



State of Utah

GARY R. HERBERT  
*Governor*

SPENCER J. COX  
*Lieutenant Governor*

Department of  
Environmental Quality

L. Scott Baird  
*Executive Director*

DIVISION OF WASTE MANAGEMENT  
AND RADIATION CONTROL  
Ty L. Howard  
*Director*

April 17, 2020

Rick York, General Manager  
Intrepid Potash – Moab LLC  
PO Box 1208  
Moab, UT 84532

RE: Finding Completeness of Permit Renewal Application  
SW105

Dear Mr. York:

The Division of Waste Management and Radiation Control have completed its review of the permit renewal request for the Intrepid Potash – Moab LLC Class IIIb Landfill Permit. The permit renewal has been determined to be complete.

Notice of the public comment period will be published on April 23, 2020 in the Moab Times – Independent. The required public comment period will begin on April 24, 2020 and will end on May 26, 2020. Following the public comment period and resolution of any comments, final action will be taken on the draft permit.

Enclosed is a copy of the draft permit and associated attachments for your review.

If you have any questions, please call Bryan Woolf at (801) 536-0227.

Sincerely,

T. Allan Moore, Solid Waste Program Manager  
Division of Waste Management and Radiation Control

(Over)

TAM/BMW/al

Enclosure(s): Draft Permit (DSHW-2020-003747)

Attachment 1 – Design and Construction (DSHW-2020-003802)

Attachment 2 – Run on Control (DSHW-2020-003804)

Attachment 3 – Plan of Operations (DSHW-2020-003806)

Attachment 4 – Inspection Sheet (DSHW-2020-003808)

Attachment 5 – Closure and Post-Closure (DSHW-2020-003810)

c: Brady C. Bradford, MSPH, REHS, Health Officer, Southeast Utah Health Department  
Orion Rogers, Environmental Health Director, Southeast Utah Health Department  
Scott Hacking, P.E., DEQ District Engineer

DIVISION OF WASTE MANAGEMENT  
AND RADIATION CONTROL  
SOLID WASTE LANDFILL PERMIT

---

**Intrepid Potash – Moab LLC Class IIIb LANDFILL**

Pursuant to *Utah Solid and Hazardous Waste Act*, Title 19, Chapter 6, Part 1, Utah Code Annotated (Utah Code Ann.) (the Act) and the *Utah Solid Waste Permitting and Management Rules*, Utah Administrative Code R315-301 through 320 adopted thereunder, a Permit is issued to

Intrepid Potash – Moab, LLC  
as owner and operator,

to own and operate the Intrepid Potash Class – Moab LLC Class IIIb Landfill located in Grand County, Utah as shown in the Permit Renewal Application that was determined complete on **INSERT DATE LETTER SIGNED**.

The Permittee is subject to the requirements of R315-301 through 320 of the Utah Administrative Code and the requirements set forth herein.

All references to R315-301 through 320 of the Utah Administrative Code are to regulations that are in effect on the date that this permit becomes effective.

This Permit shall become effective \_\_\_\_\_.

This Permit shall expire at midnight \_\_\_\_\_.

Closure Cost Revision Date: \_\_\_\_\_.

Signed this \_\_\_\_ day of \_\_\_\_\_, 2020.

\_\_\_\_\_  
Ty L. Howard, Director  
Utah Division of Waste Management and Radiation Control

**FACILITY OWNER/OPERATOR INFORMATION**

LANDFILL NAME: Intrepid Potash – Moab LLC Landfill Class IIIb

OWNER NAME: Intrepid Potash – Moab LLC

OWNER ADDRESS: PO Box 1208  
Moab, UT 84532

OWNER PHONE NO.: 435-259-7171

OPERATOR NAME: Same as Owner

OPERATOR ADDRESS: Same as Owner

OPERATOR PHONE NO.: Same as Owner

TYPE OF PERMIT: Class IIIb Landfill

PERMIT NUMBER: 0401R2

LOCATION: Landfill site is located in Township 26 South, Range 20 East, Section 25, Quarter/Quarter Section SE ¼, Quarter Section NW ¼ SLMB; Grand County, Lat. 38° 30' 53", Long. 109° 39' 50."  
  
1 HWY 279  
Moab, UT 84532

PERMIT HISTORY Permit renewal effective date **INSERT DATE SIGNED**

---

The term, "Permit," as used in this document is defined in R315-301-2(55) of the Utah Administrative Code. Director as used throughout this permit refers to the Director of the Division of Waste Management and Radiation Control.

The Permit Renewal application for Intrepid Potash – Moab LLC applied for on February 19, 2020 (DSHW-2020-002681) was deemed complete on the date shown on the signature page of this Permit. All representations made in the attachments of this permit are enforceable under R315-301-5(2) of the Utah Administrative Code. Where differences in wording exist between this Permit and the attachments, the wording of this Permit supersedes that of the attachments.

This Permit consists of the signature page, Facility Owner/Operator Information section, sections I through IV, and all attachments to this Permit.

The facility as described in this Permit consists of a Class IIIb disposal cell handling construction and demolition waste and waste asbestos containing materials. The facility operates a salt and potash solution mine located approximately 6 miles southwest of Moab, Utah. Compliance with this Permit does not constitute a defense to actions brought under any other local, state, or federal laws. This Permit does not exempt the Permittee from obtaining any other local, state or federal permits or approvals required for the facility operation.

The issuance of this Permit does not convey any property rights, other than the rights inherent in this Permit, in either real or personal property, or any exclusive privileges other than those inherent in this Permit. Nor does this Permit authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations, including zoning ordinances.

The provisions of this Permit are severable. If any provision of this Permit is held invalid for any reason, the remaining provisions shall remain in full force and effect. If the application of any provision of this Permit to any circumstance is held invalid, its application to other circumstances shall not be affected.

By this Permit, the Permittee is subject to the following conditions.

## PERMIT REQUIREMENTS

### I. GENERAL COMPLIANCE RESPONSIBILITIES

#### I.A. General Operation

- I.A.1. The Permittee shall operate the landfill in accordance with all applicable requirements of R315-304 of the Utah Administrative Code, that are in effect as of the date of this Permit unless otherwise noted in this Permit. Any permit noncompliance or noncompliance with any applicable portions of Utah Code Ann. § 19-6-101 through 125 and applicable portions of R315-301 through 320 of the Utah Administrative Code constitutes a violation of the Permit or applicable statute or rule and is grounds for appropriate enforcement action, permit revocation, modification, or denial of a permit renewal application.

