



## **Second Periodic Review Northport City Park**

---

**Park Road, Northport, Stevens County**

**Facility Site ID: 3833228, Cleanup Site ID: 3421**

**Toxics Cleanup Program, Eastern Region**

Washington State Department of Ecology  
Spokane, Washington

January 2025, Publication 25-09-023

## Document Information

This document is available on the Department of Ecology's [Northport City Park cleanup site page](#).<sup>1</sup>

### Related Information

- Facility Site ID: 3833228
- Cleanup Site ID: 3421

## Contact Information

### Toxics Cleanup Program<sup>2</sup>

Eastern Region Office  
Erin Andersen, Site Manager  
4601 N. Monroe St.  
Spokane, WA 99205  
Email: [erin.andersen@ecy.wa.gov](mailto:erin.andersen@ecy.wa.gov)  
Phone: 509-385-6669

## ADA Accessibility

The Department of Ecology is committed to providing people with disabilities access to information and services by meeting or exceeding the requirements of the Americans with Disabilities Act (ADA), Section 504 and 508 of the Rehabilitation Act, and Washington State Policy #188.

To request an ADA accommodation, contact the Ecology ADA Coordinator by phone at 360-407-6831 or email at [ecyadacoordinator@ecy.wa.gov](mailto:ecyadacoordinator@ecy.wa.gov). For Washington Relay Service or TTY call 711 or 877-833-6341. Visit [Ecology's website](#)<sup>3</sup> for more information.

---

<sup>1</sup> <https://apps.ecology.wa.gov/cleanupsearch/site/3421>

<sup>2</sup> <https://ecology.wa.gov/About-us/Who-we-are/Our-Programs/Toxics-Cleanup>

<sup>3</sup> <https://ecology.wa.gov/ADA>

# Department of Ecology's Region Offices

## Map of Counties Served



Southwest Region 360-407-6300	Northwest Region 206-594-0000	Central Region 509-575-2490	Eastern Region 509-329-3400
----------------------------------	----------------------------------	--------------------------------	--------------------------------

Region	Counties served	Mailing Address	Phone
<b>Southwest</b>	Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Mason, Lewis, Pacific, Pierce, Skamania, Thurston, Wahkiakum	PO Box 47775 Olympia, WA 98504	360-407-6300
<b>Northwest</b>	Island, King, Kitsap, San Juan, Skagit, Snohomish, Whatcom	PO Box 330316 Shoreline, WA 98133	206-594-0000
<b>Central</b>	Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, Yakima	1250 W Alder St Union Gap, WA 98903	509-575-2490
<b>Eastern</b>	Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman	4601 N Monroe Spokane, WA 99205	509-329-3400
<b>Headquarters</b>	Across Washington	PO Box 47600 Olympia, WA 98504	360-407-6000

# Table of Contents

<b>Introduction.....</b>	<b>1</b>
<b>Summary of Site Conditions.....</b>	<b>2</b>
Site description and history .....	2
Site investigations .....	2
Cleanup actions .....	3
Cleanup standards .....	4
Environmental Covenant .....	4
<b>Periodic Review .....</b>	<b>6</b>
Effectiveness of completed cleanup actions .....	6
New scientific information for individual hazardous substances or mixtures present at the Site .....	7
New applicable state and federal laws for hazardous substances present at the Site.....	7
Current and projected Site and resource uses .....	7
Availability and practicability of more permanent remedies .....	7
Availability of improved analytical techniques to evaluate compliance with cleanup levels.....	7
<b>Conclusions.....</b>	<b>7</b>
Next review .....	8
<b>References.....</b>	<b>9</b>
<b>Appendix A. Vicinity Map .....</b>	<b>10</b>
<b>Appendix B. Site Plan.....</b>	<b>11</b>
<b>Appendix C. Photo Log.....</b>	<b>12</b>
Photo 1: City Park and Structures – from the north .....	12
Photo 2: City Park and Structures – from the south .....	12
Photo 3: City Park and Structures - from the west .....	13
Photo 4: City Park and Parking Lot – from the east .....	13

# Introduction

The Washington Department of Ecology (Ecology) reviewed post-cleanup site conditions and monitoring data to ensure human health and the environment are being protected at the Northport City Park cleanup site (Site). Site cleanup was implemented under the Model Toxics Control Act (MTCA) regulations, Chapter 173-340 Washington Administrative Code (WAC). This is the second periodic review conducted for this Site. Ecology completed the first periodic review in December 2019.

