
Appendix D

Analysis of the Portland Harbor Superfund Site Impact on Marine-Dependent Industrial Land

May 31, 2021

Prepared for: City of Portland Bureau of Planning and Sustainability

Final Report



ECONorthwest
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MEMORANDUM

To: Chris Blakney, ECONorthwest Inc. Date: February 4, 2021

From: Seth Otto, AICP, LEED AP Project No.: 0663.10.01
and Matt Hoffman

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A handwritten signature in blue ink, appearing to read "Matt Hoffman".

RE: Preliminary Analysis of Portland Harbor Superfund Site Impact on Marine-Dependent Industrial Land

INTRODUCTION

Maul Foster & Alongi, Inc. (MFA) has prepared this summary memorandum at the direction of ECONorthwest, Inc. (ECO) in support of the current update to the City of Portland (City) Economic Opportunity Analysis (EOA). The EOA will determine how the City accommodates economic growth over the next 20 years. The City suspects that operational disruption and liability uncertainty associated with the Portland Harbor Superfund Site (PHSS) negatively impacts the competitive position of the Portland Harbor industrial lands and deters reinvestment by current property owners. Recognizing the importance of the Portland Harbor to economic growth, and its unique characteristics, the City has engaged ECO/MFA to conduct a separate study of marine-dependent industrial land in the harbor.

This memo summarizes the findings of MFA's preliminary analysis of the PHSS's impact on business investment and economic development competitiveness. It provides an overview of the conditions associated with the PHSS, findings from engagement with stakeholders, and a summary of the primary issues that impact investment and competitiveness.

The research for this study was guided by two primary areas of inquiry:

Competitiveness Impact. To what degree do the development constraints of the PHSS project impact the competitiveness of the Portland Harbor relative to other Lower Columbia ports?

Marine Production and Service Facilities Investment Impact. What is the potential impact, if any, that the PHSS project has on marine production and marine services investment in the Portland Harbor? To what degree is investment deferred until cleanup liability is resolved?

OVERVIEW OF CONDITIONS

The PHSS is a 10-mile stretch of the lower Willamette River and includes in-river and riverbank portions that contributed contamination from decades of industrial use. The PHSS was added to the Environmental Protection Agency's (EPA) National Priorities List in December 2000. The cleanup is estimated by the EPA to cost between \$1 billion and \$2 billion to complete; some independent projections range up to \$4 billion. Complications include a large geographic area, over 100 potentially responsible parties (PRPs), and multiple contaminants of concern spread over dozens of sediment management areas (SMAs) within the overall PHSS.



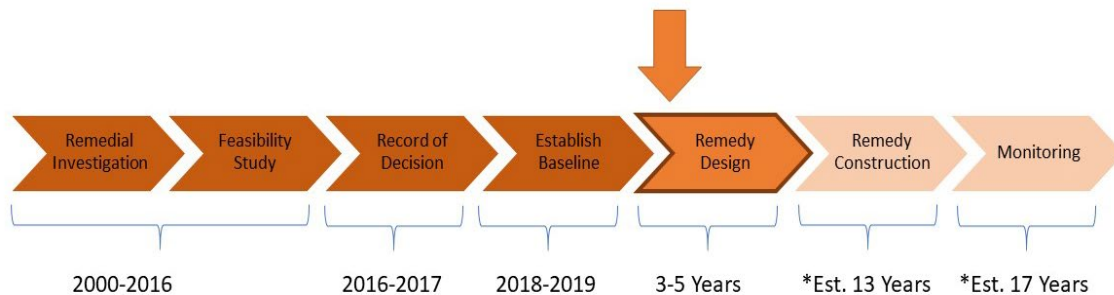
(source: <https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.Cleanup&id=1002155#bkground>)

Water, sediment, riverbank soils and biota at the PHSS are contaminated with a broad range of hazardous substances, including polychlorinated biphenyls, polycyclic aromatic hydrocarbons, dioxins/furans, pesticides, and heavy metals. These compounds have been found to be harmful to

people and the environment. The health risks associated with the sediment at the site are great enough for cleanup to be required under the Superfund law.

