

Mr. Ty Howard
Class IIIb Landfill Permit 0401
February 13, 2020
Page 3

Section If: Plan of Operations (R315-310-3(1)(e) and R315-302—2(2))

Description of onsite waste handling procedures (R315-302-2(2)(b), R315-310-3(1)(f))

Onsite waste handling consists of the waste being moved to the landfill cell by forklift, truck, or hand. A log is kept of the type and quantity of waste placed in the landfill. See Attachment E for a copy of the log sheet. Cover is applied using material that was excavated during the landfill's preparation and that is stored near the site. Six inches of cover material is applied at the end of each day that asbestos waste materials that are placed into the landfill. For non-asbestos waste, six inches of cover material is applied monthly or as needed depending on weather and other circumstances. Cover is applied as needed to prevent fires, blowing litter, or harboring of vectors during waste acceptance operations. The asbestos cell is fenced, and access is controlled by a locked gate. Mine site entry is secured with fencing, locked gates, and controlled access.

Schedule for inspections and monitoring (R315-302-2(2)(c), R315-302-2(S)(a), and R315-310-3(1)(g))

Monitoring of the landfill occurs daily during waste acceptance activities or quarterly at a minimum. In compliance with R315-303-3(1)(b), the landfill does not accept any liquid wastes and is inspected whenever there is rain-storm event. The monitoring identifies any problems or potential problems to human health or the environment. Inspections are designed to prevent malfunction or deterioration, and operator errors. A copy of the inspection log sheet is provided in Attachment F.

Contingency plans in the event of a fire or explosion (R315-302-2(2)(d))

Flammable wastes are not sent to the landfill, but some materials may be combustible, so a fire or explosion in the landfill area is not impossible but highly unlikely. The area is served by the Moab Valley Fire Department, and equipment is located at the mine site to move soil for fire suppression, if necessary.

Fugitive Dust Control Plan (R315-302-2(2)(g))

IPM follows a Fugitive Dust Control Plan as part of its approval order with the Utah Division of Air Quality. In general, fugitive dust is controlled by restricting vehicle speeds limiting disturbance of native soils. Materials deposited in the landfill are spread and covered with excavated soils from landfill construction. After spreading the debris, the equipment will make several passes over the materials for compaction.

Litter Control and Collection (R315-302-2(2)(h))

Debris that could cause litter is not placed in the onsite landfill. All municipal solid wastes, including paper, cardboard, food and other office wastes, are placed into dumpsters and are transported to a waste transfer station for proper waste disposal or recycling.

Procedures for Excluding Regulated Hazardous or PCB Containing Waste (R315-302-2(2)(i))

IPM is a Very Small Quantity Generator of hazardous waste and follows a hazardous waste management plan to manage and dispose of hazardous wastes in accordance with all federal, state,

and local laws. Employees are trained to identify and classify waste according to its hazard class. No hazardous waste is disposed of in the landfill.

IPM also has a written plan for the proper management and disposal of materials containing PCBs. Employees are trained to identify PCB containing materials. These materials are not permitted for disposal at the onsite landfill.

Procedures for Controlling Disease Vectors (R31S-302-2(2)(j))

Food and municipal waste are not permitted in the onsite landfill. The permitted waste materials are typically not attractive to disease vectors and do not support vector habitat. Thus, no additional control methods are necessary. However, the non-ACM debris to be disposed of is placed in the landfill in lifts. Dumped material in the landfill is spread and compacted in 1 to 1.5-foot-thick layers. After spreading the debris, the equipment will make several passes over the materials for compaction. This procedure has proven effective at controlling disease vectors. Water is not applied to the landfill cells.

Alternative Waste Handling (R31S-302-2(2)(k))

Materials that may be recycled or repurposed by scrappers are placed in a bone yard area located southeast of the Salt and Potash Recycle Storage Pad (Attachment B, Figure 2). In the event that IPM needs to suspend landfill operations; portable bins will be placed on site and hauled by a local solid waste contractor or other authorized personnel, as applicable.

General Training and Safety Plan for Site Operations (R315-302-2(2)(n))

All IPM employees are trained annually on the limitations on waste that can be deposited in the landfill and on landfill disposal procedures. There are trained employees assigned to monitor the acceptance of material for disposal. IPM's General Site Safety and Training Plan includes a Landfill Addendum, which is attached as Attachment G.

Recycling Programs (R315-303-4(6))

IPM uses a commercial service for recycling of glass, aluminum and tin cans, some plastics, and paper products. These products are not placed in the landfill.

Section IIa: Maps

Topographic map (R315-310-4(2)(a)(i) and R315-310-4(2)(a)(ii))

Attachment B contains three maps of the landfill. Figure 1 is a topographic map showing boundaries of the landfill unit and borrow and fill areas. Figure 2 is a map showing surface drainage channels, existing utilities and structures within ¼ mile of the site and the direction of prevailing winds. Figure 3 is an aerial photograph showing the landfill location.

