Abbreviated Preliminary Assessment for Baldy Mountain Road Landfill Site

Bonner County

State of Idaho
Department of Environmental Quality
December 2012
December 20, 2012

Mr. Ken Marcy
U.S. Environmental Protection Agency
12928 SW 276th Street
Vashon, WA 98070

RE: Abbreviated Preliminary Assessment Report for the Baldy Mountain Road Landfill Site, Bonner County, Idaho

Dear Mr. Marcy:

The Baldy Mountain Road Landfill site is located 2.75 miles west-northwest of Sandpoint on Baldy Mountain Road at roughly 12500 Baldy Mountain Road.

Attached are two copies of DEQ's Abbreviated Preliminary Assessment report for the Baldy Mountain Road Landfill site.

A site inspection involving direct observations confirmed that contaminants of concern, including hazardous materials and petroleum products, do not have the potential to exist in concentrations that could present a threat to human health or the environment. No deleterious materials or petroleum products were evident at the site. No water discharges or evidence of sustained discharge such as aquatic vegetation was found around the site perimeter.

Well logs local to the site demonstrate a restrictive layer confining the lower strata at generally 130 feet. Wells in the area draw water from strata below 235 feet. These observations indicate the landfill material is not a threat to ground water quality. An area immediately north of the site was assessed by DEQ to be sufficiently isolated from ground water to both allow land farming of petroleum contaminated soil by a private party and cleanup by DEQ of a large (2,800 cubic yards) petroleum site.

The air, soil, and water pathways are not complete. No surface water or evidence of surface water discharge such as aquatic plant assemblages were found associated with the site. No airborne pathways exist to any residences, because the solid waste is covered with soil and only the occasional piece of waste has been day lighted by frost heaving.
The Baldy Mountain Road Landfill site is located in close proximity to the 3 year time of travel (TOT) source water delineation zone. No drinking water sources, wells, or ground water sources exist on the site.

Based on existing conditions and uses, historic information, observations made during the site visit, and visual analysis of the site; potential pathway of contaminants to receptors and potential exposures to ecological and human receptors do not exist. DEQ recommends the determination of the Baldy Mountain Road Landfill site as No Remedial Action Planned (NRAP).

A link to the Abbreviated Preliminary Assessment Report for the site can also be found on DEQ’s Preliminary Assessment Web page at:


If you have any questions about these sites, the report, or DEQ’s recommendations, please do not hesitate to call me at (208) 373-0563.

Respectfully,

Tina Elayer
Mine Waste Specialist

attachments

cc: City of Sandpoint
    Baldy Mountain Road Landfill PA File
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Introduction

This is an abbreviated preliminary assessment (APA) for the Baldy Mountain Road Landfill near Sandpoint, Idaho. This document provides the rationale for the No Remedial Action Planned (NRAP) determination and that no additional analysis or site investigation is necessary for the Baldy Mountain Road Landfill site. Section 1 provides the APA checklist filled out by the assessor to determine that an APA was warranted and that no further action is required from the Idaho Department of Environmental Quality (DEQ). The following sections contain additional relevant information and evidence to support the APA, including historical and geologic information (Section 2), photographs (Section 3), maps (Section 4), and references generated during the site visit or desktop research (Section 5).

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Date: 10/24/2012

Site Name: Baldy Mountain Road Landfill

Previous Names (aka): N/A

Site Owner: City of Sandpoint

Address: 1123 Lake Street  
Sandpoint, ID 83864

Site Location: The now abandoned Baldy Mountain Road Landfill site is located 2.75 miles west-northwest of Sandpoint on Baldy Mountain Road at roughly 12500 Baldy Mountain Road.