Cleanup activities at this Site were completed under Voluntary Cleanup Program (VCP) Project No. EA0232. Residual concentrations of arsenic and lead in soil that are above MTCA Method A cleanup levels remain on the property. The MTCA cleanup levels for air, soil, sediment, surface water, and groundwater are established under [WAC 173-340-750](https://app.leg.wa.gov/WAC/default.aspx?cite=173-340-750),<sup>4</sup> [WAC 173-340-740](https://app.leg.wa.gov/WAC/default.aspx?cite=173-340-740),<sup>5</sup> [WAC 173-340-760](https://app.leg.wa.gov/WAC/default.aspx?cite=173-340-760),<sup>6</sup> [WAC 173-340-730](https://app.leg.wa.gov/WAC/default.aspx?cite=173-340-730),<sup>7</sup> and [WAC 173-340-720](https://app.leg.wa.gov/WAC/default.aspx?cite=173-340-720),<sup>8</sup> respectively.

Ecology determined institutional controls in the form of an environmental covenant would be required as part of the cleanup action for the Site. [WAC 173-340-420\(2\)](https://app.leg.wa.gov/WAC/default.aspx?cite=173-340-420(2))<sup>9</sup> requires Ecology to conduct a periodic review of certain sites every five years. For this Site, a periodic review is required because an institutional control was required as part of the cleanup action.

When evaluating whether human health and the environment are being protected, Ecology must consider the following factors (WAC 173-340-420(4)):

- a) The effectiveness of ongoing or completed cleanup actions, including the effectiveness of engineered controls and institutional controls in limiting exposure to hazardous substances remaining at the site
- b) New scientific information for individual hazardous substances or mixtures present at the site
- c) New applicable state and federal laws for hazardous substances present at the site
- d) Current and projected site and resource uses
- e) The availability and practicability of more permanent remedies
- f) The availability of improved analytical techniques to evaluate compliance with cleanup levels

---

<sup>4</sup> <https://app.leg.wa.gov/WAC/default.aspx?cite=173-340-750>

<sup>5</sup> <https://app.leg.wa.gov/WAC/default.aspx?cite=173-340-740>

<sup>6</sup> <https://app.leg.wa.gov/WAC/default.aspx?cite=173-340-760>

<sup>7</sup> <https://app.leg.wa.gov/WAC/default.aspx?cite=173-340-730>

<sup>8</sup> <https://app.leg.wa.gov/WAC/default.aspx?cite=173-340-720>

<sup>9</sup> <https://app.leg.wa.gov/wac/default.aspx?cite=173-340-420>

# Summary of Site Conditions

## Site description and history

The Site is next to the LeRoi Smelter site. Northport covers approximately 372 acres and is along the east bank of Franklin D. Roosevelt Lake (Lake Roosevelt) on the upper Columbia River. Northport is about 7 miles south of the Canadian border and 35 miles north of Colville.

Beginning in 1897, the LeRoi Smelter refined copper, lead, and silver ores. At the peak of operation, the smelter processed 500 tons of ore per day. The smelter closed in 1909 due to opening of the smelter in Trail, British Columbia. In 1914, the LeRoi Smelter reopened to process lead ore from Leadpoint, Washington, to meet government demand during World War I. Lead smelting operations during this period produced up to 30 tons per day of airborne sulfur emissions. Operations ceased permanently in 1921, and the smelter site remained inactive until 1953. The furnace, roaster, crusher, and ore buildings were removed during this period of inactivity. Between 1922 and 1953, a private landowner purchased the Site and from 1953 through 2001, the western portion of the property was used as a lumber mill.

From 1953 to 2001, the entire smelter site was used as a lumber mill; the main lumber operations were in the western portion of the property, and the eastern portion of the property was used to store lumber products and old metal parts. The lumber mill processed mostly cedar wood from rough-dimension lumber into exterior siding and exterior paneling. Mill processes included cutting, drying, and shipping the wood products. Mill operations were run on propane; no wood treatment or chemical use was reported during the mill's operating history.

