and emerging environmental data management needs, objectives, and priorities.

This project provides important benefits to meet regulatory requirements, support construction projects, and advance the Port's environmental and sustainability goals, including:

- (1) A fully supported system on a current technology platform will ensure continued availability.
- (2) Data analysis capabilities will better support contaminated site management, permit compliance, and construction.
- (3) Enhanced environmental compliance communication for internal and external stakeholders will improve situational awareness.
- (4) Self-service access to prepare, submit, and search environmental information with appropriate approval and tracking will streamline processes and reduce lag time between collection and reporting.
- (5) Improved controls will ensure fidelity of regulated data submittals and accuracy of information.

Diversity in Contracting

Project staff are working with the Diversity in Contracting Department to determine if a direct women-and-minority-owned business enterprise (WMBE) aspirational goal should be assigned. Typically, subcontracting opportunities under technology projects are limited.

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DETAILS

Scope of Work

- (1) Competitively procure and implement a new EDMS system
- (2) Migrate historical sample data into new EDMS system
- (3) Integrate with the Port’s Enterprise Geographic Information System (GIS)

Schedule

| | |
|--------------------------|----------------|
| Commission authorization | 2021 Quarter 2 |
| Procurement Complete | 2021 Quarter 4 |
| In-use date | 2022 Quarter 4 |

Cost Breakdown

| | This Request | Total Project |
|------------------------------|--------------|---------------|
| Software and Vendor Services | \$230,000 | \$230,000 |
| Port Labor | \$185,000 | \$185,000 |
| Total | \$415,000 | \$415,000 |

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1 – Delay the purchase and implementation of a modern EDMS.

Cost Implications: \$0

Pros:

- (1) Capital funds are available for other projects

Cons:

- (1) Port staff and contractors will continue to rely on an aging technology platform with increased risk of failure and inefficient processes.
- (2) Improvements in data accessibility, mobile field data collection, and GIS integration are postponed.
- (3) Increased risk of regulatory non-compliance or additional cost if current system fails or technology becomes deprecated beyond use.

This is not the recommended alternative.

Alternative 2 – Purchase and implement a full-featured Environmental Health & Safety solution

Cost Implications: \$1,000,000-\$2,500,000 Capital

Pros:

- (1) Solution potentially provides more powerful analytical reporting and forecasting tools.

Cons:

- (1) Cost is significantly higher than the recommended alternative.

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- (2) The system includes features not required by Port staff or that are covered by other Port systems.
- (3) Increased complexity will extend schedule and require more system administration.

This is not the recommended alternative.

Alternative 3 – Purchase and implement an EDMS

Cost Implications: \$415,000 Capital/\$800,000 Recurring Costs over 10 years

Pros:

- (1) Meets Aviation and Maritime requirements for best-practice environmental data management.
- (2) Improves efficiency and effectiveness of Environmental staff and contractors who routinely use the system.
- (3) Leverages modern technology to improve accessibility, performance, compatibility, scalability, security, and maintenance.

Cons:

- (4) Capital funds are not available for other projects.

This is the recommended alternative.

FINANCIAL IMPLICATIONS

| <i>Cost Estimate/Authorization Summary</i> | Capital | Expense | Total |
|--|-----------|---------|-----------|
| COST ESTIMATE | | | |
| Original estimate | \$350,000 | \$0 | \$350,000 |
| Current change | \$65,000 | 0 | \$65,000 |
| Revised estimate | \$415,000 | 0 | \$415,000 |
| AUTHORIZATION | | | |
| Previous authorizations | 0 | 0 | 0 |
| Current request for authorization | \$415,000 | 0 | \$415,000 |
| Total authorizations, including this request | \$415,000 | 0 | \$415,000 |
| Remaining amount to be authorized | \$0 | \$0 | \$0 |

Annual Budget Status and Source of Funds

This project was included in the 2021-2025 capital budget and plan of finance estimated at \$350,000. The additional \$65,000 will be requested in the funding for the 2022-2026 capital budget and plan of finance. The project will be funded 50% Airport Development Fund and 50% General Fund.

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Financial Analysis and Summary

| | |
|---|--|
| Project cost for analysis | \$415,000 |
| Business Unit (BU) | Corporate division allocations |
| Effect on business performance (NOI after depreciation) | NOI after depreciation will increase due to inclusion of capital (and operating) costs in airline rate base. |
| IRR/NPV (if relevant) | NA |
| CPE Impact | Less than \$.01 in 2023 |

Future Revenues and Expenses (Total cost of ownership)

Ten-year recurring service, license, or maintenance fees, estimated at \$800,000, will be budgeted in annual operating budgets beginning in 2022.

ATTACHMENTS TO THIS REQUEST

None

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

None