#### I.B. Acceptable Waste

- I.B.1. This Permit is for disposal of nonhazardous industrial waste, as defined in R315-301-2(35) of the Utah Administrative Code, generated by Intrepid Potash – Moab LLC and;
- I.B.2. Construction/ Demolition debris as defined in R315-301-2(17) of the Utah Administrative Code, generated by Intrepid Potash-Moab LLC and;
- I.B.3. Asbestos Waste as defined in R315-301-2(05) of the Utah Administrative Code, generated by Intrepid Potash-Moab LLC.

#### I.C. Prohibited Waste

- I.C.1. Hazardous waste as defined by R315-261 of the Utah Administrative Code;
- I.C.2. PCB's as defined by R315-301-2(53) of the Utah Administrative Code, except PCB's specified by R315-315-7(2)(a) and (c) of the Utah Administrative Code;
- I.C.3. Household waste;
- I.C.4. Municipal waste;
- I.C.5. Containers larger than household size (five gallons) holding any liquid, non-containerized material containing free liquids or any waste containing free liquids in containers larger than five gallons and;
- I.C.6. Any prohibited waste received and accepted for disposal at the facility shall constitute a violation of this Permit, of Utah Code Ann. § 19-6-101 through 126 and of R315-301 through 320 of the Utah Administrative Code.

#### I.D. Inspections and Inspection Access

- I.D.1. The Permittee shall allow the Director or an authorized representative, or representatives from the Southeastern Utah District Health Department, to enter at reasonable times and:

- I.D.1.a Inspect the landfill or other premises, practices or operations regulated or required under the terms and conditions of this Permit or R315-301 through 320 of the Utah Administrative Code;
- I.D.1.a.(i) Have access to and copy any records required to be kept under the terms and conditions of this Permit or R315-301 through 320 of the Utah Administrative Code;
- I.D.1.a.(ii) Inspect any loads of waste, treatment facilities or processes, pollution management facilities or processes, or control facilities or processes required under this Permit or regulated under R315-301 through 320 of the Utah Administrative Code; and
- I.D.1.a.(iii) Create a record of any inspection by photographic, video, electronic, or any other reasonable means.

I.E. Noncompliance

- I.E.1. If monitoring, inspection, or testing indicates that any permit condition or any applicable rule under R315-301 through 320 of the Utah Administrative Code may be or is being violated, the Permittee shall promptly make corrections to the operation or other activities to bring the facility into compliance with all permit conditions or rules.
- I.E.2. In the event of noncompliance with any permit condition or violation of an applicable rule, the Permittee shall promptly take any action reasonably necessary to correct the noncompliance or violation and mitigate any risk to the human health or the environment. Actions may include eliminating the activity causing the noncompliance or violation and containment of any waste or contamination using barriers or access restrictions, placing of warning signs, or permanently closing areas of the facility.
- I.E.3. The Permittee shall:
  - I.E.3.a Document the noncompliance or violation in the daily operating record, on the day the event occurred or the day it was discovered;
  - I.E.3.b Notify the Director of the Utah Division of Waste Management and Radiation Control by telephone within 24 hours, or the next business day following documentation of the event; and
  - I.E.3.c Give written notice of the noncompliance or violation and measures taken to protect human health and the environment within seven days after Director notification.
- I.E.4. Within thirty days after the documentation of the event, the Permittee shall submit to the Director a written report describing the nature and extent of the noncompliance or violation and the remedial measures taken or to be taken to protect human health and the environment and to eliminate the noncompliance or violation. Upon receipt and review of the assessment report, the Director may order the Permittee to perform appropriate remedial measures including development of a site remediation plan for approval by the Director.

I.E.5. In an enforcement action, the Permittee may not claim as a defense that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with R315-301 through 320 of the Utah Administrative Code and this Permit.

I.F. Revocation

I.F.1. This Permit is subject to revocation if the Permittee fails to comply with any condition of the Permit. The Director will notify the Permittee in writing prior to any proposed revocation action and such action shall be subject to all applicable hearing procedures established under R305-7 of the Utah Administrative Code and the Utah Administrative Procedures Act.

I.G. Attachment Incorporation

I.G.1. Attachments to the Permit Application are incorporated by reference into this Permit and are enforceable conditions of this Permit, as are documents incorporated by reference into the attachments. Language in this Permit supersedes any conflicting language in the attachments or documents incorporated into the attachments.

**II. DESIGN AND CONSTRUCTION**

II.A. Design and Construction

II.A.1. The landfill shall be constructed according to the design outlined in Attachment #1 and in the area designated in Attachment #1, including landfill cells, fences, gates, and berms.

II.A.2. The Permittee shall notify the Director upon completion of construction of any landfill cells or run-on and run-off diversion systems. No landfill cells or run-on and run-off diversion system may be used until construction is approved by the Director and this permit modified.

II.A.3. The Permittee shall notify the Director of the completion of construction of any final cover system and shall provide all necessary documentation and shall apply for approval of the construction from the Director and modification of this permit.

II.A.4. If ground water is encountered during excavation of the landfill, the Director shall be notified immediately, and an alternative construction design developed and submitted for approval.



II.B. Run-On Control

- II.B.1. The Permittee shall construct drainage channels and diversions as specified in Attachment #2 and shall maintain them at all times to effectively prevent runoff from the surrounding area from entering the landfill.

**III. LANDFILL OPERATION**

III.A. Operations Plan

- III.A.1. The Permittee shall keep the Operations Plan included in Attachment #3 on site at the landfill or at the location designated in section III-H of this Permit. The Permittee shall operate the landfill in accordance with the operations plan. If necessary, the Permittee may modify the Operations Plan following the procedures of R315-311-2(1) of the Utah Administrative Code and approved of by the Director. The Permittee shall note any modification to the Operations Plan in the daily operating record.

