

# Marshall Landfill Cleanup



Comments accepted: July 2 – August 1, 2018

Spokane, WA 99205

#### Email or mail comments to: Huckleberry Palmer, Site Manager huckleberry.palmer@ecy.wa.gov 4601 North Monroe Street

#### Document review locations:

https://fortress.wa.gov/ecy/gsp/Sitepa ge.aspx?csid=1022

Ecology Eastern Regional Office 4601 North Monroe Street Spokane, WA 99205 Phone: 509-329-3415 Hours: 8 a.m. – 5 p.m. by appointment

#### Facility Site ID: 648

Site Cleanup ID: 1022

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# Draft contamination and cleanup option reports available for public review and comment

The Washington State Department of Ecology (Ecology) seeks your input on the draft Remedial Investigation (RI) and Feasibility Study (FS) reports for the Marshall Landfill (site) July 2 through August 1, 2018. The RI documents the extent and location of contamination such as volatile organic compounds (VOCs), methane, metals, herbicides, and nitrate in groundwater and landfill gases at the site. The FS evaluates cleanup options.

The site is northwest of Cheney-Spokane Road about one mile southwest of the town of Marshall (see area map, page 4). Because parties responsible for site contamination are unable to pay, Ecology led the investigation and will be funding cleanup.

### Site background

The Marshall Landfill has two areas that hold municipal solid waste (see site map, page 3):

- The Main Landfill is a 25-acre waste disposal area in the south-central portion of the site. It was in use from 1970–1990. Waste is estimated to be 100 feet thick.
- The Five-Acre Landfill is in the northwest portion of the site and was in use from 1980–1984. Waste is estimated to be 45 feet thick.

Neither of these landfills has a bottom liner.

The gravel pit used by Action Materials, Inc., and the closed Spokane County Landfill are not part of the cleanup.

The owners worked to close Marshall Landfill from 1989 to 1991, but requirements were either not met or not documented, including:

• Placing a 2-foot low permeability soil cover or equivalent and a 6-inch vegetated topsoil layer



- Installing a landfill gas collection system
- Documenting approved final land contours to ensure slopes would remain stable
- Providing for at least 20 years of groundwater monitoring and cover maintenance

#### **Investigation findings**

Contamination requiring cleanup is in landfill gases and groundwater within the site boundaries. Soil was not found to pose a threat to human health or the environment.

Gases coming from the Main and Five-Acre landfills contain VOCs and methane at potentially hazardous levels if they were to build up inside a closed space, an occurrence called vapor intrusion. However, no buildings are on either landfill. Action Materials has buildings between the Main Landfill and their gravel pit, and the health of people in these buildings has been considered in the cleanup options.

Groundwater samples collected in 2016 and 2017 intermittently contained VOCs, metals (cadmium and lead), cyanide, and herbicides above screening levels. Groundwater contamination results were variable from one sampling event to the next, indicating there is not a continuous or persistent plume and that contamination appears to be limited to the property boundaries.

## **Cleanup options**

Seven cleanup options were developed and are open for public comment.

- Install a security fence and warning signs. Place a restrictive covenant on the property deed to warn any future owners of the remaining contamination. Regrade Main Landfill buttress berm. Estimated cost: \$1,430,000.
- 2. Same as option 1. In addition, place a soil cover over exposed waste, relocate waste that is within 10 feet of the property boundary, and monitor groundwater quality. Estimated cost: \$1,790,000.
- 3. Same as option 2, but with a soil cover over both landfills and the area between them consisting of 2 feet of additional soil, 6 inches of topsoil, and vegetation with hydroseed. Install a landfill gas collection system to manage gases on the property, and grade site to control stormwater. Estimated cost: \$5,340,000. (Preferred alternative when the cleanup cost and benefits to the environment are considered.)
- 4. Same as option 3, except waste in the Five-Acre Landfill would be excavated and consolidated into the Main Landfill. Estimated cost: \$14,490,000.
- 5. Same as option 3, except the cover would include a geomembrane (plastic) layer to keep precipitation from filtering through the waste. Estimated cost: \$9,540,000.
- 6. Same as option 4 with the consolidated landfill cover being the same as in option 5. Estimated cost: \$18,110,000.
- 7. Excavate and dispose of all waste and contaminated soil at a lined landfill permitted to take the waste. Estimated cost: \$135,420,000.

### Next steps

Ecology will review and respond to the comments we receive during the public review period. We will publish our responses online and send them to the people who commented.

Then, we will use our assessment of the RI/FS and public input to write a draft cleanup action plan. The draft plan will be available for public review and comment before becoming final.





# Marshall Landfill site map

Publication 18-09-025



Toxics Cleanup Program 4601 North Monroe Street Spokane, WA 99205-1295

**RETURN SERVICE REQUESTED** 

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Public comment period

July 2 – August 1, 2018

https://fortress.wa.gov/ecy/gsp/ Sitepage.aspx?csid=1022

### Request a public meeting

We will hold a public meeting to discuss the reports if 10 people request one.

Please contact Erika Bronson at 509-329-3546 or <u>erika.bronson@ecy.wa.gov</u> to request a meeting.

#### Special accommodations

To request materials in a format for the visually impaired, visit <u>https://ecology.wa.gov/accessibility</u>, call Ecology at 509-329-3546, Relay Service 711, or TTY 877-833-6341.