

PROJECT ACTION MEMO

Port of Tacoma Commission



Item No: 6B
Meeting Date: 7/16/24

DATE: July 9, 2024
TO: Port of Tacoma Commission
FROM: Eric Johnson, Executive Director
Sponsor: Debbie Shepack, Sr. Director Real Estate
Project Manager, Engineering: Brett Ozolin, Project Manager II
Project Manager, Environmental: Scott Hooton, Project Manager II
SUBJECT: Arkema Manufacturing Area Interim Action Design Authorization
(Master ID # 101585.01)

A. ACTION REQUESTED

Request project authorization in the amount \$1,215,000 for a total authorized amount of \$2,542,000, for engineering design and project coordination associated with the Arkema Manufacturing Area Interim Action, Master Identification No. 101585.01.

Strategic Plan Initiatives: EV-1, EV-2, EL-1

B. SYNOPSIS

The former Arkema Manufacturing Property purchased by the Port of Tacoma (Port) is subject to a 2011 Ecology Agreed Order that requires the Port to complete a Remedial Investigation (RI), Feasibility Study (FS) and Cleanup Action Plan (CAP) under the Model Toxics Control Act (MTCA).

The 2021 FS evaluated seven different remediation alternatives with estimated costs ranging from \$11M to \$196M; the estimated cost of the preferred remedy is \$26M. A significant driver for future costs will be the volume of soil removal within the Penite Pit area that Ecology will ultimately require.

Ecology has expressed support for completing two interim remedial actions: (1) a low permeability wall around the Penite Pits, and (2) capping less impacted areas of the property. The low permeability wall is proposed to contain the area with the highest concentrations of arsenic and retard the migration of arsenic in groundwater towards the Hylebos Waterway. Site capping is proposed to reduce aquifer recharge and isolate remnant contamination from human contact. The cap will be constructed to support high and heavy cargo use.

The previous project authorization request funded the 100% design of the low permeability wall and 30% design of capping and redevelopment.

This authorization request is for funding to complete 100% design for the capping of the entire upland 40-acre manufacturing area. The currently envisioned capping assumes the site would be capped in phases based on the Port's commercial needs and available cash flow. The 100% design effort will advance project understanding, phasing, cost estimating, coordination, permitting and construction documents from the 30% design level. The next authorization is expected to be for construction funding for the containment wall and certain portions of the cap. That request is about May 2025.

C. BACKGROUND

The former 77.6-acre Arkema Property was purchased by the Port of Tacoma (Port) on May 31, 2007, and consists of three parcels: 2901, 2920, and 3009 Taylor Way. The Port assumed all remaining environmental cleanup obligations associated with the property under the purchase and sale agreement. The 2901 and 2920 Taylor Way properties are subject to a 2011 Ecology Order requiring the Port to complete a Remedial Investigation (RI), Feasibility Study (FS) and Cleanup Action Plan (CAP) under the Model Toxics Control Act (MTCA). Although substantial remediation was performed by the prior owner, a large mass of arsenic remains in the Penite Pits area located upland of a sheet pile wall and the Hylebos Waterway. Arsenic migration towards surface water and direct human contact with contaminated materials are the primary drivers for corrective action.

Approximately 40 acres of the manufacturing complex remain available for redevelopment. Other portions of the property have been redeveloped (Arkema Mound) or transferred as part of other real estate agreements (Wypenn).

The draft FS was submitted to Ecology in April 2021 to select a commercially feasible option for the long-term remediation and redevelopment of the property. The FS evaluated seven (7) different remedial alternatives with estimated future costs ranging from \$11M to \$196M. The cost of the recommended alternative (hot-spot soil removal, capping, institutional controls, and monitoring) is \$26M. The restoration timeframes (a MTCA remedy selection criteria) for each remedial alternative were estimated using a sophisticated numerical groundwater and contaminant transport model. The estimated restoration timeframe for each alternative is inordinately long compared to most MTCA cleanups (thousands of years to meet groundwater criteria throughout the site).

Ecology did not approve the recommended remedy in the 2021 draft FS, raising concerns about: (1) the arsenic concentrations in the Penite Pits area; (2) potential migration through the sheet pile wall; (3) the source and intensity of a potential arsenic source in the "wedge" seaward of the sheet pile wall; and (4) potential arsenic concentrations in surface water areas that remained untested. Ecology has also requested the evaluation of an additional alternative that removes, treats, or contains more soil mass to reduce sources of arsenic to surface water and groundwater. Agreement to an arsenic concentration threshold for soil removal has not been reached.