III.B. Security

- III.B.1. The Permittee shall operate the Landfill so that unauthorized entry to the facility is restricted. The Permittee shall:

III.B.1.a Lock all facility gates and other access routes during the time the landfill is closed.

III.B.1.b Have at least one person employed by the Permittee at the landfill during all hours that the landfill is open.

III.B.1.c Construct and maintain all fencing and any other access controls to prevent access by persons or livestock by other routes.

III.C. Training

- III.C.1. The Permittee shall provide training for on-site personnel in landfill operation, including waste load inspection, hazardous waste identification, and personal safety and protection.

III.D. Burning of Waste

III.D.1. Intentional burning of solid waste is prohibited and is a violation of R315-303-4(2)(b) of the Utah Administrative Code.

III.D.2. The Permittee shall extinguish all accidental fires as soon as reasonably possible.

III.E. Cover

- III.E.1. The Permittee shall cover the waste as necessary to prevent fires and to control vectors, blowing litter, odor, scavenging, and fugitive dust. The Permittee shall cover wastes that are capable of attracting or providing food for vectors, materials that may become windblown litter, or fine materials that may become fugitive dust with a minimum of six inches of earth at the end of the working day in which the wastes are received. The Permittee may use an alternative cover material when the material and operation meet the requirements of R315-303-4(4)(b) through (e) of the Utah Administrative Code.
- III.E.2. The Permittee shall use a minimum of six inches of earthen cover no less than once each month for all wastes received at the landfill. This cover shall consist of soil; no alternative may be used.
- III.E.3. The Permittee shall record in the daily operating record and the operator shall certify, at the end of each day of operation when soil or an alternative cover is placed, the amount and type of cover placed and the area receiving cover.
- III.E.4. Cover requirements for dead animals are found in Section III-L of this Permit.
- III.F. Waste Inspections
- III.F.1. The Permittee shall visually inspect incoming waste loads to verify that no wastes other than those allowed by this permit are disposed in the landfill. The Permittee shall select the loads to be inspected on a random basis.

- III.F.2. The Permittee shall inspect all loads suspected or known to have one or more containers capable of holding more than five gallons of liquid to ensure that each container is empty.
- III.F.3. The Permittee shall inspect all loads that the Permittee suspect may contain a waste not allowed for disposal at the landfill.
- III.F.4. The Permittee shall conduct complete random inspections as follows:
- III.F.4.a The Permittee shall conduct the random waste inspection at the working face or an area designated by the Permittee.
- III.F.4.b The Permittee shall direct that loads subjected to complete inspection be unloaded at the designated area;
- III.F.4.c Loads shall be spread by equipment or by hand tools;
- III.F.4.d Personnel trained in hazardous waste recognition and recognition of other unacceptable waste shall conduct a visual inspection of the waste; and
- III.F.4.e The personnel conducting the inspection shall record the results of the inspection on a waste inspection form as found in Attachment #4. The Permittee shall place the form in the daily operating record at the end of the operating day.
- III.F.4.f The Permittee or the waste transporter shall properly dispose of any waste found that is not acceptable at the facility at an approved disposal site for the waste type and handle the waste according to the rules covering the waste type.
- III.G. Self Inspections
- III.G.1. The Permittee shall inspect the facility to prevent malfunctions and deterioration, operator errors, and discharges that may cause or lead to the release of wastes or contaminated materials to the environment or create a threat to human health or the environment. The Permittee shall complete these general inspections no less than quarterly and shall cover the following areas: Waste placement; cover; fences and access controls; roads; run-on/run-off controls; final and intermediate cover; litter controls; and records. The Permittee shall place a record of the inspections in the daily operating record on the day of the inspection. The Permittee shall correct the problems identified in the inspections in a timely manner and document the corrective actions in the daily operating record.
- III.H. Recordkeeping
- III.H.1. The Permittee shall maintain and keep on file at Intrepid Potash – Moab LLC office, a daily operating record and other general records of landfill operation as required by R315-302-2(3) of the Utah Administrative Code. The landfill operator, or other designated personnel, shall date and sign the daily operating record at the end of each operating day. Each record to be kept shall contain the signature of the appropriate operator or personnel and the date signed. The Daily operating record shall consist of the following two types of documents:

III.H.1.a Records related to the daily landfill operation or periodic events including:

III.H.1.a.(i) The number of loads of waste and the weights or estimates of weights or volume of waste received each day of operation and recorded at the end of each operating day;

III.H.1.a.(ii) Major deviations from the approved plan of operation recorded at the end of the operating day the deviation occurred;

III.H.1.a.(iii) Results of monitoring required by this Permit recorded in the daily operating record on the day of the event or the day the information is received;

III.H.1.a.(iv) Records of all inspections conducted by the Permittee, results of the inspections, and corrective actions taken shall be recorded in the record on the day of the event.

III.H.1.b Records of a general nature including:

III.H.1.b.(i) A copy of this Permit, including all attachments;

III.H.1.b.(ii) Results of inspections conducted by representatives of the Director of the Division of Waste Management and Radiation Control, and of representatives of the local Health Department, when forwarded to the Permittee;

III.H.1.b.(iii) Closure and Post-closure care plans; and

III.H.1.b.(iv) Records of employee training.

### III.I. Reporting

III.I.1. The Permittee shall prepare and submit to the Director an Annual Report as required by R315-302-2(4) of the Utah Administrative Code. The Annual Report shall include: the period covered by the report, the annual quantity of waste received, an annual update of the financial assurance mechanism, and all training programs completed.

### III.J. Roads

III.J.1. The Permittee shall improve and maintain all access roads within the landfill boundary that are used for transporting waste to the landfill for disposal shall be improved and maintained as necessary to assure safe and reliable all-weather access to the disposal area.

### III.K. Litter Control

III.K.1. Litter resulting from operations of the landfill shall be minimized. The Permittee shall implement the following procedures when high wind conditions are present:

III.K.1.a Reduce the size of the tipping face;

III.K.1.b Reduce the number of vehicles allowed to discharge at the tipping face at one time;

III.K.1.c Orient vehicles to reduce wind effects on unloading and waste compaction;

- III.K.1.d Reconfigure tipping face to reduce wind effect;
- III.K.1.e Use portable and permanent wind fencing as needed; and
- III.K.1.f Should high winds present a situation that the windblown litter cannot be controlled, the Permittee shall cease operations of the landfill until the winds diminish.

