

COMMISSION AGENDA

Item No: 4D

Meeting: 11/25/19

DATE: November 6, 2019

TO: Port Commission

FROM: Eric D. Johnson, Executive Director
Sponsor: Jason Jordan, Director, Environmental and Planning Services
Project Manager: Scott Hooton, Environmental Project Manager II

SUBJECT: Project Authorization for work associated with the Arkema Manufacturing Facility at 2901 Taylor Way Feasibility Study

A. ACTION REQUESTED

Request authorization to reprogram previously authorized funds to complete a draft feasibility study, Master Identification No. 096201.

B. SYNOPSIS

This is a request to expend previously authorized funds to complete additional deliverables required under an Ecology Agreed Order. At a minimum, this will include the draft Feasibility Study, but could include up to the final Feasibility Study.

C. BACKGROUND

The former 77.6-acre Arkema Manufacturing Property was purchased by the Port of Tacoma on May 31, 2007 and consists of three parcels commonly referred as 2901, 2920, and 3009 Taylor Way. An element of the purchase and sale agreement provides for the assumption of all environmental cleanup obligations associated with the property. 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).

A large mass of arsenic in the soil upland of a sheet pile wall was identified in the RI approved by Ecology in 2013. Arsenic migration into surface water in the Hylebos Waterway is the primary concern for the site. While arsenic concentrations in soil and groundwater exceed default cleanup levels over large areas of the site, the RI showed that remediation completed by the previous owner under an earlier Ecology consent decree has reduced concentrations of arsenic in groundwater throughout the property and arsenic concentrations adjacent to the Hylebos Waterway generally achieved prior consent decree requirements and are also below cleanup standards approved by the Environmental Protection Agency (EPA) for the Hylebos cleanup (Federal Ambient Chronic Water Quality Criteria and Hylebos Sediment Quality Objectives). However, applicable MTCA cleanup criterion under the current agreed order are considerably more stringent.

The previous authorization resulted in the collection of technical and regulatory justification to support the development of a cost-effective and protective remedial approach in the feasibility study. Ecology approved the data gap report on September 12, 2019. Port staff previously anticipated that additional authorization would be required to complete the feasibility study when funding for the data gap work was approved by Commission in 2017. Due to cost savings, a draft Feasibility Study can be completed and submitted for Ecology review without requiring authorization for additional funding. Port staff will endeavor to address Ecology comment and finalize the draft Feasibility Study within the available authorization if agreement on the preferred remediation approach can be reached efficiently. The objectives of the Feasibility Study are to evaluate and select commercially reasonable options for the long-term remediation of the property. Additional funding may be required to finalize the Feasibility Study if substantial revisions are required by Ecology.

D. PROJECT DETAILS

Scope of Project:

- Completing fifteen required deliverables under Ecology Agreed Order No. DE 5668:
 - Site Characterization Data Report - (Completed)
 - Draft Data Gap Work Plan and Sampling and Analysis Plan (SAP) - (Completed)
 - Final Data Gap Work Plan and SAP - (Completed)
 - Data Gap Work Plan and SAP Implementation - (Completed)
 - Draft Data Gap Technical Memorandum - (Completed)
 - Final Data Gap Technical Memorandum - (Completed)
 - Draft Wypenn Area Interim Action Plan - (Completed)
 - Final Wypenn Interim Action Plan - (Completed)
 - Draft Remedial Investigation (RI) Report - (Completed)
 - Final RI Report - (Completed)
 - Draft Feasibility Study (FS) Report
 - Final FS Report
 - First Draft Cleanup Action Plan (CAP)
 - (Contingency) Draft Interim Action Work Plan
 - (Contingency) Final Interim Action Work Plan

The draft FS Scope of Work associated with this request includes:

- Meet with Ecology later this year and next to negotiate:
 - Cleanup action objectives
 - Cleanup technology matrix

- Cleanup alternatives
 - Potential preferred remedy
 - Implementation approach
- Utilize the groundwater model to estimate impacts of cleanup technologies and cleanup alternatives on relative restoration time frames and mass flux reductions to the Hylebos Waterway.
- Rank remedial alternatives using the remedy selection criteria in MTCA:
 - Protectiveness
 - Permanence
 - Cost
 - Effectiveness over the long term
 - Management of short-term risks
 - Technical and administrative implementability
 - Consideration of public concerns
- Submit draft FS Report for Ecology review and comment
- Revise to address Ecology comments and submit final FS Report

Port staff envision an adaptive management implementation approach, or “remediation roadmap” where different technologies will be phased at different areas over time to achieve short-term, medium-term and long-term cleanup objectives. This approach will ultimately achieve compliance with MTCA cleanup standards, while managing cash-flow, additional remedial grant opportunities, and prospects for cost recovery from other PLPs.

