

DIVISION OF WASTE MANAGEMENT
AND RADIATION CONTROL
SOLID WASTE LANDFILL PERMIT

Kennecott Utah Copper 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:

Rio Tinto Kennecott Utah Copper LLC's,
as owner and operator, (Permittee)

to operate three Class IIIb Landfills known as, the Tailings Impoundment Refuse Landfill (Tailings Landfill), the Smelter Refuse Landfill (Smelter Landfill) and the Bingham Canyon Mine Used Tire Monofill (Tire Monofill) at the Rio Tinto Kennecott Utah Copper property, in Salt Lake County, Utah described below.

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 _____, 2019.

This Permit shall expire at midnight _____, 2029.

Closure Cost Revision Date: _____, 2024.

Signed this ____ day of _____, 2019

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

FACILITY OWNER/OPERATOR INFORMATION

LANDFILL NAME: Rio Tinto Kennecott Utah Copper LLC's Tailings Impoundment Refuse Class IIIb Landfill SW166; Smelter Refuse Class IIIb Landfill SW168; Bingham Canyon Mine Used Tire Monofill Class IIIb SW167

OWNER NAME: Rio Tinto Kennecott Utah Copper LLC's

OWNER ADDRESS: 4700 Daybreak Parkway
South Jordan, Utah 84095

OWNER PHONE NO.: 801-204-2000

OPERATOR NAME: Kennecott Utah Copper

OPERATOR ADDRESS: 4700 Daybreak Parkway
South Jordan, Utah 84095

OPERATOR PHONE NO.: 801-204-2000

TYPE OF PERMIT: Class IIIb

PERMIT NUMBER: 1905

LOCATIONS: The Tailings Landfill site is located in Township 1 S, Range 3 West, Section 24, Salt Lake Base Meridian (SLBM), Salt Lake County, Lat. 40° 44' 18", Long. 112° 9' 26"

The Smelter Landfill site is located in Township 1 South, Range 3 West, Section 21, SLMB, Salt Lake County, Lat. 40° 43' 27", Long. 112° 11' 47"

The Tire Monofill site is located in the Bingham Canyon Mine Pit in Township 3 South, Range 3 West, Section 14, SLBM, Salt Lake County, Lat. 40° 30' 27", Long. 112° 8' 4"

PERMIT HISTORY Permit signed **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 application for the Rio Tinto Kennecott Utah Copper LLC's dated March 7, 2018 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.

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

The facility as described in this Permit consists of three separate disposal areas designated as the Tailings Landfill, the Smelter Landfill and the Tire Monofill.

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 landfills 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 126 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 generated at the Rio Tinto Kennecott Utah Copper facility, as defined in R315-301-2(35) of the Utah Administrative Code and mine equipment waste tires, generated by Rio Tinto Kennecott Utah Copper LLC's and as described in the permit application.

I.C. Prohibited Waste

I.C.1. 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.2. Household waste;

I.C.3. Municipal waste;

I.C.4. Special waste except as specified in this Permit;

I.C.5. Commercial waste; and

I.C.6. 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.

I.C.7. Hazardous waste as defined by R315-1 and R315-2 of the Utah Administrative Code, except waste specified by R315-303-4(7)(a)(i)(B) of the Utah Administrative Code;

I.C.8. Regulated asbestos-containing material.

I.C.9. 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 Salt Lake County 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 landfills shall be constructed according to the design and in the area designated in Attachment 1.
- II.A.2. 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.3. 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.A.4. Run-On Control
- II.A.5. The Permittee shall construct drainage channels and diversions 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 for each landfill as shown in Attachment 2 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, provided that the modification meets all of the requirements of R315-301 through 320 of the Utah Administrative Code and is approved by the Director as a permit modification under R315-311-2 of the Utah Administrative Code. 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 Landfills so that unauthorized entry to the facilities is restricted. The Permittee shall:

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

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

III.B.1.c Construct 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 the 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.

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.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.
- 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 suspects 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 Personnel conducting the inspection shall record the results of the inspection and shall place the inspection report 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; 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 Rio Tinto Kennecott Copper, 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.

IV. **CLOSURE REQUIREMENTS**

IV.A. Closure

IV.A.1. Final cover of the each landfill shall follow the closure procedures outlined in the reclamation contract with Division of Oil Gas and Mining.

IV.B. Title Recording

IV.B.1. The Permittee shall meet the requirements of R315-302-2(6) of the Utah Administrative Code by recording a notice with the Salt Lake 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.

IV.C. Post-Closure Care

IV.C.1. The Permittee shall perform post-closure care at each of the landfills in accordance the reclamation contract with Division of Oil Gas and Mining.

IV.D. Financial Assurance

IV.D.1. The Permittee shall maintain financial assurance for the Tailings Impoundment Refuse Landfill, the Smelter Refuse Landfill and the Bingham Canyon Mine Used Tire Monofill in accordance with the reclamation contract with Division of Oil Gas and Mining.

IV.E. Closure Cost and Post-Closure Cost Revision

IV.E.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.

V. ADMINISTRATIVE REQUIREMENTS

V.A. Permit Modification

V.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.

V.B. Permit Transfer

V.B.1. This Permit may be transferred to a new Permittee or new Permittees by complying with the permit transfer provisions specified in R315-310-11 of the Utah Administrative Code.

V.C. Expansion

V.C.1. This Permit is for the operation of three Class IIIb Landfills according to the location and design described in Attachment 1. Any expansion of the current footprint designated in the description contained in Attachment 1, but within the property boundaries shall require submittal of plans and specifications to the Director. The plans and specifications shall be approved by the Director prior to construction.

V.C.2. Any expansion of the landfill facility beyond the property boundaries designated in the description contained in Attachment 1 shall require submittal of a new Permit Application in accordance with the requirements of R315-310 of the Utah Administrative Code.

V.C.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.

V.D. Expiration

V.D.1. If the Permittee desires to continue operating the landfills 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.

Attachment 1
Landfill Design and Location

DRAFT

Tailings Impoundment Landfill Design and Location

DRAFT

Smelter Landfill
Design and Location

DRAFT

Tire Monofill
Design and Location

DRAFT

Attachment 2
Operations Plan

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