Township 57 North, Range 2 West, Section 7

Latitude: 48.29819°N  
Longitude: -116.62722°W

Description of release (or potential release) and its probable nature:

The abandoned Baldy Mountain Road Landfill was investigated by DEQ on October 18, 2012, for potential releases of organic contaminants and heavy metals by airborne, surface water, or ground water pathways. Additionally, DEQ investigated potential discharges of other deleterious materials, such as petroleum products. No deleterious materials or petroleum products were evident at the site. No water discharges or evidence of sustained discharge such as aquatic vegetation was found around the site perimeter. Well logs local to the site demonstrate a restrictive layer confining the lower strata at generally 130 feet. Wells in the area draw water from strata below 235 feet. These observations indicate the landfilled material is not a threat to ground water quality. An area immediately north of the site was assessed by DEQ to be
sufficiently isolated from ground water to both allow land farming of petroleum contaminated soil by a private party and cleanup by DEQ of a large (2,800 cubic yards) petroleum site.

Section 1. APA Checklist

Task 1—Superfund Eligibility Evaluation

Assessor, if all answers are “no,” continue to task 2; otherwise, explain any “yes” answers below and then skip to task 3.

1. Is the site currently in the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) or an “alias” of another site?
   YES ☒ NO ☐

2. Is the site being addressed by some other remediation program (i.e., federal, state, or tribal)?
   YES ☐ NO ☒

3. Are the hazardous substances that may be released from the site regulated under a statutory exclusion (e.g., petroleum, natural gas, natural gas liquids, synthetic gas usable for fuel, normal application of fertilizer, release located in a workplace, naturally occurring, or regulated by the Nuclear Regulatory Commission, Uranium Mill Tailings Radiation Control Act, or Occupational Safety and Health Administration)?
   YES ☐ NO ☒

4. Are the hazardous substances that may be released from the site excluded by policy considerations (i.e., deferred to Resource Conservation and Recovery Act corrective action)?
   YES ☒ NO ☐

5. Is there sufficient documentation to demonstrate that there is no potential for a release that constitutes risk to human or ecological receptors (e.g., comprehensive remedial investigation equivalent data showing no release above applicable or relevant and appropriate requirements (ARARs), completed removal action, documentation showing that no hazardous substance releases have occurred, or an EPA-approved risk assessment)?
   YES ☒ NO ☐

Assessor, please explain all “yes” answer(s):

Regarding question 5: A site inspection involving direct observations confirmed that contaminants of concern, including hazardous materials and petroleum products do not have the potential to exist in concentrations that could present a threat to human health or the environment. No surface water or evidence of surface water discharge such as aquatic plant assemblages was found associated with the site. No airborne pathways exist to any residences, because the solid waste is covered with soil and only the occasional piece of waste has been day lighted by frost heaving. The closest residence to the Baldy Mountain Road Landfill site is approximately 400 feet to the west. The closest public water system (Baldy Ridge Estates PWS ID1090004) is approximately 3,180 feet southwest. As stated above, the pathway to ground water is precluded at 135 feet below surface level by a clay aquitard.
Task 2—Initial Site Evaluation

If information is not available to make a “yes” or “no” response below, further investigation may be needed. In these cases, the assessor should determine whether an APA is appropriate.

If the answer is “no” to any of questions 1, 2, or 3, proceed directly to task 3. YES NO
1. Does the site have a release or a potential to release? ☒ ☐
2. Does the site have uncontained sources containing CERCLA-eligible substances? ☐ ☒
3. Does the site have documented on-site, adjacent, or nearby targets? ☒ ☐

If the answers to questions 1, 2, and 3 above were all “yes,” then answer questions 4–7 before proceeding to task 3. YES NO
4. Does documentation indicate that a target (e.g., drinking water wells, drinking surface water intakes, etc.) has been exposed to a hazardous substance released from the site? ☐ ☐
5. Is there an apparent release at the site with no documentation of exposed targets, but targets are on site or immediately adjacent to the site? ☐ ☐
6. Is there an apparent release and no documented on-site targets or targets immediately adjacent to the site, but targets are nearby (e.g., within 1 mile)? ☐ ☐
7. Are there uncontained sources containing CERCLA hazardous substances, a potential to release with targets present on site or in proximity to the site, but no indication of a hazardous substance release? ☐ ☐

Notes:
The Baldy Mountain Road Landfill Site is located near a few occupied dwellings on large acreages. No hazardous materials were evident during the site visit and none are suspected of being disposed of on the site. Surface water drainage from the land filled sites was not located nor was any evidence of such drainage. Any human health risks or ecological health risks associated with site discharge are unlikely or more likely non-existent.