Section IIc: Engineering Report

Unit Design (R315-310-3(1)(b))

The landfill was constructed using the cell method of filling. Waste is deposited as needed along a working face measuring approximately 10'x5'x5'. The landfill closure plans will meet all requirements of R315-305-5(5)(b). The waste is covered in place and leveled on a regular basis, as per the operating plan.

The final filled area will be capped with a minimum of two feet of native soil. The final cap will be contoured such that the grade is greater than 2 percent and less than 33 percent and will be revegetated with native vegetation or a suitable alternative approved by the Executive Secretary. Any proposed deviation from this plan will be submitted in advance to the Division of Waste Management and Radiation Control for consideration and approval.

Placement of asbestos containing materials (ACM) within the landfill complies with requirements set for by the Utah Division of Air Quality and the National Emission Standards for Asbestos, CFR Part 61.154. Specifically:

- Asbestos waste generated at the site is placed within the landfill in such a manner as to generate no visible emissions to the outside air.
- The asbestos cell is enclosed by a chain link fence and displays asbestos warning signs at the entrance and at intervals not exceeding 100m around the perimeter.
- All asbestos waste is placed in double lined 6 mil poly bags or, for larger materials, the ACM is wrapped with 6 mil poly sheeting and taped to prevent potential fiber release.
- All asbestos waste is loaded and unloaded from the containers by hand to prevent accidental breakage of the 6-mil poly.
- ACM is covered with a minimum of 15 centimeters (6 inches) of compacted non-ACM within 24 hours of placement into the landfill cell.
- Asbestos waste received at the cell is documented with the quantity of ACM in cubic yards and the date of receipt.
- Only ACM waste generated by IPM is accepted at the landfill. ACM from offsite generators is not accepted.

Design and Location of Run-on and Run-off Control Systems (R315-310-4(2)(c)(viii))

A two-foot diversion berm has been placed at the up-gradient side (south side) of the landfill and extends to the east and west (Figure 2 in Attachment B) to minimize run-off from storm events. The landfill is in part of the tailings pond drainage that is completely raised and enclosed, so there is no potential for run-on from a 25-year storm event. Based on calculations there is more than adequate capacity to contain any run-off from a 25-year storm event.

Section IIe: Closure

Closure Plan (R315-310-3(1)(h))

IPM will notify the Grand County Recorder to file proof of closure as outlined in R315-302-2(6),

within 60 days after certification of closure. The Closure Plan is included with this application as Attachment H.

Section II f: Post-Closure Care

Post-Closure Care Plan (R315-310-3(1)(h))

IPM will provide post closure activities that will include, at a minimum, monitoring of land and water, for a period of 30 years, or as long as the Executive Secretary determines is necessary for the facility or unit to become stabilized and to protect human health and environment. Class IIIb Landfills are not subject to ground water monitoring. The Post-Closure plan is part of the Closure Plan included with this application as Attachment H.

Section II g: Financial Assurance

Identification of Closure costs (R315-310-4(2)(d)(iv))

Closure cost calculations for the landfill are shown in Attachment I. The costs for closure of the landfill are expected to be \$101,705

Identification of Post-Closure Care Costs (R315-310-4(2)(e)(iv))

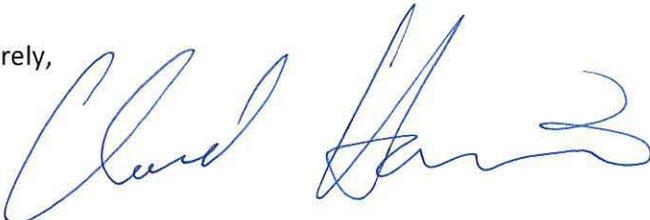
Post-closure cost calculations for the landfill are included in Attachment I. The costs for post-closure of the landfill are expected to be \$43,147

Financial Assurance Mechanism (R315-309-1(1) and R315-310-3(1)(j))

Financial Assurance is provided by funds held in the Intrepid Potash—Moab Solid and Hazardous Waste Control Board of Utah Trust Fund. The updated total cost of closure, and post-closure, as well as contingencies and ten years of escalation is \$190,540. An additional contribution to the fund was deposited on January 31, 2020, bringing the balance to \$190,783.45, which exceeds the total closure costs. Attachment J is the most recent bank statement showing the January 31 deposit and the balance of the fund.

IPM appreciates the opportunity to with the DWMRC on this matter. Please contact me if you have any questions or require any further information regarding this application.

Sincerely,



Chad Harris, PE
Environmental Manager