Smelter operations contaminated properties outside of the property boundaries, including residential and commercial properties and the neighboring City Park. BNSF Railway owns the park, which is leased to the Town of Northport. BNSF owns a right-of-way that extends from 100 feet to about 180 feet south of the existing main line tracks. This right-of-way was occupied by the former smelter operations. Soil at and near the smelter is contaminated with lead, arsenic, and other metals.

A vicinity map is in Appendix A, and a Site plan is in Appendix B.

## Site investigations

From 1922 through 1998, several regulatory agencies conducted studies and investigations in Northport, including air quality assessments, a residential garden crop and soil study, blood level screening of Northport children, and soil sampling at the former smelter and park. Between 2000 and 2003, the U.S. Environmental Protection Agency (EPA) conducted Preliminary Assessments/Site Investigations at 39 mine and mill sites, including the LeRoi Smelter site. In 2003, EPA conducted a Removal Site Evaluation of the LeRoi Smelter site and residential and community properties in Northport. The 2003 EPA study included portions of the BNSF right-of-way south of the main tracks.

GeoEngineers conducted a subsurface evaluation for BNSF in April 2004; work included excavating 18 test pits and 24 hand-auger borings. Soil samples were collected at approximate depths of 0.5, 1.0, and 1.5 feet below ground surface (bgs) from the test pit and hand auger locations. In addition, soil samples were also collected from 3 and 6 feet bgs in the test pits. Samples were sieved in the field and screened for metals with a portable x-ray fluorescence (XRF) analyzer. A total of 162 samples were collected: 90 from test pits and 72 from borings. Based on XRF screening results, 56 soil samples were submitted for chemical analysis.

Twenty-nine of the 56 samples contained lead and/or arsenic above MTCA Method A cleanup levels. The 29 samples were collected from 16 test pits and five borings. Seventeen of the samples were from 0.5-foot depth, 5 from 1-foot depth, four from 1.5-foot depth, 3 from 3-foot depth, and none from 6-foot depth.

Assessment results indicated that the highest concentrations of lead and arsenic were in shallow samples collected throughout the gravel parking lot and in selected locations in the grass-covered portion of the Site, and in deeper samples in the west portion of the Site near the railroad tracks. Lead and arsenic concentrations above cleanup levels were primarily limited to fill areas. The fill material was readily identified by its dark gray and black colors, as compared to brown native material. None of the soil samples collected from the native material contained lead or arsenic concentrations above cleanup levels.

## Cleanup actions

Approximately 7,714 tons of lead- and arsenic-contaminated soil were excavated from the Site between September 9 and September 14, 2004. The maximum extent of excavation was approximately 2 feet bgs within the grass park area and about 4 feet bgs in the parking area. Contaminated soil was not removed from beneath existing buildings or trees, although hand excavation was done near trees to remove near-surface contaminated soil. Excavated soil was transported to the EPA containment area on the LeRoi Smelter site.

Contaminated soil generally was not removed from the BNSF portion of the smelter site, except to establish a uniform grade between the EPA site and the BNSF site. Material generated during slope development was transported to the EPA containment cell. Following slope development and site grading, the BNSF portion of the former smelter site was covered with an 8-mil-thick plastic sheeting and capped with 12 inches of imported crushed rock.

The excavated area within the grass-covered portion of the Site was backfilled with top-soil, compacted, and covered with sod. About 1,452 cubic yards of topsoil was imported and about 29,000 square feet of sod was placed over the topsoil. The parking area was backfilled with about 6,500 tons of imported crushed rock.

A 4-foot-tall chain-link fence was installed in October 2004. The fence is between the park and the railroad tracks to minimize the potential for pedestrian traffic across the tracks.

A few areas remain where residual arsenic and/or lead exceed Method A cleanup levels. These areas include soil immediately around trees that would be damaged by additional excavation, areas near the railroad tracks that could not be excavated without risking damage to the rails,

and soil around three reported tunnels that passed through the park. Soil was excavated in the tunnel areas to a depth of approximately 4 feet bgs, but contaminated soil remained in these locations based on visual observations. The presence of low depression areas, which were interpreted to be the locations of former reported tunnels, were identified by deep buried ash and debris. These areas were not fully excavated due to the proximity to the railroad tracks and Lake Roosevelt.

