

DIVISION OF WASTE MANAGEMENT
AND RADIATION CONTROL
SOLID WASTE LANDFILL PERMIT

**Kennecott Utah Copper Bingham Canyon
Used Tire Monofill 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 Copper, as owner and operator, (Permittee)

to operate the Kennecott Utah Copper Bingham Canyon Used Tire Monofill Class IIIb Landfill located within the Permittee's property described below, in Salt Lake County, Utah.

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 _____, 2020.

This Permit shall expire at midnight _____, 2030.

Closure Cost Revision Date: _____, 2025.

Signed this ____ day of _____, 2020

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

FACILITY OWNER/OPERATOR INFORMATION

LANDFILL NAME: Kennecott Utah Copper Bingham Canyon Used Tire Monofill Class IIIb Landfill

OWNER NAME: Rio Tinto Kennecott Copper

OWNER ADDRESS: 4700 Daybreak Parkway
South Jordan, Utah 84095

OWNER PHONE NO.: 801-204-2000

OPERATOR NAME: Kennecott Utah Copper - Bingham Canyon Mine

OPERATOR ADDRESS: 12800 West Highway 111
Bingham Canyon, Utah 84066

OPERATOR PHONE NO.: 801-204-2000

TYPE OF PERMIT: Class IIIb Landfill

PERMIT NUMBER: 1906

LOCATION: The Used Tire Monofill (SW167) Landfill is located in the Bingham Canyon Mine Pit in Township 3 South, Range 3 West, Section 14, SLBM, Salt Lake County, Lat. 40° 33' 57" N, Long. 112° 8' 34" W

PERMIT HISTORY: This is the initial permit. Its effective date and expiration date are shown on the cover page.

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.

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 is the Bingham Canyon Mine Used Tire Monofill Landfill (LANDFILL).

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 Kennecott Utah Copper and as described in the permit application. The landfill is used only for the disposal of tires from ore haulage trucks and other large equipment generated by the Permittee. The total area of the active landfill will be no more than two acres at any given time. The landfill receives only tires with a rim diameter of greater than 24.5 inches. The Permittee anticipates the disposal of 500-800 compliant tires per year. Production drives the amount of tires that are disposed, so the range is subject to change. These tires are either recycled or they are deposited into the BCM Used Tire Monofill. RTKC submits an annual record of used tire waste loads to the DSHW.

I.B.2. The landfill serves the Permittee's Bingham Canyon Mine operations and is used only for the disposal of tires from ore haulage trucks and other large equipment generated by the Permittee. Access to the site is restricted through the Permittee's security system and property fencing.

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 R315-261-3 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 LOCATION

II.A.1. The landfill is an existing active facility located within the Permittees Bingham and Dry Fork Canyons formed from depressions of suitable size within the waste rock disposal areas. The Permittee's intent is to relocate the Monofill approximately every two years, as needed, within the waste rock deposition areas. The LANDFILL is currently located in the Bingham Canyon area in the BC-7 Waste Rock Dump as shown in Attachment 1

II.A.2. The landfill is a depression in the waste rock disposal area similar in physical and geochemical characteristics as the surrounding waste rock which comprises the used tire Monofill bottom and sidewalls. Most of the filling will occur as part of normal waste rock disposal operations. Reclamation of the waste rock cover will be in a manner that is consistent with other nearby waste rock surfaces with similar physical and geochemical characteristics.

II.A.3. Run-On Control

II.A.4. Run-on and run-off control is not a factor since the nature of the waste rock provides a drain-field effect. Surface drainage of storm water will be directed back to the pit where it is commingled with waters collected within the pit. Buried haul truck tires will not generate harmful contaminants or leachate. Subsurface water passing through the buried areas of the landfill will ultimately report to the east side water collection system which captures surface and subsurface waters from the toe of the dump where it is directed back into the process water system.