A Record of Decision was signed in 2017. The preferred remediation alternative includes a combination of dredging, capping, and monitored natural recovery. It is assumed that remediation will take between seven and 13 years to complete, with additional time for monitored natural recovery to occur. PRPs are in the process of negotiating contributions to the remedial design and expect to be done by 2024. The next phase will be actual implementation of the various remedies throughout the PHSS. The timing and process for managing and overseeing this phase are only now being established.

Process Timeline



Source: Portland Harbor Superfund Council Presentation, September 11, 2019.

PRIMARY ISSUES

To address the research questions posed for this study and to highlight the primary issues facing investment in the Portland Harbor, MFA completed a qualitative assessment consisting of a review of primary sources and interviews with key stakeholders involved with and/or impacted by the PHSS.

The stakeholder interviews were conducted over the phone or via videoconference with the individuals listed below. No quotations or data points are directly attributed. Rather, MFA received the information and compiled it into the summary points provided in the Primary Issues and Findings section of this memo.

Interviewees

Name	Title	Organization
Jim McKenna	Natural Resources Policy Analyst, Governor's Office	State of Oregon
Jessica Hamilton	General Manager, Portland Harbor Environmental	Port of Portland
Teresa Carr	Director, Business Development and Commercial Properties	Port of Portland
Geoff Tichenor	Partner	Stoel Rives, LLC
Annie Von Burg	Environmental Policy Manager, Bureau of Environmental Services	City of Portland
Mark Wilson	Executive Director	Port of Kalama
Kent Cash	Chief Operations Officer	Port of Vancouver
Mike Bomar	Director of Economic Development	Port of Vancouver
Jim Hagar	Economic Development Project Manager	Port of Vancouver
Alan Sprott	Vice President, Environmental Affairs	Vigor Industrial
Myron Burr	Director, EHS	Siltronic Corp.

The interviews focused on the impact the PHSS has on business investment and market competitiveness with other industrial lands in the region. The information provided below is based on the responses received from interviewees and was not independently verified.

Business Investment

Reinvestment by existing owners, and transactions for new users and tenants, are negatively impacted by the PHSS status, extended cleanup horizon, and yet-to-be-defined cleanup liability across layers of current and past property owners. The primary themes associated with the business investment issue are feasibility and uncertainty.

Feasibility

Significant challenges confront redevelopment in the harbor. Businesses make location decisions on a wide range of factors, including, but not limited to, labor availability and cost, utility costs, access to transportation, taxes and incentives, and channel draft (for water-dependent users). Extraordinary due diligence costs and environmental uncertainty hinder, development timing, financing terms and negatively impact feasibility. It was also found that land closer to downtown is more attractive for mixed-use redevelopment and not industrial development. Is this because of the PHSS, independent factors, or a combination? Here is what we learned from the interviews:

- Uncertain timelines, costs, and environmental risks pose challenges to project feasibility and result in more expensive debt and equity.

The common theme across all interviews was that uncertainty caused by the Superfund Site is the most significant impediment to new investment in the water-dependent industrial lands of the Portland Harbor.

- Some industrial land users turn away from properties that are connected to a Superfund simply because of the stigma associated with it.
- Because of liability concerns, PRPs that currently own land are finding it difficult to secure new tenants and in some cases are holding property off the market.
- Aspects that once made Portland Harbor attractive for manufacturing are fading, such as workforce housing, business climate, and dedicated industrial districts. Aspects such as transportation connectivity, infrastructure, and available workforce remain a strength for the region.
- Insurance products and contractual tools that address liability may change the feasibility analysis once remedial design has progressed, which will provide greater certainty in projected remediation costs and potential effects to marine uses in the harbor.

Uncertainty

Several unresolved matters associated with the PHSS cleanup have created uncertainty. These issues must be resolved, and the investment community must become confident in the implementation plan and comfortable with the risks and related liability protections.

