Vancouver Port of NuStar Cadet Swan Cleanup Site Response to Comments

Comment Period: July 13 – August 11, 2023

Cleanup Site ID:	3450
Facility ID:	1026
Address:	2565 NW Harborside Drive, Vancouver, WA 98660
County:	Clark County

Documents for review and comment

Remedial Investigation (RI) Reports
Feasibility Study (FS)
Draft Cleanup Action Plan (dCAP)
Draft Agreed Order DE 21295 (AO)
State Environmental Policy Act Determination of Non-Significance (SEPA DNS)

Background

The Vancouver Port of NuStar Cadet Swan cleanup site (Site) includes two source areas, one known as the Cadet/Swan part of the site and the other as the NuStar and KMBT part (see Figure 1). The documents shared with the public during this comment period pertain to the Cadet/Swan part of the site. In 1956, the Swan Manufacturing Co. (Swan) started making electrical heaters in a building located at the corner of W 4th Plain Blvd and St Frances Lane. In 1964, they moved to 2500 W 4th Plain Blvd. In 1972, the Cadet Manufacturing Co. (Cadet) purchased Swan. Cadet continued to make heaters. The Port purchased the former Swan site in 1982. In 2006, the Port acquired the Cadet property. The Port has been conducting interim actions at Cadet and Swan since 1998.

Figure 1. The documents available for public comment relate to the Cadet and Swan portion of the site. This map shows the location of the Swan (yellow), Cadet (orange), as well as the NuStar (red), and KMBT (blue) areas of the Site.

Contamination and possible pathways of exposure

Trichloroethylene (TCE) and other chlorinated solvents were used to clean metal parts at both facilities and the solvents were released to soil and groundwater. The area of solvent contamination in groundwater is called a plume. A residual groundwater plume of chlorinated solvents is located under the Cadet and Swan facilities.

Contamination at the Site has not adversely affected City of Vancouver, Clark Public Utilities, or Port drinking water supply wells. Even so, cleanup of the groundwater plume and other contaminants is important because exposure to these substances can be harmful to human health and the environment, including the neighboring Columbia River.

Previous cleanup actions

In 2009, the maximum extent of the solvent plume at the Site became known. This extent is outlined by a black dashed line in Figure 2. The Port has been conducting interim actions at Cadet and Swan since 1998. Some of these actions include:

- Excavation of 13,800 cubic yards of VOC-impacted soil.
- Storage and successful treatment of excavated soil on site.
- Addressing contaminated groundwater with remediation treatment wells.
- Installation of soil vapor extraction wells, indoor vapor removal systems and vapor monitoring.
- Operation of a large diameter groundwater extraction well and treatment of groundwater since 2009.

