# Attachment 1

**Facility Description**

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Appendix B.1 – USEI Deeds for Section 19, Including Site ‘B’ and Section 20
B.0 Facility Description

This Section provides a general description and an overview of the existing and proposed hazardous waste management units at the US Ecology Idaho, Inc. (USEI) Site “B” treatment, storage and disposal facility (TSDF) in Owyhee County, Idaho. Additional details are provided in other sections.

B.1 General Description (IDAPA 58.01.05.012 & 40 CFR 270.14(b)(1))

USEI owns and operates an approximately 328-acre Treatment, Storage and Disposal Facility (TSDF) for hazardous waste. This facility is located at the end of Lemley Road approximately 10 ½ miles west of the town of Grand View, Owyhee County, Idaho (See Figure B-1 for the site location). Additionally, USEI owns adjacent land as indicated on Drawing Number PRMI-T01.

The site had previously operated as a waste storage and landfill disposal facility by a different owner, Western Containment, Inc. (Wes-Con) from 1973 to 1981. Envirosafe Services of Idaho, Inc. (ESII) acquired the facility from Wes-Con in August 1981 and continued to treat, store, and dispose of hazardous waste under RCRA interim status regulations until a RCRA Part B Permit was issued in 1988. USEI acquired ownership of Site B from ESII in February 2001. In May 2022, Republic Services acquired all outstanding stock in USEI’s parent company US Ecology, Inc. Current activities at this facility include storage, treatment, and disposal of industrial and hazardous wastes at on-site landfill(s). USEI serves several types of industries including chemical, manufacturing, steel, petroleum, and pharmaceutical. Furthermore, some hazardous wastes are generated on-site from various site activities. These activities include leachate generation from landfills, liquids collected from various containment areas/systems, and other waste streams generated during the operation of various on-site waste management units including the Stabilization Facility, Stabilization Building, various container management units, landfill(s), surface impoundments, and other existing hazardous waste management units and support facilities. USEI previously operated a Containment Building consisting of a Stabilization Portion and a Debris Portion. These facilities were partially closed due to an explosion incident which caused significant damage to the entire Stabilization Portion. The Debris Portion was minimally damaged and has been repurposed as a covered container management unit.

The active disposal portion of the facility is comprised of three (3) active landfill disposal cells, designated as Cells 14, 15, and 16 and three (3) surface impoundment disposal units, designated as the Evaporation Pond and Collection Pond #’s 1 and 3. One lined landfill disposal cell, Cell 5, was closed using a traditional RCRA Subtitle C cover system. Additionally, there are two landfill disposal units, Trenches 10 and 11, which have been closed and capped with evapotranspiration (ET) covers. The Facility Site Plan is included as Drawing Number PRMI-T03.

Historically, the site has been used for management of non-hazardous and hazardous wastes, and PCB waste under a separate TSCA approval. Throughout the 1970’s, the facility was operated by Wes-Con, Inc. as an industrial waste landfill and received wastes for disposal in the abandoned on-site Titan missile silos and then active chemical waste landfill. In 1980 Wes-Con obtained interim status under RCRA for management of hazardous wastes, including treatment, storage, and disposal of approved hazardous wastes. ESII received a “Hazardous Waste Treatment, Storage and Disposal Facility Permit” from U.S. EPA and IDEQ on December 15, 1988. A renewal permit was issued to USEI effective November 12, 2004.

The Grand View, Idaho waste management facility has been in operation since 1973. Prior to the purchase of the facility by US Ecology Idaho, Inc., portions of the Titan missile silo complex were used for waste disposal in addition to the on-site trenches. Because of the timing of the USEI purchase of the site and the promulgation of current environmental regulations, the only information available regarding past disposal practices is the records that were maintained at the facility by previous owners and information
that USEI has been able to obtain from past owners and long-term employees at the site. Section J (Corrective Action for Solid Waste Management Units) provides information regarding pre-RCRA and active waste management areas, the approximate capacity of waste disposal areas, the date waste was last received in each area, the date that each unit was closed, and other information. The location of these specific disposal areas is shown on Drawing PRMI-T05a.

