DEPARTMENT OF ECOLOGY
State of Washington

March Point Landfill

Site Cleanup Documents Available for Public Review and Comment


March Point Landfill area

CONTACTS & INFORMATION

Comments invited:

June 28 - July 28, 2016

Submit comments to:

Arianne Fernandez - Site Manager
P.O. Box 47600
Olympia, WA 98504-7600
Phone: (360) 407-7209
E-mail: Arianne.Fernandez@ecy.wa.gov

Document review locations:

Anacortes Public Library
1220 10th Street
Anacortes, WA 98221
Phone: (360) 293-1910
Hours: Varies

Padilla Bay National Estuarine Research Reserve
10441 Bayview-Edison Road
Mount Vernon, WA 98273
Phone: (360) 428-1558
Hours: Wed.-Sun. 10 am - 5 pm

Ecology Headquarters
300 Desmond Drive SE
Lacey, WA 98503
Phone: (360) 407-7224
Hours: By Appointment

Website:

https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=304

Facility Site ID #: 2662
Cleanup Site #: 304

Site background

The March Point Landfill Site (Site), sometimes called the Whitmarsh Landfill, operated from 1950 until 1973, first as an unregulated public dump and later as a county disposal area. Decades of household, commercial and industrial wastes were discarded at the Site. From the late 1980s to around August 2011, a sawmill operated at the Site. Wood waste up to 10 feet thick accumulated over large portions of the landfill. The majority of wood waste was removed in 2014 and 2015.

Prior to this report's data collection efforts, marine sediment and water samples were collected from the area as far back as 1985. Past sediment data showed measurable levels of heavy metals, phthalates, phenols, polycyclic aromatic hydrocarbons, dioxins and furans. Surface water and groundwater samples from the landfill contained metals, petroleum compounds and polychlorinated biphenyls (PCBs). Current contaminants found at the Site during the Remedial Investigation are listed on page 2.

Public comment invited

The Department of Ecology (Ecology) asks for your comments on plans to clean up this Site. The March Point Landfill is one of several cleanup sites located on the waterfront in Fidalgo/Padilla Bays that has been prioritized for cleanup under the State's Puget Sound Initiative.

The Site is generally located at 9663 South March Point Road in Anacortes, Skagit County, Washington.

You are invited to:

- **Review** the draft Remedial Investigation/Feasibility Study (RI/FS) and the draft Public Participation Plan (PPP) for the Site.
- **Send** your comments to Ecology for consideration. Comments will be accepted from June 28 - July 28, 2016.

See Contacts & Information on the first page for details about where to review documents and submit comments.

What happens next?

Once the public comment period ends on July 28, Ecology will review and consider all comments received. The draft RI/FS and draft PPP may be modified based on your comments. If future documents on the Site are developed, you will be notified of additional public comment periods.

For information about other Ecology public comment periods, meetings, and other events, please visit Ecology's public events calendar at: https://fortress.wa.gov/ecy/publiccalendar/

Why this cleanup matters

In 2007, Washington State established the Puget Sound Initiative to protect and restore Puget Sound. Several bay-wide areas in the Sound have been identified as high-priority cleanup areas as part of this Initiative, including Port Gamble, Dumas Bay, Padilla and Fidalgo Bays, Port Angeles, Budd Inlet and Port Gardner Bay. This work includes cleaning up 50-60 sites within one-half mile of the Sound, including the March Point Landfill of Fidalgo Bay. These cleanup actions will help to reduce pollution and restore habitat and shorelines in Puget Sound.

For more information about other cleanup sites, go to: ecy.wa.gov/programs/tcp/sites_brochure/psi/overview/psi_baywide.html

Overview of Remedial Investigation/Feasibility Study (RI/FS)

This draft RI/FS presents research findings and sampling results from studies completed between 2008 and 2013. It also evaluates alternative cleanup approaches that could address residual contamination.

The RI/FS is intended to:

- Define the nature and extent of solid waste and landfill gas, potential for ongoing gas and leachate (substances released from a solid material when water passes through it) production, and need for controls at the Site.
- Define the nature and extent of soil, groundwater and surface water, and sediment contamination at the Site.
- Define the need for shoreline protection along Padilla Bay, as solid waste from the Site is close to the bay.
- Evaluate cleanup standards for potential remedial alternatives developed during the FS.
- Evaluate remedial technology alternatives and select a preferred alternative to clean up the Site.
- Provide a schedule to implement the preferred remedial alternative.

Contaminants found through the RI

Solid and wood waste

Solid waste at the Site is approximately eight to 16 feet thick, totaling about 340,000 cubic yards. When the landfill closed in 1973, two to three feet of soil was placed over the solid waste. Most of the Site, except for the southwestern-most part, was then covered in wood waste up to 10 feet thick. The Washington Department of Natural Resources removed most wood waste in 2014 and 2015.

Soils, ground/surface water and marine sediments

Soils, groundwater, surface water and marine sediments were sampled to determine the extent of contamination on the Site. The following contaminants were found above preliminary cleanup levels (PCLs) in soil, groundwater and surface water. These are levels that trigger evaluation of remedial actions.