## Cleanup standards

Cleanup standards include cleanup levels, the location where these cleanup levels must be met (point of compliance), and any other regulatory requirements that apply to the Site.

[WAC 173-340-704](https://app.leg.wa.gov/WAC/default.aspx?cite=173-340-704)<sup>10</sup> states MTCA Method A may be used to establish cleanup levels at sites that have few hazardous substances, are undergoing a routine cleanup action, and where numerical standards are available for all indicator hazardous substances in the media for which the Method A cleanup level is being used. Method B may be used at any site and is the most common method for setting cleanup levels when sites are contaminated with substances not listed under Method A. Method C cleanup levels may be used to set soil and air cleanup levels at industrial sites.

MTCA Method A cleanup levels for unrestricted land use were determined to be appropriate for contaminants at the LeRoi Smelter site. The cleanup actions conducted at the park Site were determined to be routine, few hazardous substances were found at the Site, and numerical standards were available in the MTCA Method A table for each hazardous substance.

At the time of the remedial action, the MTCA Method A cleanup level for lead and arsenic were 250 parts per million (ppm) and 20 ppm, respectively. Because soils with lead and arsenic concentrations above MTCA Method A cleanup levels remain capped at the Site, institutional controls are required to prevent activities at the Site that might expose those soils.

The point of compliance is the area where the soil cleanup levels must be attained. Standard points of compliance are used for the Site. The standard point of compliance for soil is based on direct contact with contaminated soils and is defined as the area throughout the Site to a depth of 15 feet.

## Environmental Covenant

Ecology determined institutional controls would be required for the Site to be eligible for a no further action (NFA) determination because soil with concentrations of lead and arsenic above MTCA Method A cleanup levels was capped at the Site. Institutional controls in the form of an [environmental covenant](https://apps.ecology.wa.gov/cleanupsearch/document/83089)<sup>11</sup> were recorded for the property in 2010, and an NFA was issued in 2014.

---

<sup>10</sup> <https://app.leg.wa.gov/WAC/default.aspx?cite=173-340-704>

<sup>11</sup> <https://apps.ecology.wa.gov/cleanupsearch/document/83089>



The Covenant recorded for the Site imposes the following limitations:

1. Any activity that may result in the release or exposure to the environment of hazardous substances beneath the cap, create a new exposure pathway for hazardous substances beneath the cap, or impair or interfere with the integrity of the cap, is prohibited. Some examples of activities that are prohibited in the capped areas include the following: drilling, digging, excavating, placement of any objects or use of any equipment which deforms or stresses the surface beyond its load bearing capacity, piercing the surface with a rod, spike or similar item, bulldozing, or earthwork.
2. Any activity on the Property that may interfere with the integrity of the Remedial Action and continued protection of human health and the environment is prohibited.
3. Any activity on the Property that may result in the release or exposure to the environment of a hazardous substance that remains on the Property as part of the Remedial Action, or create a new exposure pathway, is prohibited without prior written approval from Ecology.
4. The Owner of the property must give thirty (30) day advance written notice to Ecology of the Owner's intent to convey any interest in the Property. No conveyance of title, easement, lease, or other interest in the Property shall be consummated by the Owner without adequate and complete provision for continued monitoring, operation, and maintenance of the Remedial Action.
5. The Owner must restrict leases to uses and activities consistent with the Covenant and notify all lessees of the restrictions on the use of the Property.
6. The Owner must notify and obtain approval from Ecology prior to any use of the Property that is inconsistent with the terms of this Covenant. Ecology may approve any inconsistent use only after public notice and comment.
7. The Owner shall allow authorized representatives of Ecology the right to enter the Property at reasonable times for the purpose of evaluating the Remedial Action; to take samples, to inspect remedial actions conducted at the property, to determine compliance with this Covenant, and to inspect records that are related to the Remedial Action.
8. The Owner of the Property reserves the right under WAC 173-340-440 to record an instrument that provides that this Covenant shall no longer limit use of the Property or be of any further force or effect. However, such an instrument may be recorded only if Ecology, after public notice and opportunity for comment, concurs.
9. Neither Ecology nor the Owner intend to include any third-party beneficiaries with enforcement rights under this Covenant.
10. By signing this Covenant, the Owner does not intend to affect the scope of existing preemption under the Interstate Commerce Commission Termination Act, 49 U.S.C. § 100501.