III.L. Disposal of Special Wastes

- III.L.1. The Permittee shall handle and dispose of asbestos waste in accordance with R315-315-2 of the Utah Administrative Code.

CLOSURE REQUIREMENTS

III.M. Closure

- III.M.1. Final cover of the landfill shall be as shown in Attachment #5. The final cover shall meet, at a minimum, the standard design for closure as specified in R315-305-5(5)(b) of the Utah Administrative Code.

III.N. Title Recording

- III.N.1. The Permittee shall meet the requirements of R315-302-2(6) of the Utah Administrative Code by recording a notice with the Grand County Recorder as part of the record of title that the property has been used as a landfill. The notice shall include waste disposal locations and types of waste disposed. The Permittee shall provide the Director the notice as recorded.

III.O. Post-Closure Care

- III.O.1. The Permittee shall perform post-closure care at the closed landfill in accordance with the Post-Closure Care Plan contained in the Permit Application. Post-closure care shall continue until all waste disposal sites at the landfill have stabilized and the finding of R315-302-3(7)(c) of the Utah Administrative Code is made.

III.P. Financial Assurance

- III.P.1. The Permittee shall keep in effect and active the currently approved financial assurance mechanism or another approved mechanism that meets the requirements of R315-309 of the Utah Administrative Code and is approved by the Director to cover the costs of closure and post-closure care at the landfill. The Permittee shall adequately fund and maintain the financial assurance mechanism(s) to provide for the cost of closure at any stage or phase or anytime during the life of the landfill or the permit life, whichever is shorter (include the following for a trust fund), and the Permittee shall fully fund the trust fund within ten years of the date waste is first received at the landfill.

III.Q. Financial Assurance Annual Update

III.Q.1. The Permittee shall submit an annual revision of closure and post-closure costs for inflation and financial assurance funding as required by R315-309-2(2) of the Utah Administrative Code, to the Director as part of the annual report.

III.R. Closure Cost and Post-Closure Cost Revision

III.R.1. The Permittee shall submit a complete revision of the closure and post-closure cost estimates by the Closure Cost Revision Date listed on the signature page of this Permit and any time the facility is expanded, any time a new cell is constructed, or any time a cell is expanded.

**IV. ADMINISTRATIVE REQUIREMENTS**

IV.A. Permit Modification

IV.A.1. Modifications to this Permit may be made upon application by the Permittee or by the Director following the procedures specified in R315-311-2 of the Utah Administrative Code. The Permittee shall be given written notice of any permit modification initiated by the Director.

IV.A.2. Permit Transfer

IV.A.2.a This Permit may be transferred to a new Permittee or new Permittee/s by complying with the permit transfer provisions specified in R315-310-11 of the Utah Administrative Code.

IV.B. Expansion

IV.B.1. This Permit is for the operation of a Class IIIb Landfill according to the design and Operation Plan described and explained in the Permit Application. Any expansion of the current footprint designated in the description contained in the Permit Application, but within the property boundaries designated in the Permit Application, shall require submittal of plans and specifications to the Director. The plans and specifications shall be approved by the Director prior to construction.

IV.B.2. Any expansion of the landfill facility beyond the property boundaries designated in the description contained in the Permit Application shall require submittal of a new Permit Application in accordance with the requirements of R315-310 of the Utah Administrative Code.

IV.B.3. Any addition to the list of acceptable waste in Section I-B shall require submittal of all necessary information to the Director and the approval of the Director.

IV.C. Expiration

IV.C.1. If the Permittee desires to continue operating this landfill after the expiration date of this Permit, the Permittee shall submit an application for permit renewal at least six months prior to the expiration date, as shown on the signature (cover) page of this Permit. If the Permittee timely submits a permit renewal application and the permit renewal is not complete by the expiration date, this Permit shall continue in force until renewal is completed or denied.

Attachments to the permit:

- 1- Design and Construction
- 2- Run on Control
- 3- Plan of Operations
- 4- Inspection Sheet
- 5- Closure and Post-Closure

Attachment #1  
Design and Construction





## Section Ia: Facility General Information

### *General Description of the Facility (R315-310-3(1)(b))*

IPM owns and operates a salt and potash solution mine located approximately 6 miles southwest of Moab, Utah. The mine has approximately 20 buildings and structures that are in current use and several buildings or structures that are not utilized for the mining and processing operations. It operates a small Class IIIb landfill near its salt tailings area to handle construction and demolition waste and waste asbestos containing materials. Approximately 10 structures at the mine site have Galbestos® sheeting that is used as siding and/or roofing. The Galbestos® sheeting in good condition is considered a non-friable Asbestos Containing Material (ACM). During removal, however, this material may become friable and is handled as such.

The salt tailings area is located southwest of the mine's main office. (See Attachment B for maps of this location.) During normal operations, IPM dissolves the salt tailings and the resultant brine

solution is injected back into the mine for mining potash. The potash-laden brine is pumped to solar ponds. After the water is evaporated the remaining salt and potash material is harvested by scraper and processed at the mill into final products. A 2.3-acre parcel of the salt tailings area which lies up gradient and to the south of the salt tailings pile has been developed as a previously permitted Class IIIb landfill (see Figure I in Attachment B).

*Legal description and Proof of Ownership (R315-310-3(1)(c))*

The legal description of the onsite landfill is:

SE1/4 of NW1/4 Section 25, Range 20 East Township 26 South

*Proof of Ownership (R315-310-3(1)(c))*

A statement of ownership is included as Attachment C. Land use in the surrounding area consists of recreational jeep, biking and hiking trails. Dead Horse Point State Park is located approximately 20 miles southwest of the site. Arches National Park is approximately 20 miles to the northeast. The city of Moab is approximately 6 miles northeast of the site, and most of the immediately surrounding area is in its undisturbed, natural state.

*Demonstration that the landfill is not a commercial facility (§19-6-102(3))*

The IPM landfill does not accept solid waste for profit from any source. Only waste generated at the IPM facility is accepted the IPM landfill, therefore this landfill is not a commercial landfill.