B.2 Topographic Map (IDAPA 58.01.05.012 & 40 CFR 270.14(b)(19))

B.2.a General Requirements

The General Facility Topographic Plan, Drawing Number PRMI-T01, provides the topographic map showing the USEI permitted facility and adjacent property. This drawing includes a distance of one thousand feet (1,000 ft.) around the permitted facility at a scale of 1 inch = 200 feet, with a 2 ft. contour interval. The facility boundary, property boundary, and buildings are depicted to scale on this drawing.

B.2.a.(1) Standard Map Requirements

The map scale, date and orientation of the topographic map are indicated on each of the following facility plans, Drawing Numbers PRMI-T01, -T03, -T04, -T05a, -T06, -T07, -T08, -T09, -T10, -T11, and -T12.

B.2.a.(2) Surface Waters

The site is located approximately ½ mile east of Castle Creek and 2.6 miles west of the Snake River. Due to the arid conditions of this area, the topographic relief, the on-site run-off control systems, and the distance to these surface-water sources, run-off will not migrate to these surface waters. For additional information see the Surface Water Management Plan in Section N.

B.2.a.(3) Surrounding Land Uses

All land within 1,000 ft. of USEI’s permitted facility is owned by USEI or by the Bureau of Land Management (BLM). The land within 1,000 ft. of the site is either open land or grazing land. No residences or crop land are within 1,000 ft. of the facility.

B.2.a.(4) Wind Rose

A wind rose is included on Drawing Numbers PRMI-T01 and PRMI-T04. This wind rose represents meteorological records from 1988 to 1992. The 1988 to 1992 wind rose is consistent with meteorological data which was derived from research into meteorological records spanning the previous 20 years to 1992. Meteorological conditions represented by the wind rose should be generally representative of the overall wind distribution at the facility. The data indicate that the predominant wind direction in the area is from the south-southeast.

B.2.a.(5) Legal Boundaries of Hazardous Waste Facility Site and Location of Operational Units

The legal descriptions of the facility boundaries and for USEI’s property are provided in deeds included within Appendix B.1. Additionally, the legal boundaries of the USEI permitted facility and adjacent property are shown on Drawing Number PRMI-T01. Also, Drawing Numbers PRMI-T03 and -T04 show the facility boundaries, property boundaries, and the individual boundaries for the existing and proposed
hazardous waste management units at the facility. Drawing Number PRMI-T05a shows the location of the Pre-RCRA disposal areas in addition to the information on Drawing Number PRMI-T04.

B.2.a.(6) Access Control

The facility is surrounded by a chain link fence that is a minimum of 6 ft. high and topped with three (3) strands of barbed wire. Existing entrances to the facility are shown on Drawing Number PRMI-T10, are controlled access points, and are occupied or secured during the site’s operational hours. Access control is discussed in further detail in Section F (Procedures to Prevent Hazards).

B.2.a.(7) Injection and Withdrawal Wells

The site has no injection wells. With the exception of USEI’s on-site groundwater monitoring wells, there are no other producing wells within 3,000 ft. of the facility. Section E (Groundwater Monitoring) provides detailed well information for USEI’s on-site monitoring wells. Drawing Numbers PRMI-T01, T03, and T04 indicate the locations of the monitoring wells.

B.2.a.(8) Buildings; Treatment, Storage or Disposal Operations; or Other Structures

Buildings and Structures: Drawing Numbers PRMI-T03 and T04 show the locations of existing and proposed buildings and structures on the property, as well as hazardous waste storage, treatment, and disposal areas. Drawing Number PRMI-T05a shows the location of the Pre-RCRA disposal areas in addition to the information on Drawing Number PRMI-T04.

Access and Internal Roads: Access to the USEI facility is via State Route 78 and Lemley Road, an Owyhee County road. Drawing Number PRMI-T07 indicates the existing internal site roads. Drawing Number PRMI-T08 indicates future internal site roads. Drawing Number PRMI-T09 indicates internal roads at final closure.