# Periodic Review

## Effectiveness of completed cleanup actions

During the Site visit Ecology conducted on January 30, 2025, the cleanup appears to be functioning as intended. Fencing is around the perimeter of the park, and the grass and parking lot appear in good condition. The park appears to be regularly used by the public. No indications the soil cap had been compromised or other indications of exposure to contaminated soils capped at the Site were observed.

The annual inspection report by AECOM for 2018 was reviewed as part of this periodic review. The inspection report identified several deficiencies that had been addressed between 2016 and 2018, including:

- Missing fence panels
- Rodent burrows in the park
- Thinning grass in the park

None of these issues were apparent during Ecology's Site inspection in 2025, as they were successfully addressed by the Town of Northport. Based on this evaluation, the City is meeting their obligation to maintain the capping remedy implemented for the Site.

A photo log is in Appendix C.

## Direct contact

The cleanup actions were intended to eliminate human exposure to contaminated soils at the Site. Exposure pathways to contaminated soils by ingestion and direct contact were reduced by a barrier cap and institutional controls. The cap appears to be in satisfactory condition, and no repair, maintenance, or contingency actions are required at this time.

## Protection of groundwater

Soils with lead and arsenic at concentrations above MTCA Method A cleanup levels remain at the Site; however, most of the contaminated soil source material has been removed.

## Institutional controls

Institutional controls in the form of a Covenant were implemented at the Site in 2010. The Covenant remains active and discoverable through the Stevens County Auditor's Office. Ecology found no evidence a new instrument has been recorded that limits the effectiveness or applicability of the Covenant. This Covenant prohibits activities that will result in the release of contaminants contained as part of the cleanup action and prohibits any use of the property that is inconsistent with the Covenant, unless approved by Ecology in advance. This Covenant ensures the long-term integrity of the cleanup action will be protected.

## **New scientific information for individual hazardous substances or mixtures present at the Site**

There is no new relevant scientific information for the hazardous substances remaining at the Site.

## **New applicable state and federal laws for hazardous substances present at the Site**

There are no new applicable or relevant state or federal laws for hazardous substances remaining at the Site.

## **Current and projected Site and resource uses**

The Site is used as a public park and parking lot. There have been no changes in current or projected future Site or resource uses. The current Site use is not likely to have a negative impact on the protectiveness of the cleanup action.

## **Availability and practicability of more permanent remedies**

The remedy implemented included containing hazardous substances, and it continues to be protective of human health and the environment. While more permanent remedies may be available, they are still not practicable at this Site.

## **Availability of improved analytical techniques to evaluate compliance with cleanup levels**

The analytical methods used at the time of the cleanup action were capable of detection below the selected MTCA cleanup levels. The presence of improved analytical techniques would not affect decisions or recommendations made for the Site.

# **Conclusions**

- The cleanup actions completed at the Site appear to be protective of human health and the environment.
- Soil cleanup levels have not been met at the Site; however, the cleanup action is determined to comply with cleanup standards under WAC 173-340-740(6)(f), since the long-term integrity of the containment system is ensured and the requirements for containment technologies have been met.
- The Covenant for the property is in place and is effective in protecting human health and the environment from exposure to hazardous substances and the integrity of the cleanup action.

Based on this periodic review, Ecology has determined the requirements of the Covenant are being followed. No additional cleanup actions are required by the property owner at this time. The property owner is responsible for continuing to inspect the Site to ensure the integrity of the cap is maintained.

## **Next review**

Ecology will schedule the next review for the Site five years from the date of this periodic review. If additional cleanup actions or institutional controls are required, the next periodic review will be scheduled five years after those activities are completed.

## References

GeoEngineers. *Site Remediation Report*. October 28, 2005.

AECOM. *Annual Cap Maintenance Report – 2018*. November 7, 2018.