*Waste Type and Anticipated Daily Volume (R315-310-3(1)(d))*

The landfill accepts non-hazardous waste that is generated exclusively the mine site. IPM estimates 10-15 cubic yards accepted at the landfill annually.

The following non-hazardous solid wastes will be accepted at the facility:

- Galbestos® sheeting and other asbestos containing material waste
- Obsolete equipment
- Pallets
- Concrete
- Iron and other non-recyclable scrap metal
- Asphalt
- Other construction/demolition non-hazardous waste

All municipal solid waste including paper, cardboard, food and other office wastes is placed in appropriate dumpsters and transported to a commercial waste transfer station for proper disposal or recycling.

*Intended schedule of construction (R315-302-2(2)(a))*

This application is for renewal of an existing landfill permit. No additional construction is proposed at this time. The cell for Non-ACM has been constructed and an As-built Construction letter was submitted to the Utah Solid & Hazardous Waste Control Board on February 28, 2005, please refer to Attachment D for a copy of this letter. The cell was constructed southeast of the existing salt tailings pond as identified in the figures found in Attachment B. The ACM cell was constructed in 2009. Please refer to Figure 1 in Attachment B for the location of the cells within the permitted 2.3-acre

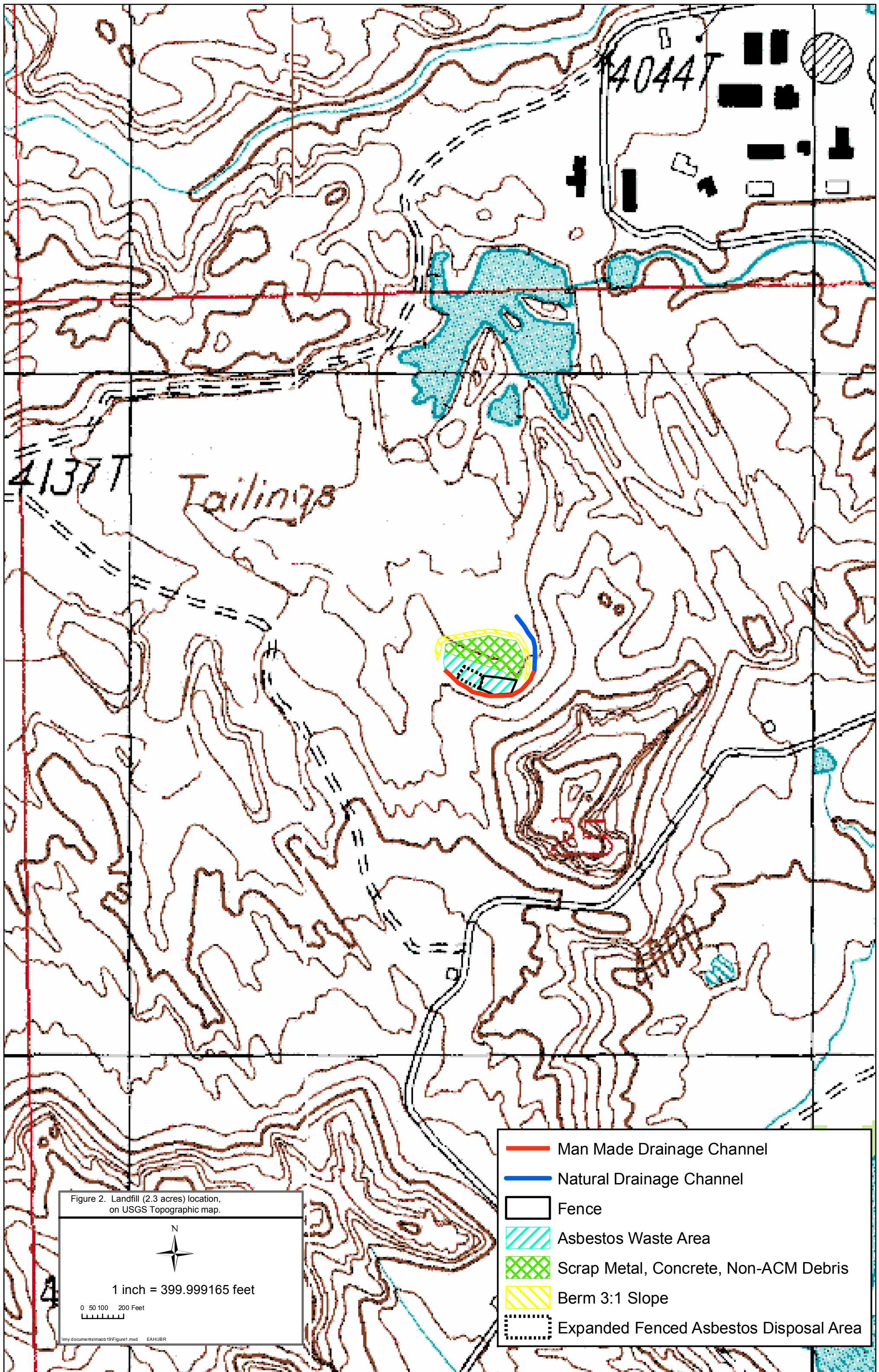
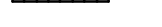


Figure 2. Landfill (2.3 acres) location, on USGS Topographic map.










1 inch = 399.999165 feet

0 50 100 200 Feet



\\mydocuments\maob19\Figure1.mxd

EAHUBR

-  Man Made Drainage Channel
-  Natural Drainage Channel
-  Fence
-  Asbestos Waste Area
-  Scrap Metal, Concrete, Non-ACM Debris
-  Berm 3:1 Slope
-  Expanded Fenced Asbestos Disposal Area