Storm, Sanitary and Process Sewers: The storm and sanitary sewer systems are shown on Drawing Number PRMI-T06. Additional storm sewer information is contained in the Surface Water Management Plan in Section N. Sanitary wastewater, including domestic uses, showers, the laundry, and the laboratory, is presently discharged into subsurface wastewater storage tanks for subsequent periodic pumping and transport off-site for disposal. Laboratory wastes are collected in a holding tank for on-site processing or off-site disposal. There are no process sewers at the facility.

Loading and Unloading Areas: Waste trucks received at the facility stop at the main gate for security clearance, weigh-in, manifest review and truck preparation prior to unloading. Waste trucks are then directed to the appropriate unit for further management. The appropriate units include the staging/sampling area, the tank or container management units, evaporation pond, stabilization facility, containment building, stabilization building or active landfill trench/cell. See Drawing Number PRMI-T03 for the Facility Site Plan.

On-site generated liquids and leachate generated from existing and closed units on-site may be loaded into vacuum or tanker trucks at several locations. These locations typically include loading areas at each closed landfill cell/trench, loading areas at the surface impoundments, loading areas adjacent to the active landfill cells/trenches, the RCRA Storage Tank System, or the sump areas of the tank or container management units, Stabilization Facility, Containment Building, and the Stabilization Building, including the truck unloading aprons.

Fire Control Facilities: USEI maintains water suppression equipment in the firehouse. Also, fire extinguishers and other emergency equipment are strategically located throughout the facility. Drawing Number PRMI-T10, and Sections F and G indicate locations of this equipment.
B.2.2 Additional Requirements for Land Disposal Facilities

The Facility Topographic Plan, Drawing Number PRMI-T04, shows the locations of the existing waste management areas, as well as the construction footprint for Cell 16, the facility boundary and the location of existing groundwater monitoring wells. The location of the Pre-RCRA disposal areas are shown on Drawing PRMI-T05a.

The uppermost aquifer beneath the site is not contained in one continuous formation. The upper aquifer is found beneath the northern two-thirds of the site. The direction of flow is to the east. Because the upper aquifer is dry beneath the southern third of the site, the aquifer beneath it is classified as the uppermost aquifer in that area. Groundwater flows to the northeast in that aquifer. Section E of this permit application provides a detailed discussion of the hydrogeological characteristics and the planned groundwater monitoring system.

Section E.3 identifies the uppermost aquifer and other aquifers hydraulically interconnected beneath the facility. Furthermore, Section E.3 identifies the groundwater flow direction and rate and identifies the basis for the information shown.

B.3 Location Information

B.3.2 Seismic Standard

The facility is located near the town of Grand View, Owyhee County, Idaho, which is not listed in Appendix VI of IDAPA 58.01.05.008 and 40 CFR 264 (publication dated July 1, 1995). Therefore, this standard is not applicable per IDAPA 58.01.05.012 and 40 CFR 270.14(b)(11)(i).

B.3.3 Floodplain Standard

The 100-year flood plain elevations for Castle Creek and the Snake River have been calculated and the information is provided in Appendix B.3. The independent calculations were necessary because no Federal Emergency Management Agency (FEMA) maps are available for either stream in the vicinity of the USEI site. The normal pool elevations of both streams are approximately 150 ft. below the site elevation.

B.4 Traffic Information

B.4.2 Traffic Patterns On-site

Due to its isolated location and the low traffic volume to the site, facility operations at USEI have only a minimal impact on the traffic near the site. The site is at the end of a lightly used county road (Lemley Road) approximately 1.7 miles off State Highway 78. Grand View, the closest town, is approximately 10 ½ miles south-east of the site.

Lemley road, which provides access and egress to the USEI site, is an 18 ft. wide bituminous roadway that is part of the local highway system. The 18 ft. roadway width provides adequate passing clearance for tractor trailers, tankers, and general automotive traffic normal to the site. No paved shoulders exist adjacent to the roadway, but grades are almost flush with the driving surface.

State Highway 78, Lemley Road, and the roadways on the site are all two-way. Parking for employees and visitors is generally confined to local lots near the site administrative complex. Within the plant, traffic vehicles consist mostly of front-end loaders, lift trucks, and trucks. USEI generally operates front-end
loaders, skid steer loaders, trucks, bulldozers, and other mobile equipment on a daily (normal work day) basis.