Timing of Remedial Design

Designs will conclude in the next three to five years and then the process will advance to remedial action. It is assumed that the settlement of remedial design for PRPs will better support liability management and facilitate investment.

Approximately 80 percent of the PRPs are under order or are currently in the process of negotiating with EPA to establish their responsibility and contribution to remedial designs. The PHSS is divided into multiple SMAs, each with its own set of PRPs and remedial actions. Work plans for several subsites are under development and review by state and federal agencies. Designs will conclude in the next three to five years and then the process will advance to remedial action. It is assumed that the settlement of remedial design for PRPs will better support liability management and facilitate investment. Specifically, liability tools such as environmental insurance and contractual tools such as prospective purchaser agreements will be more viable when designs and cost obligations are set. The duration of remedial actions will depend on the type of action, the ability to settle contribution obligations, and the availability of infrastructure outside the harbor to support the cleanup—this includes qualified contractors and equipment and transportation and disposal of the contaminated media. Remediation activities throughout the PHSS can be active for 13 years and longer, followed by continuing obligations for operations and maintenance.

Liability

As mentioned, there are multiple subsites, and cost allocation is ongoing in each subsite to determine the percent PRPs will pay for remedial design and action. Each SMA often has multiple PRPs further complicating negotiations. Additionally, the PHSS is impacted by multiple types of contamination from multiple sources. The only common PRPs and sources throughout the PHSS are the state, through ownership of the riverbed itself, and the City, through its conveyance of storm and industrial wastewater in public infrastructure.

The EPA and the Oregon Department of Environmental Quality (DEQ) still have not fully defined roles for addressing upland and riverbank areas, resulting in uncertainty around the extent of liability for in-water contamination associated with upland properties. The joint-and-several liability clause of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) that governs implementation of the PHSS results in the potential for reopening of a PRP's liability and obligation to contribute, including on SMAs not previously associated with their property. "Orphan sites" are those areas where no single viable PRP remains, and the responsibility for cleanup will be allocated out among multiple PRPs. This issue remains a significant concern and barrier without a recognized form of indemnification.

Cleanup Implementation

There is uncertainty around how cleanup will be implemented over multiple SMAs, each with its own unique set of PRPs. Questions that remain unresolved include:

- How will various remedial actions be orchestrated if they are to be carried out close to the same geography over a similar timeframe?
- Will this put pressure on the availability of contractors, equipment, and oversight?
- Will remediation take into consideration of the lasting impact on the availability of marine-dependent uses in the harbor? For instance, remedies that involve long-term institutional controls, such as caps, may limit or prohibit the development of in-water structures to serve marine-dependent uses.

Urgency

Several interviewees voiced the opinion that government agencies are not prioritizing the PHSS as an issue of state and regional importance. The speculation is that this is due to the lack of demand from a major employer that the issues be resolved and/or provide a pathway to resolve liability to make investments and locate jobs in the harbor. It may also be due to a lack of awareness of the role that industry, and heavy manufacturing in particular, plays in providing living wage jobs for the region.

Equity

While equity issues are not necessarily impacting reuse, they factor into decision making.

Environmental Justice

The consumption of fish is a primary risk pathway from contaminated media to the natural and human environment. Because the communities that rely more heavily on consumption of fish from the harbor are communities of color and populations with lower indices of socioeconomic status, the PHSS has an important role in addressing environmental justice considerations.

Economic Balance

The Portland Harbor, along with the Columbia Corridor, remains the largest area of industrial land in the city. Historically, industrial jobs have provided reliable and well-paying employment to a diverse cross section of the Portland population, especially for minority communities and members of the population with lower education attainment. The pressure to rezone and redevelop large areas, particularly where the harbor interfaces with transitioning neighborhoods such as Slabtown in the northwest, is significant and poses a risk to maintaining the stock of industrial employers in Portland.