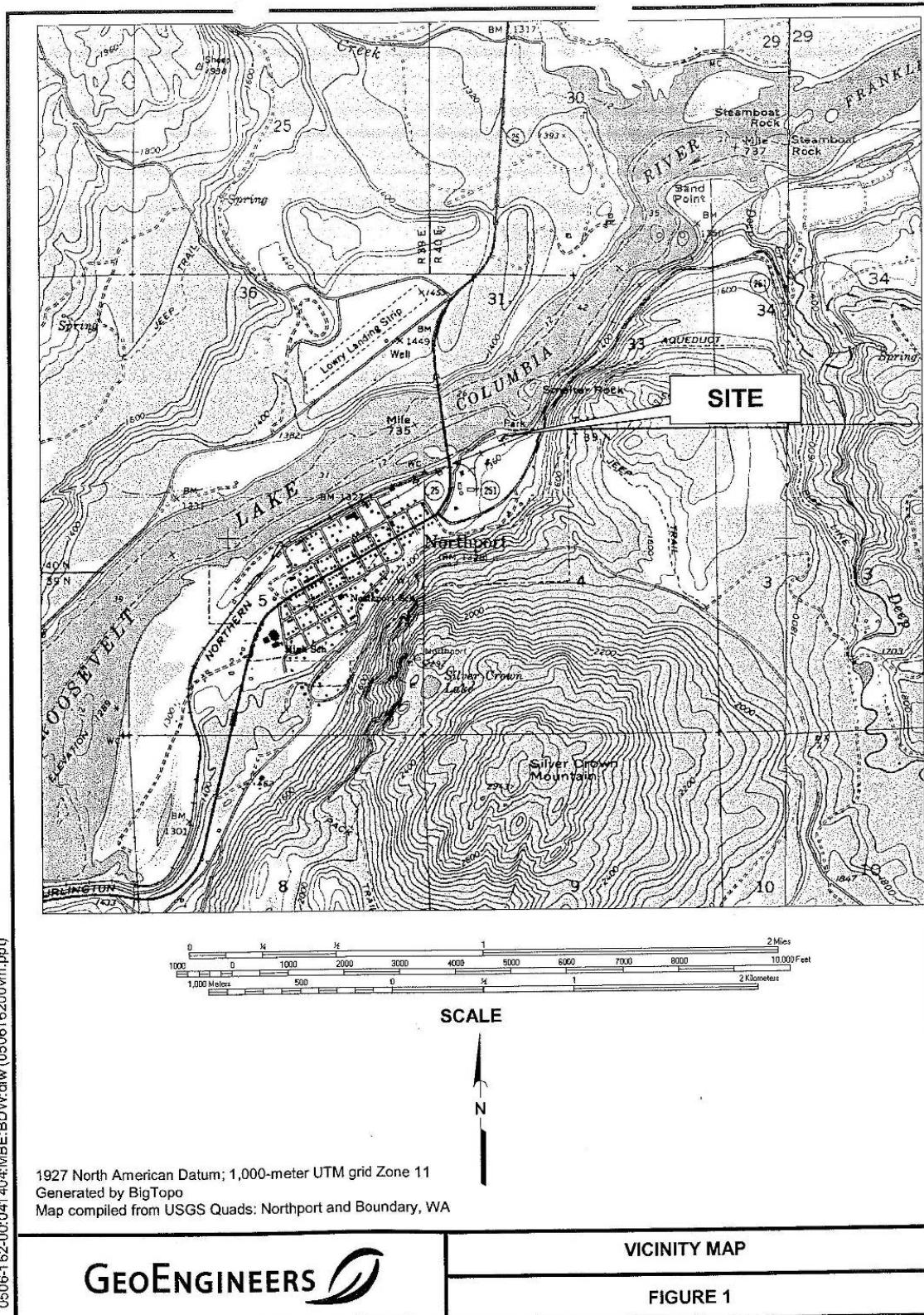
Ecology. *Environmental Covenant*. March 27, 2014.

Ecology. “No Further Action Determination.” July 2, 2014.

Ecology. *Periodic Review*. December 2019.