Attachment #2  
Run-on Control

DRAFT

## Attachment #2 Run on Control

Submitted with the permit application dated February 13, 2020

### *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.

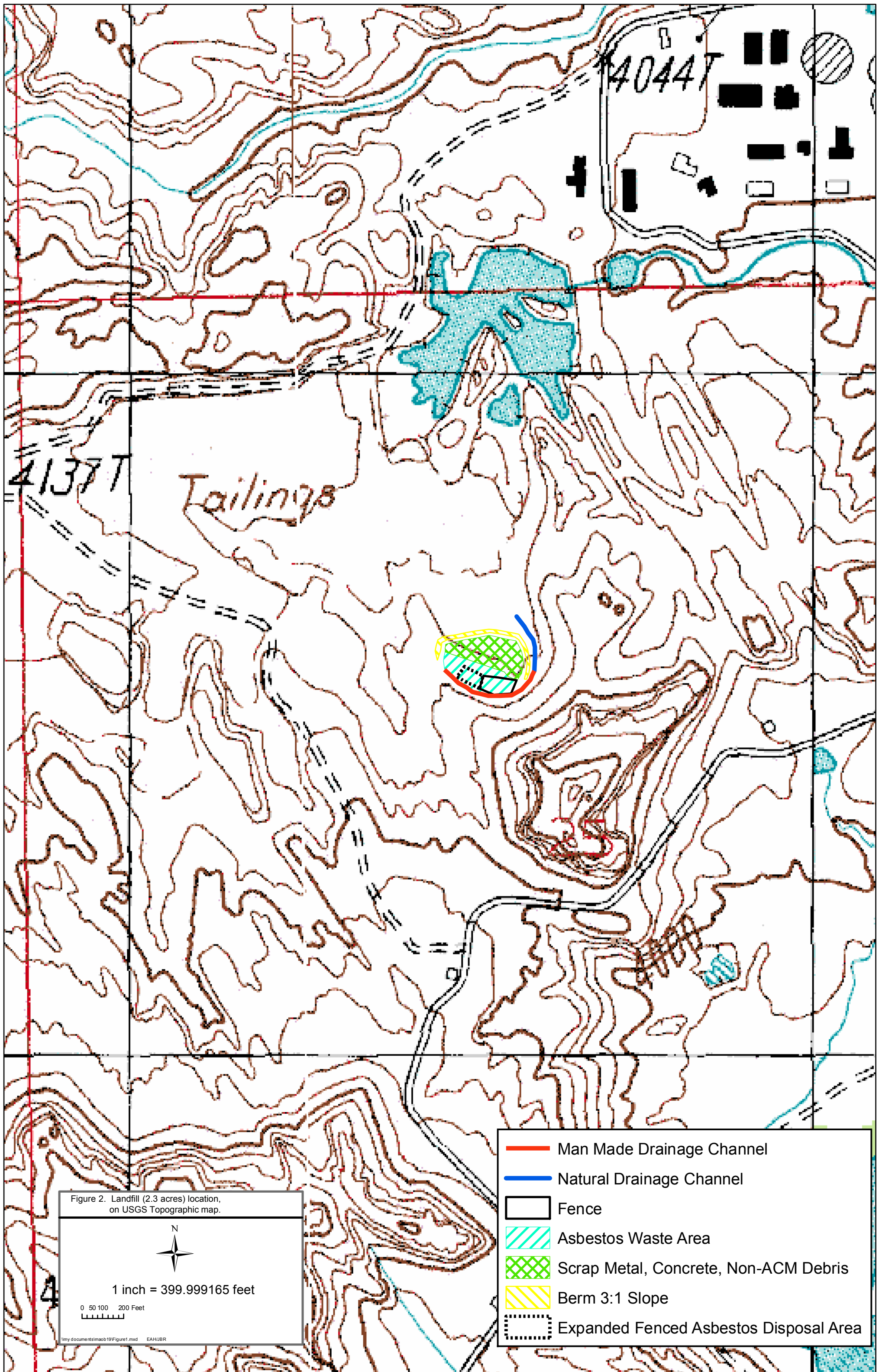
The final filled area will be capped with a minimum of two feet of native soil. The final cap will be contoured such that the grade is greater than 2 percent and less than 33 percent and will be revegetated with native vegetation or a suitable alternative approved by the Executive Secretary. Any proposed 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.



Attachment #3  
Plan of Operations

DRAFT

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,

A handwritten signature in blue ink, appearing to read "Chad Harris", written over a white background.

Chad Harris, PE  
Environmental Manager

Attachment #4  
Inspection Sheet

DRAFT



Attachment #5  
Closure and Post-Closure

DRAFT

## Table of Contents

1.0	Introduction
1.1	Site Description and Background
2.0	Statement of Closure Plan
3.0	Closure Plan
3.1	Methods, Procedures, and Processes
3.1.1	Maintenance and Control
3.1.1.1	Escape of Air Pollutants/Gases
3.1.1.2	Control of Run-off
3.1.2	Final Facility Topography
3.1.3	Drainage Plan
3.1.4	Composition of Cover
3.1.4.1	Sloping
3.1.4.2	Landscaping
3.1.4.3	Vegetation
3.1.5	Description of Monitoring and Maintenance
3.1.6	Contact Personnel
3.2	Maximum Portion of Operation
3.3	Maximum Inventory and Estimated Life
3.4	Schedule for Completion
3.5	Notification and Review
3.6	Closure Activity Notification
4.0	Post-Closure Plan
4.1	Maintenance of Final Cover
4.1.1	Repairs
4.1.2	Prevention of Run-On and Run-Off
4.1.3	Maintenance and Operation of Leachate Collection System
4.1.4	Monitoring of Surface and Groundwater
4.1.5	Monitoring of Gases
4.2	Post-Closure Care Statement
4.3	Post-Closure Use Statement
4.4	Post-Closure Certification
5.0	Submittal Statement
6.0	Appendix-Post-Closure Inspection Form
7.0	Figures
7.1	Figure 1—Map of Cell Locations
7.2	Figure 2—Facility Final Topography

## **1.0 Introduction**

IPM is submitting this Closure and Post-Closure Plan in accordance with the State of Utah, Division of Solid and Hazardous Waste's (DSHW) R315-304-5 rules with this document.

### **1.1 Site Description and Background**

IPM owns and operates a salt and potash mine located approximately 15 miles south on Highway 279, Moab, Utah. The two cells are located up-gradient and to the southeast of the existing tailings pond. See Figure 1 for a map of the landfill location.