Market Competitiveness

In a competitive market, users scour an area for the right property on which to locate. In general, anything that creates uncertainty is a deterrent, especially for water-dependent uses because of challenges associated with getting permits on waterways. The PHSS shadow is an additional constraint to potential investment, given this uncertainty's impact on project feasibility. In addition, project informants identified a "death by a thousand cuts" for the Portland Harbor that included a diminished business climate, encroachment from non-industrial uses, onerous stormwater and air quality regulations, and a disinvestment in public education and public safety.

Draft Depth and Marine-Dependent Industry

The Navigation Channel depth within the Harbor ranges from 40-50 feet. Several moorages have depths half that level. This compares unfavorably with what other Columbia River ports offer and therefore limits the size and draft depth of ships in the Harbor. Shipping and other businesses that rely on large-draft vessels already look elsewhere for real estate. The ports of Kalama and Vancouver, Washington, both offer deep-draft harbors. Because channel dredging is delayed and encumbered by the Superfund shadow, Portland runs the risk of impacting the ability of even shallower-draft vessels to operate and serve businesses in the harbor.

Market Niche

Draft depth is just one factor impacting business location and market competitiveness, however, and Portland retains some competitive advantages for industry. The Portland Harbor offers advantages to businesses seeking to locate an industrial operation, specifically:

- Population density and established industries and employers that create opportunity for associational benefits and clustering

- Transportation networks, including two intersecting interstates, regional highways, rail hubs, and in-water (barging) infrastructure
- Critical infrastructure such as power, water, and high-speed internet

With more clarity around cleanup costs and liability, landowners may begin to market to businesses that seek the unique attributes of the Portland Harbor.

Interviews with representatives of ports along the Lower Columbia River also revealed that they are unaware of customers or businesses seeking to locate at, or relocate to, their ports instead of Portland Harbor because of its Superfund status. Instead, we heard consistently that ports view themselves as operating in a symbiotic environment in which each has its own niche based on physical, locational, and development factors. Portland has the benefit of international name recognition, which the more regional ports in the Lower Columbia can take advantage of, based on proximity. If anything, the health of the Portland Harbor is important in the overall health of ports and marine-related industry in the entire region.

LOOKING FORWARD

Upside & Opportunities

There is a path forward: 80% of PRPs are in out-of-court processes with EPA and starting on their remedial design; the remainder will be brought to the table by an EPA enforcement action. This means that cost estimates and eventual resolution are on the horizon and may help provide certainty for real estate and business transaction and investment. Establishing limits of liability and allocating cost share responsibility will free up attention, and potentially capital, for other activities.

Challenges & Risks

Much uncertainty remains associated with the implementation of the PHSS project, specifically with timing, cost, liability, and coordination. There is currently no coordinated effort to bring all the various PRPs together to work collaboratively on moving through remedial design and into implementation. The City and the State of Oregon have made strides in coordinating efforts to bring PRPs to the table and move toward a resolution, yet attention from elected officials remains lacking. In the absence of leadership from local and state officials and with the lack of coordination of PRPs and other stakeholders, the issues associated with the PHSS likely will continue to present barriers to investment and limit market competitiveness for marine-dependent industry in the Portland Harbor.

Tools

The tools available to PRPs within the Harbor to manage risk, liability and cost are limited, specifically by the nature of federal CERCLA laws, by the terms of the ROD, and the multiple layers of jurisdiction over the Harbor.

DEQ can provide Prospective Purchaser Agreements (PPAs), which define and limit environmental liabilities, on upland properties but cannot issue protection for in-water contamination. EPA has so far been reluctant or unwilling to issue PPAs, directing purchasers to rely instead on the liability protections of the Bona Fide Prospective Purchasers provision of the 2002 Brownfields Amendments to CERCLA. This has largely not been satisfactory for risk-averse purchasers. The only PPA issued by EPA to date has been for the Triangle site at the University of Portland. To date, EPA has emphasized the availability of “comfort letters” to PRPs once an agreement is negotiated. The value of such letters has not been tested on the market or in defense against a liability claim.