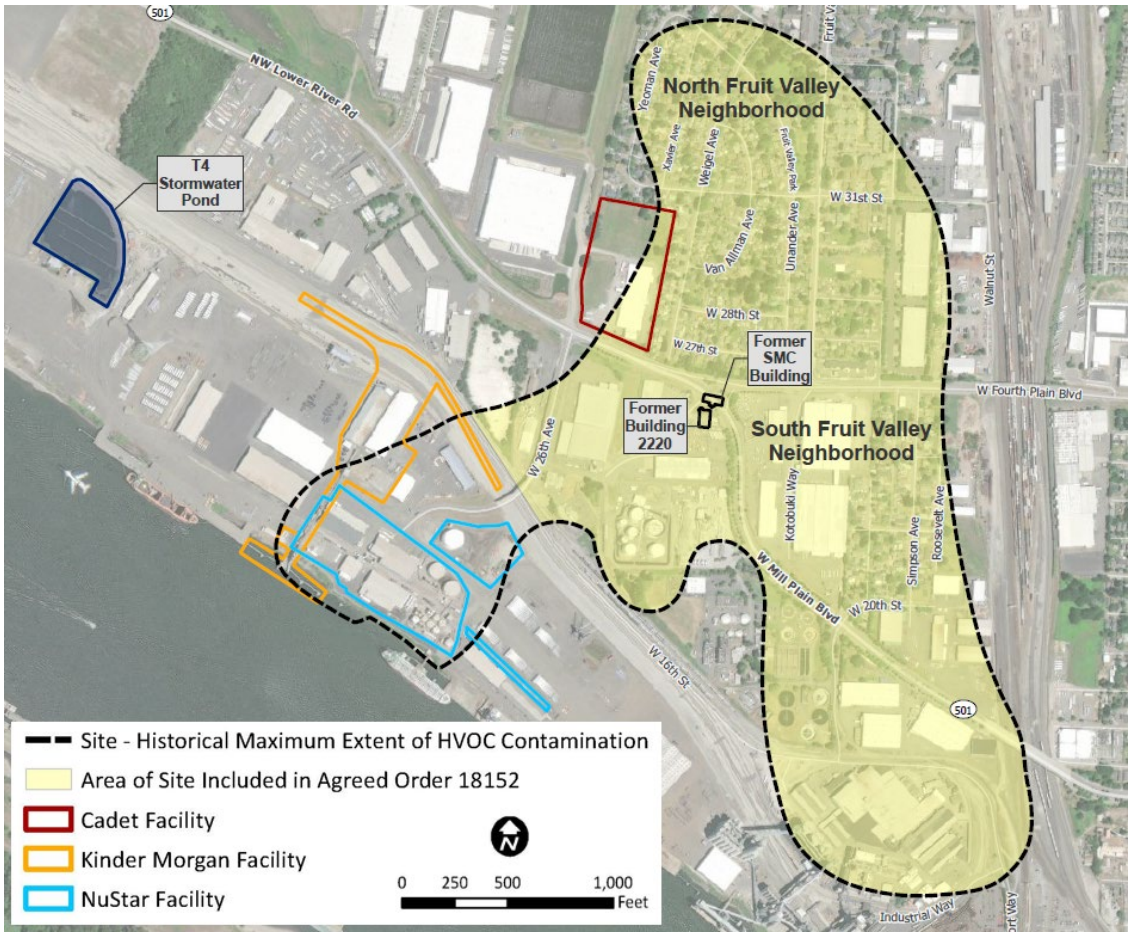

Figure 2. The site is divided into two portions; non-shaded and yellow-shaded. The black line shows the historical maximum extent of solvent contamination prior to interim cleanup actions. The yellow shaded area within the Site outline is the area considered in the AO for partial cleanup by the Port.

Proposed plan for cleanup

Until recently, Ecology considered the solvent plume from the Swan/Cadet and NuStar source areas to be one area-wide plume. Figure 2 includes a black dashed line that defines the historical maximum extent of the solvent plume at the Site prior to interim clean up actions.

The yellow shaded area within the Site outline is the area considered in both the 2020 Agreed Order (AO DE18152) and the 2023 dCAP and Agreed Order. Interim actions have reduced the solvent contaminant levels, so the solvent plume is no longer contiguous with the Cadet/Swan and NuStar source areas.

Washington's cleanup law, the Model Toxics Control Act (MTCA), provided authority in AO DE 18152 to require the Port to conduct and draft a feasibility study and prepare a preliminary dCAP for a partial cleanup within the Site (see Figure 3).

The selected proposed cleanup actions involve:

- shutting off the groundwater pump and treatment system.
- monitoring groundwater and evaluating the natural attenuation of contaminants.
- restrictions of groundwater use.
- guidance on future building construction on Port property affected by the Site.

Ecology's proposed cleanup plan is described in the dCAP. Those plans are here made available for public comment ahead of implementation of the Cleanup Action Plan.

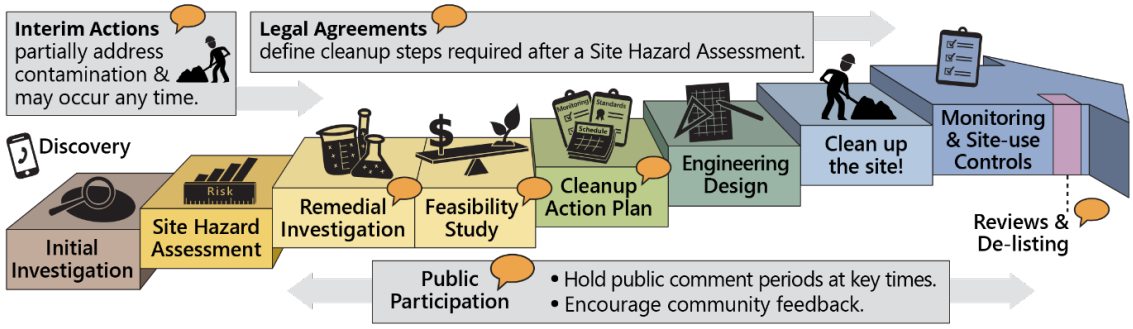

Figure 3. The Model Toxics Control Act (MTCA) is Washington's cleanup law. There are several steps in the MTCA cleanup process. The comment bubbles indicate major milestones in the process when there is an opportunity for public comment.