Schedule

Submit draft Feasibility Study	2Q2020
Submit final Feasibility Study	4Q2020
Submit draft Cleanup Action Plan	TBD – Subject to Future Commission Action
Submit final Cleanup Action Plan	TBD – Subject to Future Commission Action

E. FINANCIAL SUMMARY

Estimated Cost for This Request

No additional funding is associated with this request to reprogram funding authorized for the FS Data Gap work to complete the draft FS. The remaining authorization is \$751,282. If the cost of this effort is anticipated to exceed the authorized amount, additional Commission authorization will be requested.

Estimated Cost of Project

The cost to complete the work under the current Ecology order (RI/FS/CAP) is estimated at \$9.2M, which includes the potential for completing interim cleanup actions. Additional Commission authorization may be required to complete the scope of work under the agreed order.

Remediation design and construction will likely occur as a series of phased actions and will also require future Commission authorizations (likely to occur no sooner than 2021).

Cost Details

Item	This Request	Total Previous Requests	Total Request	Cost to Date	Remaining Authorization
TOTAL	\$0	\$5,763,794	\$5,763,794	\$5,012,512	\$751,282

Source of Funds

The 2019-2023 Capital Investment Plan allocates \$3,759,000 to complete the feasibility study and draft cleanup action plan (MID 096201). There's another \$5,093,000 in the budget for interim actions (MID 2017-42).

Funding for future cleanup is allocated to Master Identification No. 2017-61.

Financial Impact

Project costs related to the feasibility study and interim actions will be capitalized as land assets and remain on the balance sheet as non-depreciating assets. The asset cost will exclude any grant funds.

A remedial grant in the amount of \$3,115,807 has been awarded by Ecology for this project. The grant provides reimbursement of 50% of eligible costs incurred by the Port and is recorded as non-operating income at the time reimbursement is requested. Grant reimbursements total \$2,801,551.

F. ALTERNATIVES CONSIDERED AND THEIR IMPLICATIONS

Alternative 1) Do Nothing.

Alternative 2) This request.

Alternative 2 is the recommended course.

G. ENVIRONMENTAL IMPACTS/REVIEW

Permitting:

None identified.

Remediation:

This effort will identify a remediation approach for existing contamination.

Stormwater:

None identified.

Air Quality:

None identified.

H. PREVIOUS ACTIONS OR BRIEFINGS

<u>Date</u>	<u>Action</u>	<u>Amount</u>
February 10, 2007	PSA Award	\$52,000
December 28, 2007	PSA Amendment	\$47,000
January 16, 2008	PSA Amendment	\$1,448,434
May 17, 2011	Agreed Order	Not Applicable
November 1, 2012	PSA Amendment	\$598,500
March 18, 2014	Project Authorization	\$1,294,807
August 17, 2017	Project Authorization	\$2,323,053
TOTAL		\$5,763,794


I. ATTACHMENTS TO THIS REQUEST

- Computer slide presentation.
- Agreed Order DE 5668

J. NEXT STEPS

Port staff will complete and submit a draft FS to Ecology.

At a future time, Port staff will brief Commission on the findings and implications on the ultimate scope and cost of site remediation. Additional Commission action may be required to complete the scope of work under the current Ecology order.



Item 4D
Date of Meeting: 11/25/19

Authorization to Reallocate Previously Authorized Funds for Arkema Manufacturing Area

Scott Hooton
Environmental Project Manager II



Project Reallocation Authorization Arkema Manufacturing Area



Request project authorization to reallocate previously authorized funds to complete additional deliverables required under an Ecology Agreed Order for the Arkema Manufacturing Area, Master Identification No. 096201.



An aerial photograph of an industrial area. A large red outline encompasses a central region. Within this red-outlined area, there are three sub-regions: a rectangular area on the left, a triangular area in the center, and a parallelogram area on the right. Labels are placed within these sub-regions. The top of the image shows a dark waterway. The bottom left shows a green wooded area. The bottom right shows a parking lot and other industrial structures.