Due to its rural location, there are no specific traffic control mechanisms, such as stacking lanes on the local highways. Traffic on State Highway 78 is generally light and no such mechanisms are required.

Drawing Number PRMI-T07 indicates the existing on-site traffic patterns and internal site roads. Drawing Number PRMI-T08 indicates future on-site traffic patterns and internal site roads. Drawing Number PRMI-T09 indicates on-site traffic patterns and internal roads at final closure.

**B.4.b Estimated Traffic**

Table B-1 provides currently anticipated vehicle types and estimated traffic volumes for arrivals at the USEI facility. This list is provided as a general pattern and provides typical examples/guidelines based on present and anticipated future activities.

**B.4.c Traffic Control Signs, Signals and Procedures**

USEI uses various appropriate traffic control signs to control speed, direction and flow of on-site traffic. USEI has no traffic signals on-site at present. On-site traffic is directed and controlled by USEI site personnel.

**B.4.d Access Road Surfaces and Load-bearing Capacity**

The USEI facility is accessed from the state road via Lemley Road. Lemley Road is an Owyhee County road. Lemley Road is constructed of bituminous concrete pavement (blacktop) and was designed by the Army Corps of Engineers to allow the transport of Titan missiles to the former missile base. Although the actual thickness of the roadway is not known, its excellent condition attests to its adequacy to support the vehicle traffic. Since the largest trucks received at the USEI site are approximately 52.5-tons gross vehicle weight, the road has and will continue to support the weight and traffic. Design drawings and calculations were previously requested from the Walla Walla, Washington office of the Army Corps of Engineers. It was indicated that this information cannot be located, but that the original design and construction would have met then current Idaho state regulations.

The original on-site roads were compacted gravel. The site has been in operation since 1973 and these roads have been adequate for the on-site traffic for numerous years and have supported this traffic without any adverse effects. California Bearing Ratio (CBR) tests were performed on numerous road surfaces at the facility.

Due to traffic patterns over pre-RCRA units, and concerns regarding air emissions, on-site access roads utilized to route trucks to designated staging, storage, treatment, or disposal areas are constructed with a bituminous concrete pavement that is capable of bearing the standard 80,000-pound weight limit. See Appendix B.2.a for the bituminous pavement calculations.

Selected areas, including unloading aprons at the Indoor Stabilization, consist of reinforced concrete paving. See Appendix B.2.b for the concrete pavement calculations.

Appendix B.2.c provides the calculations indicating that the various culverts used on-site have sufficient strength to support the anticipated vehicle traffic loads, while Appendix B.2.d provides the calculations indicating the minimum soil cover/pavement required in areas of vehicle traffic over pre-RCRA units.
# Table B-1 Estimated On-site Waste Vehicle Traffic Volume

<table>
<thead>
<tr>
<th>Typical Vehicle Type</th>
<th>Estimated Capacity</th>
<th>Estimated Numbers per day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquid Tankers</td>
<td>2,000-10,000 gallons</td>
<td>0 - 40</td>
</tr>
<tr>
<td>Vans/Flatbeds</td>
<td>50-90 containers</td>
<td>0 - 40</td>
</tr>
<tr>
<td>Semi-dumps</td>
<td>20 - 50 yds³</td>
<td>0 - 100</td>
</tr>
<tr>
<td>Vacuum Trucks</td>
<td>1,600-5,000 gallons</td>
<td>0 - 20</td>
</tr>
<tr>
<td>Roll-off Trucks</td>
<td>10 - 40 yds³</td>
<td>0 - 60</td>
</tr>
<tr>
<td>Dump Trucks</td>
<td>6 - 15 yds³</td>
<td>0 - 60</td>
</tr>
<tr>
<td>Sludge Trucks</td>
<td>10 - 20 yds³</td>
<td>0 - 80</td>
</tr>
<tr>
<td>Pneumatic Trucks</td>
<td>15 - 50 yds³</td>
<td>0 - 80</td>
</tr>
<tr>
<td><strong>Total Waste Vehicles Entering Site on Average Day</strong></td>
<td><strong>2,500 yds³</strong></td>
<td><strong>50</strong></td>
</tr>
</tbody>
</table>