You can follow the progress of cleanup at the Vancouver Port of NuStar Cadet Swan webpage.[1]

Prepared by

Andrew Smith, Cleanup Project Manager
Matt Fuller, Public Involvement Coordinator

[1] https://apps.ecology.wa.gov/cleanupsearch/site/568

Comments received during the comment period

Comment from James Watt, Department of Health (August 11, 2023)

TO:
Sam Meng
Washington Department of Ecology

FROM:
James Watt
Washington Department of Health
Office of Environmental Health, Safety and Toxicology
243 Israel Road SE, PO Box 47846, Olympia, Washington 98504-7846
TDD Relay Service: 1-800-833-6388

SUBJECT:
Remedial Investigation Report, Draft Cleanup Action Plan and Feasibility Study –
Technical Document Review
POV NuStar Cadet Swan Site
Vancouver, Clark County, Washington

This letter is in response to Washington Department of Ecology's request for public comment regarding the cleanup documents for the Port of Vancouver NuStar Cadet Swan cleanup site. The Washington Department of Health (DOH) has reviewed the documents, in particular the Remedial Investigation (RI) reports, the Draft Cleanup Action Plan (dCAP) and Feasibility Study. The primary chemical of concern is trichloroethylene (TCE), although other volatile organic compounds (VOCs) such as tetrachloroethylene have historically been found at the site and are currently at levels below concern.

The goal of DOH is to ensure that potential health effects from chemical exposures are properly evaluated and actions are taken to address current exposures. If no current exposure pathways exist, steps should be taken to prevent or minimize future exposures. The RI and dCAP have outlined that complete exposure pathways do not exist to residents of the North or South Fruit Valley Neighborhoods, as evidenced by the fact that shallow groundwater plume of TCE has been reduced in scope considerably since remedial action was installed in 2009, and that residents are delivered tap water from the City of Vancouver, rather than from private wells. DOH also acknowledges that cleanup standards for drinking water are at least as stringent as vapor intrusion standards, and that exposure to TCE vapor indoors is no longer considered a concern by Ecology.

Within a small area near the source of the contamination, levels of TCE remain high (cited as 0.216 mg/L TCE in August of 2020, dCAP pg. 2-4) and may pose health risks above levels of concern, given reasonable maximum exposure assumptions of drinking water use. We agree that the potential for exposure to this area of the plume is low, as the area is generally limited to source workers and is also not a source of drinking water. However, DOH also agrees with Ecology that this remains a valid potential exposure.

Given that the exposure pathway to residents and workers is incomplete because the groundwater is not used as a potable drinking water source, DOH does not anticipate health effects to arise from current or future use of the site, provided the groundwater is extracted for remedial actions only. TCE exposure via soil is also not anticipated to pose a health risk to residents, as contaminated samples are limited in number and confined to the industrial property, and institutional controls will limit worker exposure during cleanup. DOH supports consistent monitoring of VOCs to ensure residents and site workers are apprised of the potential risks from use of groundwater (e.g., installation of future wells), particularly among sites closest to the source. Monitoring should include intermediate and deep groundwater, as these zones are currently showing levels of TCE in exceedance of MTCA standard and are anticipated to be cleared at a slower rate compared to the shallow zone.

DOH appreciates this opportunity to review the above documents. Please contact me at 564-669-4205 if you have any questions.

Sincerely,
/s/James Watt

Health Assessor
Toxicologist
Site Assessments and Toxicology Section

cc: Lenford O'Garro, Department of Health
Andrew Smith, Ecology
Matt Fuller, Ecology

Ecology Response:
Thank you for your comments and the support of this cleanup. The Port will continue to monitor the shallow, intermediate and deep groundwater at the site and will evaluate the effects of this action over time to ensure the remedy is working as designed. .

Comment from Jean Avery (Vancouver, WA) July 1, 2023

From: Jim Shroyer
Sent: Tuesday, July 18, 2023
To: Andrew Smith
Subject: Nu Star clean up Vancouver

Good morning,

Reaching out about clean up of Nu Star in Vancouver.
At which site will the excavation of 13.8k cubic yards of take place?
Also, will any work take place outside of 4 highlighted areas in figure 1?
And finally, when is everyone hoping to begin this project?

Thank you...

Ecology Response:

Jim,

The excavation of 13,800 cubic yards took place on the Swan Manufacturing Site in the early 2000s. On the fact sheet for this public comment, the section that mentioned the excavated yards was under "Previous Cleanup Actions". So, it's already been done. As far as the work proposed, the pump and treatment system will be turned off after operating for the past 14 years. Most of the contaminants have been removed and we are planning on monitoring the groundwater after turning off the pump to see if the contaminants will dissipate over time. All this is described on the fact sheet and associated documents in the public comment page. We plan on turning pump off this summer.

Let me know if you have any other questions.

Thanks,
Andy

Andrew Smith, PE, LHG
Unit Supervisor UST/Technical Support Unit
Department of Ecology
Toxics Cleanup Program
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