The landfill is an industrial solid waste landfill that meets the classification of a Class IIIb Landfill. It is not accessible to the public and will accept only non-hazardous debris that is generated onsite. The landfill is not located on public lands or near public drinking water supplies. The landfill is not located in a subsidence area, flood zone, near designated wetlands, or above an underground mine. There are no surface bodies of water, residential dwellings, or incompatible structures within ¼ mile of the landfill. The coordinates of the landfill are as follows:

SE1/4 of NW1/4 Section 25, Range 20 East Township 26 South

## **2.0 Statement of Closure Plan**

IPM is required to submit Closure and Post-Closure Plans in a way that "minimizes the need for further maintenance and minimizes the post-closure formation and releases of leachate and explosive gases to the air, groundwater or surface water to the extent necessary to protect the public health and welfare and prevent any nuisance." This document represents IPM's compliance with R315-302-3 (2).

## **3.0 Closure Plan**

### **3.1 Methods, Procedures, and Processes**

All materials disposed of within the Class IIIb landfill will comply with acceptable waste constituents of an industrial non-hazardous landfill. The landfill will accept only non-hazardous waste that is generated at the mine site. The waste will consist of obsolete equipment, pallets and other debris generated during demolition/renovation activities, plant operations, and other industrial debris. Special wastes include Galbestos® sheeting for demolition and renovation activities and small amounts of thermal system insulation generated while conducting routine Operation and Maintenance (O&M) of the mine site's ACM. No other wastes are accepted; therefore, this landfill will not be a commercial landfill and no other areas will be served. On average, approximately 10 cubic yards per day of this waste is disposed at the landfill.

#### **3.1.1 Maintenance and Control (R315-310-4 (2)(e)(iii))**



Access to the facility is restricted through mine security and property fencing. Signs are posted indicating authorized personnel only are allowed on the access roads leading into the mine. Wind dispersal of landfill litter will be minimized by the application of cover.

After cessation of operations at the mine, the landfill will be closed with an application of the intermediate cover and a complete inspection of the surface will be performed. Cleanup of the site will be performed concurrently. All remaining visible litter and debris in the immediate vicinity will be placed in the final lift of the landfill unit. At that time, the final cover will be applied. A thorough closure inspection shall consist of observations for erosion, sloping, drainage, surface leachate, and run-on. Areas requiring repairs/modifications will be documented on the Landfill Inspection Form in the Appendix. Necessary modifications will be made using appropriate materials and compacted, as required.

#### **3.1.1.1 Escape of Air Pollutants/Gases**

The contents of this industrial waste landfill have little or no amounts of putrescible materials and the decomposition of the organic wastes are minimal. The U.S. EPA reports that methane is generated from “municipal” solid waste only when the moisture content exceeds 40% (U.S. EPA, 1994). Due to the limited moisture at the site and the absence of putrescible wastes contained in the heap, methane gas generation is not anticipated. Vector, dust, and odors are effectively controlled so they are not a nuisance or hazard to health, safety or property. None of the waste is flammable, but combustible waste may exist; however, a fire or explosion in the landfill area is highly unlikely. The area is served by the local fire department, and equipment is located onsite to move soil for fire suppression, if necessary.

#### **3.1.1.2 Control of Run-off**

Runoff from the landfill is not expected to occur due to the design of the tailings pond. After closure, the absorption and evapotranspiration by the vegetation layer and the absence of any appreciable run-on will ensure the control of runoff. Once the vegetation layer growth is established, most storm events will not result in significant direct run-off from the landfill surface area. Nonetheless, significant percolation through the cover layer is unlikely, thus leachate or seepage from the heap is minimal.

### **3.1.2 Final Facility Topography**

Figure 2 shows the final facility topography.

### **3.1.3 Drainage Plan**

Most surface water run-off will be contained in pre-existing drainage channels and will be routed around the landfill by naturally occurring topography. IPM has constructed a small

berm directly to the southeast of the landfill from native soils and rocks to divert any possible storm water run-off from the area to the southeast.

### **3.1.4 Composition of Cover (R315-310 –4(2)(c)(iii))**

The final cover system will be made of the intermediate compacted cover, compacted soil layer, and vegetation layer. The material used for final cover will be placed on the graded, compacted, intermediate cover layer (12 inches of intermediate cover). The soil layer material will be compacted and will be composed of clayey silt-sand mixture with a low permeability. The soil layer will be no less than 6 inches of compacted soil and will come from onsite sources. These two layers total 18 inches of compacted soil, which will serve to minimize infiltration. A vegetation layer of no less than 6 inches will then be applied. The vegetation layer will be of an organic composition that will support native or compatible plant life. The final cover depth will be no less than 24 inches.

#### **3.1.4.1 Sloping**

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 for other similar operations. Any deviation from this plan will be submitted in advance to the Executive Secretary and the Division of Solid and Hazardous Waste for consideration and approval.

#### **3.1.4.2 Landscaping**

The waste will be leveled to the extent practicable, covered with a minimum of two feet of soil and the cover contoured as described above. No vegetation, other than local introduced and native grasses and woody species identified in this plan will be placed on the landfill.

### 3.1.4.3 Vegetation

The vegetation layer provides the base for native plants to grow. The layer will be of enough organic content and volume such that the landfill's approved seed mixes will have the ability to prosper. Approved seed species are listed in the following table:

Common Name	Scientific Name	Application rate/acre
Galleta	<i>Hilaria jamesii</i>	3.0 lbs
Alkali Sacaton	<i>Sporobolus airoidies</i>	3.0 lbs
Three-awn	<i>Aristida purpurea</i>	2.0 lbs
Inland Saltgrass	<i>Distichlis stricta</i>	2.0 lb
Indian Ricegrass	<i>Oryzopsis hymenoides</i>	2.0 lbs
Sand Dropseed	<i>Sporobolus cryptandrus</i>	2.0 lbs
Scarlet Mallow	<i>Sphaeralcea coccinea</i>	2.0 lbs
Gooseberry-leaf Mallow	<i>Sphaeralcea grossulariaefolia</i>	2.0 lbs

The final seed mix will be a combination of the above-mentioned seeds and planted by the drilling method. Approximately 4 acres will be seeded during closure at a density of approximately 18 pounds per acre.

### 3.1.5 Description of Monitoring and Maintenance

Qualified personnel will be located near or around the landfill to supervise continued activities during closure. The closure of the landfill will be concurrent with the landfill's final development. Landfill operations will proceed in a manner that will minimize the working area of the landfill. Once the final intermediate cover is placed and graded, landfill inspections will commence. The Post-Closure Landfill Inspection Form in the appendix will be used for the final closure inspection.