In August 2023, Commission provided authorization to enable staff to address those concerns by implementing a work plan approved by Ecology in July 2023 (Expanded Response to Comments Data Gaps Investigation Work Plan, June 23, 2023). This additional investigation, coordination and study work is ongoing under Ecology Agreed Order DE 5668, Master Identification No. 096201.

With the FS work ongoing, Ecology's Toxics Cleanup Program staff informally approved an approach to place an environmental cap on less contaminated portions of the property so that redevelopment for Port or NWSA operations may occur, provided that the Port also installed a containment cell around the Penite Pits – the most highly contaminated area of the property. With this approach, the FS will be completed after the completion of the interim action(s). The wall's performance will be a key factor in the scope of future remedial actions required by Ecology, either in the revised FS or additional interim action(s).

Commission authorized three tasks in April 2022 to support interim action planning. They include: (1) Low Permeability Wall Basis of Design (BOD) Report; (2) Alternatives Assessment for 24-Acre Capping and Redevelopment; and (3) Work Plan for BOD and 24-Acre Capping and Redevelopment.

The Low Permeability Wall BOD evaluated performance, characteristics, costs, means of construction and alignment for several types of low permeability walls, and recommended a preferred alternative. The report contains a sizable portion of the information to support final design.

For the second task, the project team evaluated site redevelopment concepts for 24 acres of the less contaminated portions of the site outside the proposed low permeability wall area. The task concluded with site plans that summarized the infrastructure and costs associated with redevelopment. The area will be suitable for industrial use (i.e. break-bulk storage, including tracked equipment and RO-RO cargo but not a container yard).

The Work Plan for the BOD and the third task included testing necessary to advance the low permeability wall and redevelopment. This Work Plan was also approved by Ecology in July (Expanded Response to Comments Data Gaps Investigation Work Plan, June 23, 2023). This fell within the scope of authorization under MID 096201.

Commission authorized two design tasks in August of 2023 to support interim action design. They included: (1) 100% Low permeability wall Design; and (2) 30% Site Capping Design.

The 100% Low Permeability Wall Design is progressing on schedule and within budget. Wall alignment, depth, physical properties, and performance are shown in the design documents. The wall permeability and mix design were validated by long-lead testing studies in June. The design will be part of an Interim Action Workplan subject to future approval by Ecology.

The 30% Site Capping Design is nearing completion and will also be included in the Interim Action Workplan subject to future approval by Ecology. Federal shoreline permitting for site outfalls is ongoing. Local permitting for outfall, containment wall, and site capping will be completed in phases during the design process.

The entirety of the developable area is 40-acres. This includes the North Boundary Area (NBA), which is subject to a separate Ecology order associated with a former rock wool manufacturing facility operated by US Gypsum. The NBA remediation, containment wall, and capping are prerequisite to returning the entirety of the property to productive use. The entire 40-acre site is

assumed to be available for commercial use within 10 years. The design team is considering a continuous 40-acre site at buildout, developed in phases.

Considered phases are bound by drainage basins. Two 12-acre areas are anticipated to be available for capping after installation of the containment wall.

Staff intends to complete the 100% design for the entirety of the 40-acre site, with all available acreage capped (24-acres) following regulatory approval (Phase 1, Phase 2, and Phase 3). Proposed phasing and construction program costs are attached to this memorandum.

The Interim Action Work Plan (IAWP) will be submitted to Ecology in August 2024. The 30% design drawings for the containment wall and capping will be appendices to the IAWP. The body of the IAWP will be a technical narrative and figures that describe how the interim actions will be implemented. Ecology will provide review and comment, and the revised IAWP will also be subject to additional public review and comment. When the IAWP is approved, it will be an enforceable element of the Agreed Order.

Phasing will be a key component of the IAWP. The low permeability wall is planned for installation following approval of the IAWP. Capping will follow, or proceed in parallel with the wall, but this work will be phased to align with Port funding and grant opportunities.

PROJECT DETAILS

Scope of Project:

- Design, permitting and construction of a low permeability wall around the Penite Pit area
- Design, permitting and construction of 40-acres of Site Capping
- Ecology coordination, interim action work plan and approval

Scope of Work for This Request:

- 100% Design of Site Capping
 - 60, 90, 100% document packages
 - Ecology coordination
 - Project management
 - Permit support
- Low Permeability Wall
 - Additional performance modeling
 - Additional Ecology coordination

The August 2023, authorization request included permitting and ecology coordination. This request also includes additional permitting and ecology coordination support funding to take project work from initial submittals through approvals.