- **Soil:** Metals, benzene, semi-volatile organic compounds (SVOCs), PCBs and total petroleum hydrocarbons
- **Groundwater:** Metals, benzene, SVOCs, PCBs and pesticides
- **Surface water:** Metals, benzene, SVOCs and pesticide

See the RI/FS for detailed information about contaminants.

The investigation found no impacts above PCLs to marine sediments in the Padilla Bay inner lagoon or Padilla Bay. Based on these findings, marine sediments will not be considered for remedial measures.

Shallow groundwater within the solid waste appears to be discharging into Padilla Bay's inner lagoon along the shoreline. A silt layer currently limits groundwater infiltration from the landfill to the underlying lower aquifer.

Landfill gas

In 2010, the highest methane concentrations were found near wood waste, most of which was removed in 2014 and 2015. Carbon dioxide, oxygen and nitrogen were also detected in samples from 2011-2012.

Evaluation of remedial alternatives

The FS evaluated seven remedial cleanup alternatives within the upland area of the landfill. All alternatives must protect human health and the environment, comply with cleanup standards, comply with applicable state and federal laws and provide for compliance monitoring. Each alternative is also evaluated across seven criteria, including protectiveness of the environment, permanence of solution, long-term effectiveness, short-term risk, ease of technical & administrative implementation, public concerns and cost.

The seven alternatives are:

1. No action.
2. Restore existing soil cover by adding a 6-inch layer of topsoil over the Site.
3. Place a liner made of plastic and clay (known as a geo-synthetic clay laminate liner, or GCLL) over Site contaminants to prevent most water and other materials from passing through the liner (preferred alternative).
4. Install a high-density polyethylene (HDPE) cap.
5. Install a HDPE cap anchored into bay mud.
6. Install a polyvinyl chloride (PVC) cap as a barrier over Site contaminants.
7. Excavate and dispose of solid waste offsite.

Alternative 1 ranks least favorably across all evaluation criteria except cost ($231,000) and short-term risk. Alternative 2 ranks unfavorably compared to Alternatives 3-6 across all evaluation criteria except cost ($6.4 million) and short-term risk because it does not use a material to help limit erosion, does not eliminate pathways for potentially contaminated water to reach the bay and does not meet the Remedial Action Objectives (RAOs).

Alternative 7 would be most protective of the environment, most permanent and most effective since all solid waste would be removed from the Site and disposed of in a lined, engineered landfill. However, Alternative 7 would be most difficult to implement (technically and administratively), presents the greatest short-term risk because it has the highest possibility of releasing contaminants to the bay during excavation and is the most expensive ($82.8 million).

Alternatives 3-5 would offer similar permanence and long-term effectiveness, while Alternatives 3, 4 and 6 would offer similar protectiveness of the environment and addressing of public concerns. Alternative 5 is also similar to Alternative 3 in addressing public concerns, and it would potentially offer a greater degree of environmental protection than some other alternatives because it would use the HDPE membrane as a side barrier as well. Alternative 6 would be slightly less permanent than some other alternatives because plasticizers could be lost from the PVC geomembrane. It would also be less effective in the long-term than all alternatives except Alternative 1 because of the higher risk the PVC geomembrane could lose plasticizers, crack and leak.

Of Alternatives 3-6, Alternative 3 is the least expensive ($12 million) compared to Alternatives 4-6 ($15.2-$15.3 million). For all of these alternatives, construction within the intertidal zone may present some challenges, but these challenges are standard in shoreline rehabilitation and/or restoration projects. Alternative 3 also has the least short-term risk and environmental impact during construction since it will be completed in one tidal cycle.

Selection of a preferred alternative

Alternative 3 is the preferred remedy. It effectively protects human health and the environment by minimizing or eliminating groundwater seeps from within the landfill and reducing the possibility of erosion of solid waste at the lowest cost possible.

Alternative 3 makes the greatest use of preferred technologies and is a "permanent to maximum extent practicable" alternative. It also provides optimal environmental benefits for the estimated cleanup costs. Construction of this preferred alternative would be practical and implementable both technically and administratively.

Overview of the draft Public Participation Plan (PPP)

Ecology is committed to providing the public with timely information and meaningful opportunities to participate in the cleanup process. As part of this commitment, Ecology has developed a draft PPP. This draft PPP outlines how people can learn about and provide input on the cleanup.

Your comments and ideas are needed to improve the cleanup. The draft PPP explains how Ecology will:

- Notify the public when and where documents are available for review and comment.
- Notify the public about how they can get involved and provide public participation opportunities.
- And Consider public comments in cleanup decisions.

Special accommodations

To request ADA accommodation for disabilities, or printed materials in a format for the visually impaired, call Ecology at 360 -407-7170 or visit http://www.ecy.wa.gov/accessibility.html. Persons with impaired hearing may call Washington Relay Service at 711. Persons with speech disability may call TTY at 877-833-6341.

DEPARTMENT OF ECOLOGY
State of Washington

Toxics Cleanup Program
Attn: Andrea Flaherty
PO Box 47600
Olympia, WA 98504-7600

Join the discussion about cleanup!

March Point Landfill

Anacortes, Skagit County, WA

Ecology seeks public comment on two site cleanup documents: the draft Remedial Investigation/Feasibility Study and draft Public Participation Plan.

Public Comment Period

June 28 - July 28, 2016