During the site assessment, DEQ used references from several different documents, including Google Earth maps, Idaho Department of Water Resource (IDWR) ground water well logs, and local historical knowledge.

Table 1 parallels the questions above and should be used by the assessor to make decisions during task 3. Table 1 identifies different types of site information and provides some possible recommendations for further site assessment activities based on that information. The assessor should use Table 1 in determining the need for further action at the site, based on the answers to the questions in task 2. Assessors should use professional judgment when evaluating a site. An assessor’s individual judgment may be different from the general recommendations for a site given below.
Table 1. Site assessment decision guidelines for a site.

<table>
<thead>
<tr>
<th>Suspected/Documented Site Conditions</th>
<th>EPA-Recommended Site Assessment Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. There are no releases or potential to release.</td>
<td>APA</td>
</tr>
<tr>
<td>2. No uncontained sources with CERCLA-eligible substances are present on site.</td>
<td>APA</td>
</tr>
<tr>
<td>3. There are no on-site, adjacent, or nearby targets.</td>
<td>APA</td>
</tr>
<tr>
<td>4. There is documentation indicating that a target (e.g., drinking water wells, drinking surface water intakes, etc.) has been exposed to a hazardous substance released from the site.</td>
<td>APA → SI or PA/SI</td>
</tr>
<tr>
<td>5. There is an apparent release at the site with no documentation of exposed targets, but there are targets on site or immediately adjacent to the site.</td>
<td>APA → SI or PA/SI</td>
</tr>
<tr>
<td>6. There is an apparent release and no documented on-site targets and no documented targets immediately adjacent to the site, but there are nearby targets. Nearby targets are those targets that are located within 1 mile of the site and have a relatively high likelihood of exposure to a hazardous substance migration from the site.</td>
<td>Full PA</td>
</tr>
<tr>
<td>7. There is no indication of a hazardous substance release, and there are uncontained sources containing CERCLA hazardous substances, but there is a potential to release with targets present on site or in proximity to the site.</td>
<td>Full PA</td>
</tr>
</tbody>
</table>

Task 3—DEQ Site Assessment Decision

When completing task 3, the assessor should use task 2 and Table 1 to select the appropriate decision. For example, if the answer to question 1 in task 2 was “no,” then an APA is appropriate and the “NRAP” box below should be checked. Additionally, if the answer to question 4 in task 2 is “yes,” then two options are available (as indicated in Table 1): (1) proceed with an APA and check the “Lower Priority SI” or “Higher Priority SI” box below or (2) proceed with a combined PA/SI.

Check the box that applies based on the conclusions of the APA checklist:

- [ ] No Remedial Action Planned (NRAP)
- [ ] Defer to NRC
- [ ] Higher Priority SI
- [ ] Refer to Removal Program
- [ ] Lower Priority SI
- [ ] Site is being addressed as part of another CERCLIS site
- [ ] Defer to RCRA Subtitle C
- [ ] Other: ________________________________

DEQ Reviewer:

Geoff Harvey

December 20, 2012
Please explain the rationale for your decision:
The Baldy Mountain Landfill site received municipal solid waste for an eight year period from roughly 1966 to 1973. A site inspection involving direct observations confirmed that solid waste was landfilled at the site and frost heave action in the sandy soil occasionally brought pieces of waste to the surface. These were large appliance goods and tires. Most other waste has likely decomposed in the moist sandy aerated soils. No hazardous materials were evident during the site visit.

No surface water or evidence of surface water (seeps or areas of aquatic vegetation) was found associated within the site perimeter, which is down gradient of the fill. The ground water of the general area is found 235 feet below ground surface and is protected from contamination from above by an aquitard located 135 feet below ground level. The closest residence to the site is 400 feet to the west, but the waste is covered severing any airborne transmission of contaminants. The surface and ground water pathways are also incomplete.