### **3.1.6 Contact Personnel (R315-310-4 (2)(e)(vi))**

The following positions and personnel represent IPM's contact list of responsible officials as they pertain to the landfill.

**Landfill Owner:** Intrepid Mining LLC

**Operator:** Rick York  
General Manager

**Address:** P.O. Box 1208  
Moab, Utah 84532

**Contact Person:** Chad Harris, PE  
Environmental Manager

**Phone:** 435-259-1282

### **3.2 Maximum Portion of Operation**

The cell method of land filling will be used at the landfill, within the tailings pond system. Thus, the working face will be limited to the smallest area practical in order to confine the amount of exposed waste without interfering with effective operation. The maximum working face (surface area) open at any one time will be approximately 150 square feet, a total maximum height of 5 feet and horizontal spatial distance of approximately 10 feet.

### **3.3 Maximum Inventory and Estimated Life (R315-310-4 (2)(d)(ii))**

Based on the final closure design, original topography, and volume of the final cover, the maximum inventory for the landfill will be approximately 50,000 cubic yards. The total volume (including final cover) is estimated to be 63,000 cubic yards. The average volume loading of waste to the landfill is estimated to be approximately 96.30 cubic yards (~27 tons) per year. The estimated life of the landfill, based on the above volumes and an existing waste volume of 50,000 cubic yards, is approximately 19.2 years from the time of this submittal.

### **3.4 Schedule for Completion (R315-310-4 (2)(d)(i) and R315-310-4 (2)(d)(iii))**

The cell has been completed and has been inspected by the DSHW. The initial permit was issued on November 15, 2004 and was given permit number 0401. Closure activities will commence within 30 days after receipt of the final volume of waste, and will be completed within 180 days of the start time. IPM will notify the DSHW upon completion of closure to schedule the final inspection by regulatory agencies.

### **3.5 Notification and Review (R315-310-4 (2)(e)(ii))**

Within 60 days of certification of closure of the landfill, IPM will make the proper notification and submittals to the Grand County recorder and, upon doing so, file proof of title filing with the Executive Secretary. With respect to the requirement at R315-302-2(6)(b) for public access to records containing information about solid waste amounts, location, and periods of operation,

IPM will file annual reports to the Division of Solid and Hazardous Waste, as required. These documents are public records and may be obtained by local zoning authorities from either the Division or IPM, upon request.

### **3.6 Closure Activity Notification**

IPM will begin closure activities of the landfill in accordance with the approved Closure Plan no later than 30 days following the final receipt of waste at the landfill.

Closure activities shall be completed within 180 days from their starting time, however, IPM reserves the right for extensions of the deadline for beginning and concluding closure activity. The Executive Secretary will be given written justification for any extension requests. If necessary, fences will be erected to limit service and signs will be posted at conspicuous locations indicating closure activities have begun. Alternative disposal site locations will be indicated on the closure notice signs.

#### **4.0 Post-Closure Plan (R315-310-3(1)(h))**

After the Closure Plan has been executed, completed, and certified, the following post-closure and end use plan will be implemented. Following closure of the landfill, IPM will conduct the appropriate industrial landfill post-closure care.

##### **4.1 Maintenance of Final Cover**

Facility maintenance and monitoring of applicable gases, land, and water constituents will be conducted for a period of 30 years after closure. The landfill cover and surrounding areas will be inspected and repaired by IPM or IPM contractor on a quarterly basis for the first year, then semi-annually for 29 years thereafter. The Post-Closure Inspection Form is shown in the appendix.

###### **4.1.1 Repairs**

During landfill inspections, if any settlements, subsidence or erosion areas are found on the cover, they will be promptly backfilled with onsite compatible (similar permeability) soil. After final grading, the area will be re-vegetated with the prescribed native seed mix. If there are areas of inherent erosion it will be documented on the Landfill Inspection Form and addressed by re-grading and placement of appropriate cover material. To prevent integrity breaks in the cover due to mechanical agitation, notices will be posted, and access will be limited to inspection, maintenance, and monitoring personnel. Repairs will be made promptly with the appropriate soil, rip rap, or other necessary materials that will be compatible to the immediate environmental factors that cause breaches in the cover integrity.

###### **4.1.2 Prevention of Run-On and Run-Off**

Because the landfill is part of the tailings pond system that is completely raised and enclosed, there is no potential for run-on from a 25-year storm event and there is more than adequate capacity to contain any run-off from a 25-year storm event.

###### **4.1.3 Maintenance and Operation of Leachate Collection System**

Given the topographical area and expected rainfall, no leachate collection system is recommended for this site.

###### **4.1.4 Monitoring of Surface and Groundwater**

Groundwater monitoring for Class III(b) landfills is exempt by R315-304-5(4)(c). Surface water monitoring is not required.

###### **4.1.5 Monitoring of Gases**

Due to low moisture content and minimal putrescible waste, generation of gases is not expected, and thus monitoring of gases is not applicable.

#### **4.2 Post-Closure Care Statement**

IPM will conduct post-closure monitoring and maintenance care as necessary or as directed by the Executive Secretary for a period of 30 years from date of closure. Reduction or extension of the 30-year monitoring and maintenance care period may be negotiated between the Executive Secretary and IPM management.

#### **4.3 Post-Closure Use Statement**

Post-Closure use is anticipated to be very minimal. Post-Closure use will not increase the foreseeable threat to public health.

#### **4.4 Post-Closure Certification**

IPM will submit written verification following the closure of a landfill unit and following the completion of post-closure care of a landfill unit. This verification will state the completed activities are in accordance with the requirements of R315-302-3(7)(b).

#### **5.0 Submittal Statement**

The Closure Plan, Post-Closure Plan, and other necessary documents were prepared and submitted to the Division of Solid and Hazardous Waste.

No subsequent modification to the Closure and Post-Closure Plan will be made without the approval of Executive Secretary. IPM reserves the right to petition to amend the Post-Closure Plan.

IPM will keep a copy of the most recent approved Closure Plan and Post-Closure Plan at the Mine Offices.