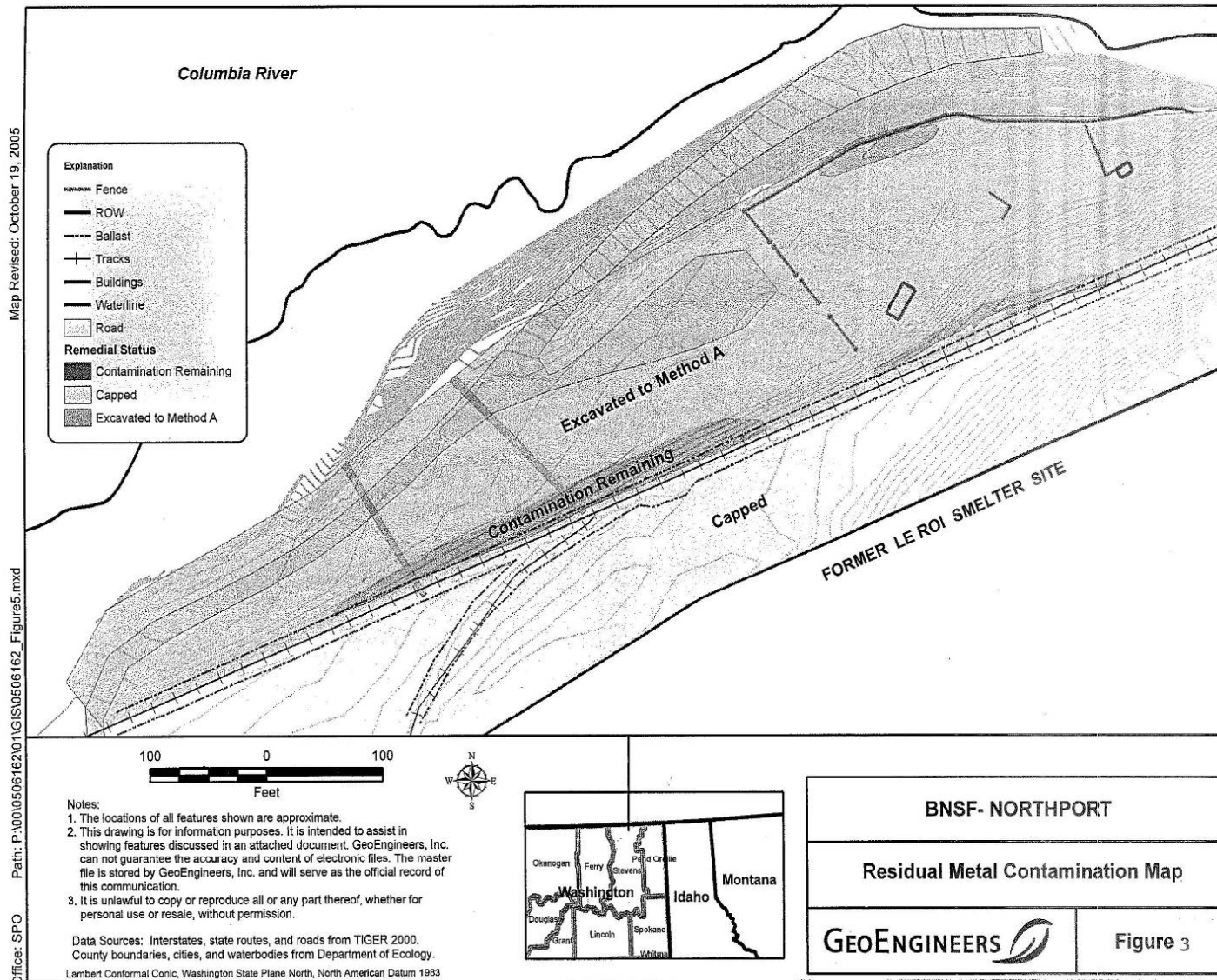
Ecology. Site visit. January 30, 2025.

# Appendix A. Vicinity Map





## Appendix B. Site Plan





## Appendix C. Photo Log

**Photo 1: City Park and Structures – from the north**



**Photo 2: City Park and Structures – from the south**





**Photo 3: City Park and Structures - from the west**



**Photo 4: City Park and Parking Lot – from the east**