III. LANDFILL OPERATION

III.A. Plan of Operations

III.A.1. The Permittee shall keep the Plan of Operations included 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 Plan of Operations, provided that the modification meets all of the requirements of R315-301 through 320 of the Utah Administrative Code, is as protective of human health and the environment as the Plan of Operations approved as part of this Permit, and is approved by the Director as a permit modification under R315-311-2(1) of the Utah Administrative Code. The Permittee shall note any modification to the Plan of Operations 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 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. Except as provided in this paragraph, intentional burning of solid waste is prohibited and is a violation of R315-303-4(2)(b) of the Utah Administrative Code. The Permittee

is allowed to burn material by complying with the requirements of R307-202-5 of the Utah Administrative Code. The Permittee shall perform such burning in a segregated area within the landfill site. The Permittee shall extinguish all accidental fires as soon as reasonably possible. The Permittees non-compliance with R307-202-5 of the Utah Administrative Code, as determined by the Director of the Division of Waste Management and Radiation Control, also constitutes non-compliance with this Permit.

III.D.3. The Permittee shall extinguish all accidental fires as soon as reasonably possible.

III.E. Cover

III.E.1. The covering will occur as part of normal waste rock disposal operations.

III.E.2. Waste Inspections

III.E.3. 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 conduct a complete waste inspection at a minimum frequency of 1 % of incoming loads, but no less than one complete inspection per day. The Permittee shall select the loads to be inspected on a random basis.

III.E.4. 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.E.5. The Permittee shall inspect all loads that the Permittee suspects may contain a waste not allowed for disposal at the landfill.

III.E.6. The Permittee shall conduct complete random inspections as follows:

III.E.6.a The Permittee shall conduct the random waste inspection at the working face or an area designated by the Permittee.

III.E.6.b The Permittee shall direct that loads subjected to complete inspection be unloaded at the designated area;

III.E.6.c Loads shall be spread by equipment or by hand tools;

III.E.6.d Personnel trained in hazardous waste recognition and recognition of other unacceptable waste shall conduct a visual inspection of the waste; and

III.E.6.e The personnel conducting the inspection shall record the results of the inspection on a waste inspection form as found in Attachment 3. The Permittee shall place the form in the daily operating record at the end of the operating day.

III.E.6.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.F. Self-Inspections

III.F.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.G. Recordkeeping

III.G.1. The Permittee shall maintain and keep on file at the 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.G.1.a Records related to the daily landfill operation or periodic events including:

- III.G.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.G.1.a.(ii) Major deviations from the approved plan of operation recorded at the end of the operating day the deviation occurred;
- III.G.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.G.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.G.1.b Records of a general nature including:

- III.G.1.b.(i) A copy of this Permit, including all attachments;
- III.G.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.G.1.b.(iii) Closure and Post-closure care plans; and
- III.G.1.b.(iv) Records of employee training.

III.H. Reporting

III.H.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.I. Roads

III.I.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.I.2. CLOSURE REQUIREMENTS

III.J. Closure

III.J.1. Final cover of the landfill shall be as shown in Attachment 4. 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.K. Title Recording

III.K.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.

III.L. Post-Closure Care

III.L.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.M. Financial Assurance

III.M.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, and the Permittee shall fully fund the trust fund within ten years of the date waste is first received at the landfill.

III.M.2. 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. The Permittee shall submit the information as required in R315-309-9 of the Utah Administrative Code and shall meet the qualifications for the "Corporate Financial Test" or "Corporate Guarantee" each year.

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

III.N.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 Permittees 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 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.

IV.B.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.

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

Attachment 1 – Landfill Design and Location

Attachment 2 – Operations Plan

Attachment 3 – Closure, Post Closure and Financial Assurance

Attachment 1
Landfill Design and Location

Submitted with the permit application
Dated April 11, 2019

Attachment 2
Operations Plan

Submitted with the permit application
Dated April 11, 2019

Attachment 3
Closure, Post Closure and Financial Assurance

Submitted with the permit application
Dated April 11, 2019