As a result of DEQ’s research and observations, the department recommends an NRAP designation for the Baldy Mountain Road Landfill. Sections 2 through 5 provide further support for this determination.

Section 2. Historical and Geologic Information
Numerous sources were used during desktop research prior to visiting the site. DEQ could not improve or expand upon these reports.

Landfill History: Local historical sources informed DEQ that the Baldy Mountain Road Landfill site was used for illegal solid waste disposal for many years. However, the City of Sandpoint closed the landfill near Chuck Slough (located under Travers Park) in 1966. By 1973, the Colburn Landfill was accepting all of Sandpoint’s solid waste and active landfilling at the Baldy Mountain Road site ceased. The city covered the waste and placed fencing and a gate to control illegal disposal. The Baldy Mountain Road Landfill site received solid waste in significant volume for at most eight years.

Geologic Features: No geology or hydrogeology of the specific area could be located. However, the immediate area was assessed in preparation of siting a large petroleum contaminated soil farming activity immediately to the north of the landfill. The best available information was from logs of private wells documented by IDWR. Both well logs show a sand, gravel, and boulder mix in the upper 8 to 100 feet below surface level (bsl), a layer of decomposed granite from 10 to 135 feet bsl and a soft clay layer at 135 feet bsl of about 3 feet thickness. Below the clay layer, granite of various hardness and fracture is found. Reliable sources of ground water are not encountered until roughly 235 feet bsl with some as much as nearly 400 feet bsl. The geology and hydrogeology indicates that groundwater is at depths over 235 feet and is protected from contamination from above by an aquitard located at 135 feet bsl.

Section 3. Site Conditions and Photographs
All of the Baldy Mountain Road Landfill photographs in this section were taken by DEQ on October 18, 2012.
Photo 1 shows tires exposed by excavation at the edge of the Baldy Mountain Road Landfill.

Photo 1. Tires exposed by excavation on Baldy Mountain Road Landfill site.

Photo 2 shows the general surface of the landfill and some of the appliances that are exposed in a few locations.

Photo 2. Waste appliances found across landfill surface.
Section 4. Maps

Figure 1. Location of the Baldy Mountain Road Landfill in Bonner County, Idaho.
(Source: Google Earth)
Figure 2. Braun well log showing major substrates lithology in the vicinity of the Baldy Mountain Road Landfill.
(Source: IDWR)
Figure 3. McBurney well log showing major substrate lithology in the vicinity of the Baldy Mountain Road Landfill.
(Source: IDWR)
Figure 4. Major lithology in the vicinity of the Baldy Mountain Road Landfill.
Figure 5. Domestic well and public water system locations.

There are several domestic wells or public water systems within the 4-mile radius, 15-mile TDL. There are two significant wetlands within a 4-mile radius and in the general area; the largest wetland is approximately 1640.672 hectares.

(Source: Microsoft Virtual Earth Aerial with Labels © 2009 Microsoft Corporation)
Figure 6. Sensitive streams located in the vicinity of the Baldy Mountain Road Landfill. Turnipseed Creek is shown as “Fully Supporting” until it reaches Syringa Creek.

(Source: Microsoft Virtual Earth Aerial with Labels © 2009 Microsoft Corporation)
Figure 7. Plant, nongame animal, and fishery sensitive species within 4-mile radius and surrounding area of the Baldy Mountain Road Landfill.
(Source: SDE Feature Dataset, Animal Conservation Database. Idaho GIS ArcSDE 9.2 Geodatabase)
Figure 8. Fishery sensitive species within 4-mile radius and surrounding area of the Baldy Mountain Road Landfill.
(Source: SDE Feature Dataset, Animal Conservation Database. Idaho GIS ArcSDE 9.2 Geodatabase)
Section 5. References

GIS Coverages


IDFG (Idaho Department of Fish and Game). 2002. Fisheries information GIS layer.