Schedule:

Advertise for Bid	May 2025
Open Bids	June 2025

Notice of Award	July 2025
Substantial Completion	Q2 2026
Final Completion	Q3 2026

The project has two Interim Actions that will most likely bid as separate construction packages. The low permeability wall will precede the site capping. The existing plan is to phase site capping. The interim action will be subject to regulatory review, public comment, and approval processes. The current project schedule has all approvals and permits secured in May of 2025, with construction funding also requested in May of 2025. The earliest portions of the property could become potentially available for operations is June of 2026.

D. FINANCIAL SUMMARY

Estimated Cost of Project

The low permeability wall is estimated to have a construction program cost of \$6 million.

The total project cost including all stages is not estimable because the volume of soil to be removed from the Penite Pit area has not yet been determined. Construction costs will also vary dependent on final site phasing and work areas.

The total cost of site capping and redevelopment was provided as part of the 30% design effort. The project team converted this cost to a unit area cost to develop a construction program cost by anticipated phase. These costs are presented in the Site Phasing attachment as order of magnitude costs.

Staff are requesting the Capital Improvement Program (CIP) allocate \$33.3M to fund completion of Phases 1, 2 and 3 (Low permeability wall, South 12 Acres, Middle 11 Acres).

Estimated Cost for This Request

The total estimated cost of the Design for this project is \$2,542,000. This includes approximately \$268,000 for preliminary design and \$2,274,000 for final design. If this estimated cost is expected to exceed the authorized amount, additional Commission authorization will be requested.

Estimated Sales Tax

The total estimated sales tax to be paid to local and state governments for containment wall construction and 24 acres of site capping is \$2.5 million.

Cost Details

Item	This Request	Total Previous Requests	Total Request	Total Project Cost	Cost to Date	Remaining Cost
PRELIM. DESIGN	\$0	\$320,000	\$320,000	\$267,744	\$267,744	(\$52,256)*
DESIGN	\$1,215,000	\$1,007,000	\$2,222,000	\$2,274,256	\$399,755	\$1,874,501

CONST. - WALL	\$0	\$0	\$0	\$6,000,000	\$0	\$6,000,000
CONST.** -CAPPING	\$0	\$0	\$0	\$27,300,000	\$0	\$27,300,000
TOTAL	\$1,215,000	\$1,327,000	\$2,542,000	\$35,842,000	\$667,499	\$35,122,245

*Unused funds applied to design program.

**Site capping estimate based on 24 acres (Phase 2 and Phase 3) and is not the total cost for the Arkema Manufacturing site.

Source of Funds

The current Capital Investment Plan (CIP) allocates \$6,831,000 for this project and will be updated during the current 2025 budget process.

Financial Impact

The capping will be capitalized and depreciated over an estimated 10-year life resulting in annual depreciation expense of \$2,938,400. The wall will be capitalized and depreciated over an estimated 20-year life resulting in annual depreciation expense of \$322,900.

Grant reimbursements of \$2,629,094 have been received to date. Additional grant funding of \$2,000,000 was awarded in 2022 and will become available after the remaining \$486,713 funding in the current grant is expended. Grant funds will be recorded as non-operating income when the reimbursement is requested.

E. ENVIRONMENTAL IMPACTS/REVIEW

Permitting: SEPA will be completed, and all applicable environmental and construction permits will be obtained prior to starting construction.

Remediation: This is a remediation project.

Stormwater: The design will include stormwater treatment prior to discharge to the Hylebos Waterway. A construction stormwater permit will be obtained and complied with during construction. The site will fall under the Port’s Municipal Separate Storm Sewer Systems (MS4) permit or Industrial Stormwater General Permit as applicable based on the site use and activities.

Air Quality: No significant air quality issues or concerns are anticipated.

F. PREVIOUS ACTIONS OR BRIEFINGS

Date	Action	Amount
April 21, 2022	Commission Authorization	\$320,000
August 15, 2023	Commission Authorization	\$1,007,000
TOTAL		\$1,327,000

G. ATTACHMENTS TO THIS REQUEST

- Phasing Exhibit

H. NEXT STEPS

Complete design and return to Commission for construction authorization in 2025.