HYLEBOS WATERWAY

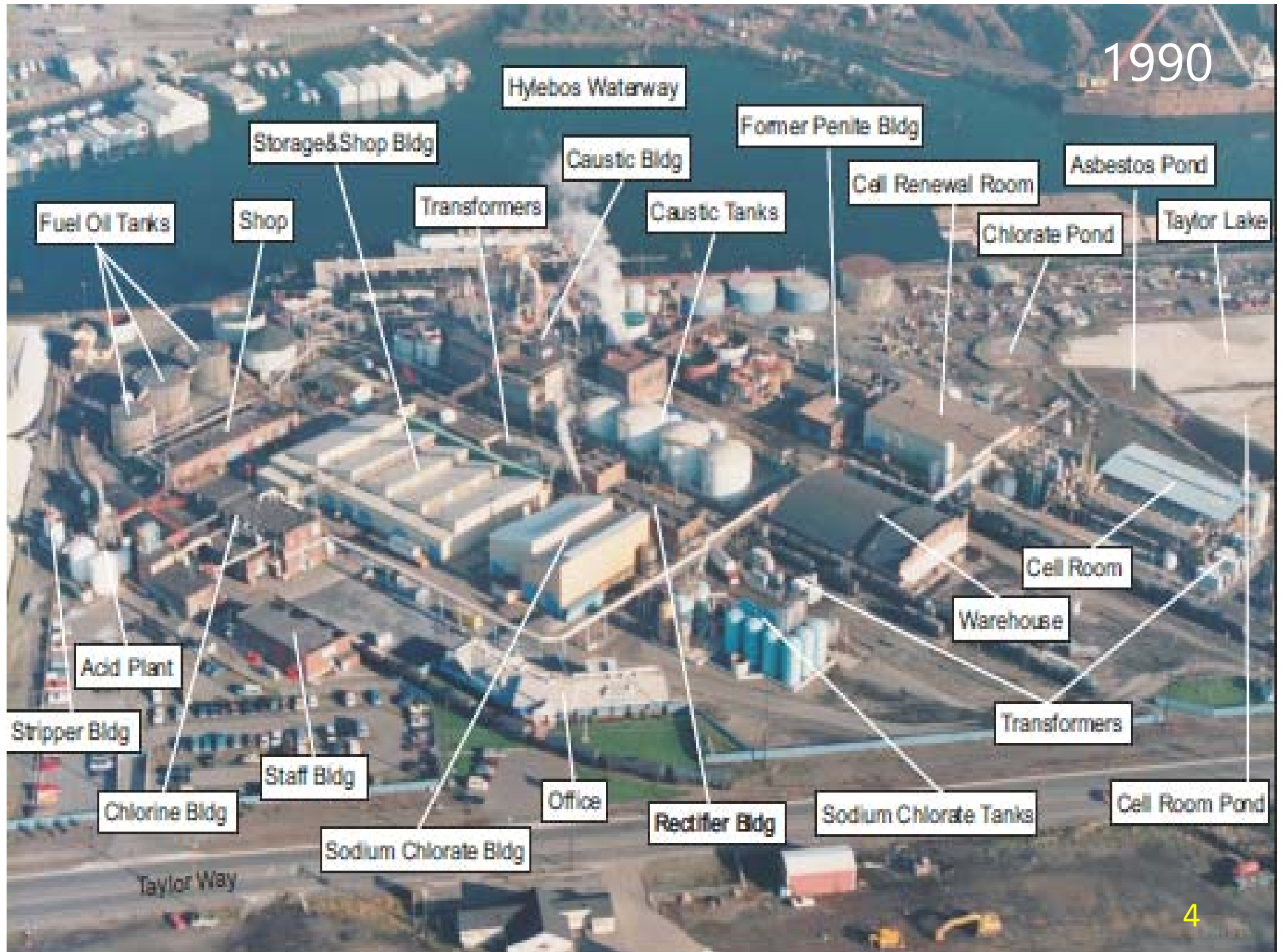
Manufacturing
2901 Taylor Way

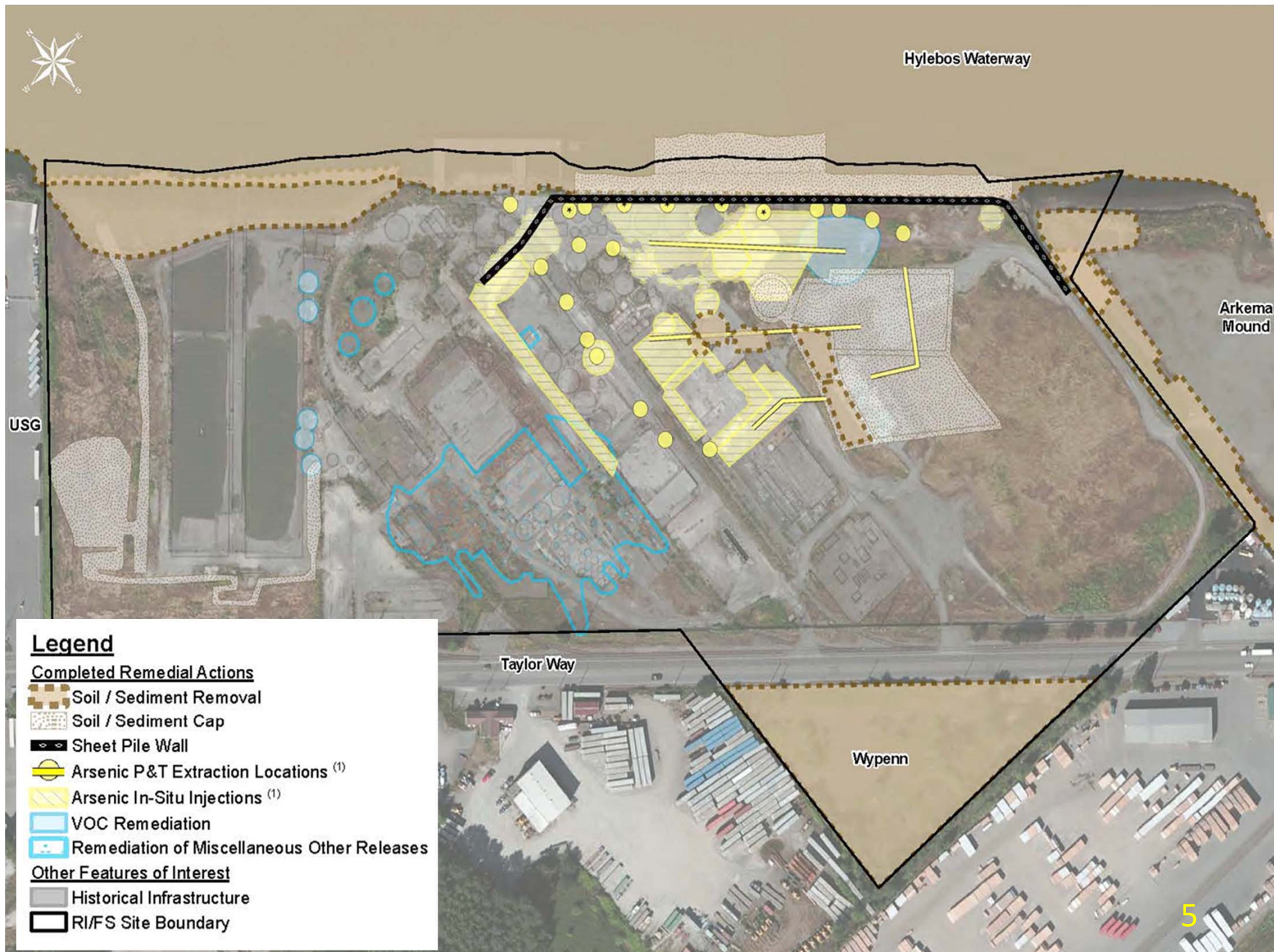
Log Yard
3009 Taylor Way

Wypenn
2920 Taylor Way

2006

1990





Project Description

Arkema Manufacturing Area



- Negotiation of an Agreed Order (Complete)
- Data Compilation Report (Complete)
- Remedial Investigation (RI) (Complete), Feasibility Study (FS) and Draft Cleanup Plan (DCAP)
- Cost Estimate to implement DCAP
- Potential Interim Actions
- Ecology Oversight Costs
- Legal Support
- Port Staff
- Contingency

Project Description

Arkema Manufacturing Area



FS Data Gap Investigation Findings

1. Most of the arsenic mass is associated with soil in the first aquitard. Excavation to the standard point of compliance is most likely impracticable.
2. Targeted removal of residual wastes from the Penite Pits is feasible.
3. Arsenic in groundwater is generally stable or declining.
4. Arsenic in shoreline porewater is below Marine AWQC at all but three locations.
5. Arsenic in shoreline surface water is <5 ppb cleanup level.
6. Favorable geochemical and hydraulic conditions will continue to limit migration of arsenic to the Hylebos Waterway
7. A numerical model developed for this site will be used to predict the relative restoration time frames of different remedial alternatives to be evaluated in the FS. Achieving standards MTCA cleanup levels throughout the site within a reasonable timeframe may not be technically achievable.

Source of Funds Arkema Manufacturing Area



- Additional Commission Authorization will most likely be required after the feasibility study is completed to fulfill requirements of the Ecology order.
- The estimated total Project budget to complete the Feasibility Study is \$5,763,794.
- The 2019-2023 Capital Improvement Plan allocates \$3,759,000 for this project.
- MTCA grant funding of \$3.1M offset approximately 50% of implementation costs of the current Ecology order.

Financial Summary Arkema Manufacturing Area



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Project Schedule

Arkema Manufacturing Area



Activity	Timeframe
Submit Draft Feasibility Study	2Q2020
Submit Final Feasibility Study	4Q2020
Submit Draft Cleanup Action Plan	TBD - Subject to Future Commission Action
Submit Final Cleanup Action Plan	TBD - Subject to Future Commission Action

Conclusion

Arkema Manufacturing Area



Request project authorization to reallocate previously authorized funds to complete additional deliverables required under an Ecology Agreed Order for the Arkema Manufacturing Area, Master Identification No. 096201.