



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

September 29, 2020

Cassady Kristensen
Environmental Business Partner
Rio Tinto Kennecott
4700 Daybreak Parkway
South Jordan, UT 84009

RE: Rio Tinto Kennecott Utah Bingham Canyon Mine Used Tire Monofill
Class IIIb Landfill Permit (RTKUC Tire Landfill)

Dear Ms. Kristensen:

The Division of Waste Management and Radiation Control (Division) has completed its review of the application to permit the RTKUC Tire Landfill located in the Bingham Canyon Mine Pit in Township 3 South, Range 3 West, Section 14, SLBM, Salt Lake County, Utah. The address of the Bingham Canyon Mine gate and offices are located at: 12800 West Highway 111, Bingham Canyon, Utah 84066.

Enclosed with this letter is the approved Permit #1906 and applicable attachments from portions of the application. The Permit approval and expiration dates are as shown on the cover of the permit.

The Statement of Basis for this permit (DSHW-2020-012362) containing the Division's history evaluating the permit application, public comment period and transmittal of the permit, is also attached.

If you have any questions, please call Doug Taylor at (801) 536-0240.

Sincerely,

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

(Over)

Enclosures Statement of Basis (DSHW-2020-012362)
 Permit (DSHW-2020-004087)
 Attachment #1 - Landfill Design and Construction (DSHW-2020-004516)
 Attachment #2 – Plan of Operations (DSHW-2020-004518)
 Attachment #3 – Closure, Post-Closure and Financial Assurance (DSHW-2020-004520)

TLH/DT/ar

c: Gary Edwards, MS, Health Officer, Salt Lake County Health Dept.
 Dorothy Adams, Deputy Director, Salt Lake County Health Dept.
 Royal DeLegge, MPA, EHS, Environmental Health Director, Salt Lake County Health Dept.
 Ryan Evans, Rio Tinto Kennecott Utah Copper, LLC, Environmental Partner

**Statement of Basis
for the Kennecott Utah Copper Bingham Canyon Used Tire Monofill
Class IIIb Landfill Permit**

1. INTRODUCTION

This Statement of Basis provides the rationale of the Director of the Division of Waste Management and Radiation Control (DWMRC) for issuing the Kennecott Utah Copper Bingham Canyon Used Tire Monofill Class IIIb Landfill Permit. The Director's staff conducted this evaluation to ensure compliance with the applicable Solid Waste Rules. Doug Taylor wrote this Statement of Basis.

2. FACILITY BACKGROUND

a. Facility Location and History

The facility is located in the Bingham Canyon Mine Pit in Township 3 South, Range 3 West, Section 14, SLBM, Salt Lake County, Utah as shown in Figure 1. The address of the Bingham Canyon Mine gate and offices is located at: 12800 West Highway 111, Bingham Canyon, Utah 84066.

b. Regulatory History

The Smelter Refuse landfill facility has been in existence for many years operating under the Salt Lake Valley Health Department Permit 35-0011803.

3. EVALUATION OF THE PERMIT APPLICATION

- a. The permit applications (DSHW-2015-006229 and DSHW-2019-003551) for the Facility were received in June of 2015 and April of 2019, respectively, at which time the evaluation of the permit application was begun. The DWMRC deemed the permit application to be complete in September of 2019 and a single draft permit for the three disposal sites at the applicant's facility and completeness letter was sent to the permit applicant on January 13, 2020 (DSHW-2020-013402). The applicant reviewed the January 13, 2020 document and responded on February 7, 2020 (DSHW-2020-002162), proposing more accurate information, comments and a request that DWMRC separated out the permit into three separate permits, one for each of the disposal sites at the applicant's facility. The comments were incorporated, and three draft permits were developed. One for the Smelter Refuse Landfill, one for the Tailings Refuse Landfill and one for the Bingham Canyon Mine Tire Monofill were completed and sent to the applicant for review (DSHW-2020-004782), (DSHW-2020-004784) and (DSHW-2020-004786), respectively. The permit applicant approved the draft permits verbally and a public comment period was begun on August 4, 2020 (DHSW-2020-010510).

4. JUSTIFICATION FOR ISSUING THE PERMIT

- a. The Director's staff has evaluated the permit application as required by Section 19-6-108 of the Solid and Hazardous Waste Act and R315-301 through 320 of the Solid and Hazardous Waste Rules.

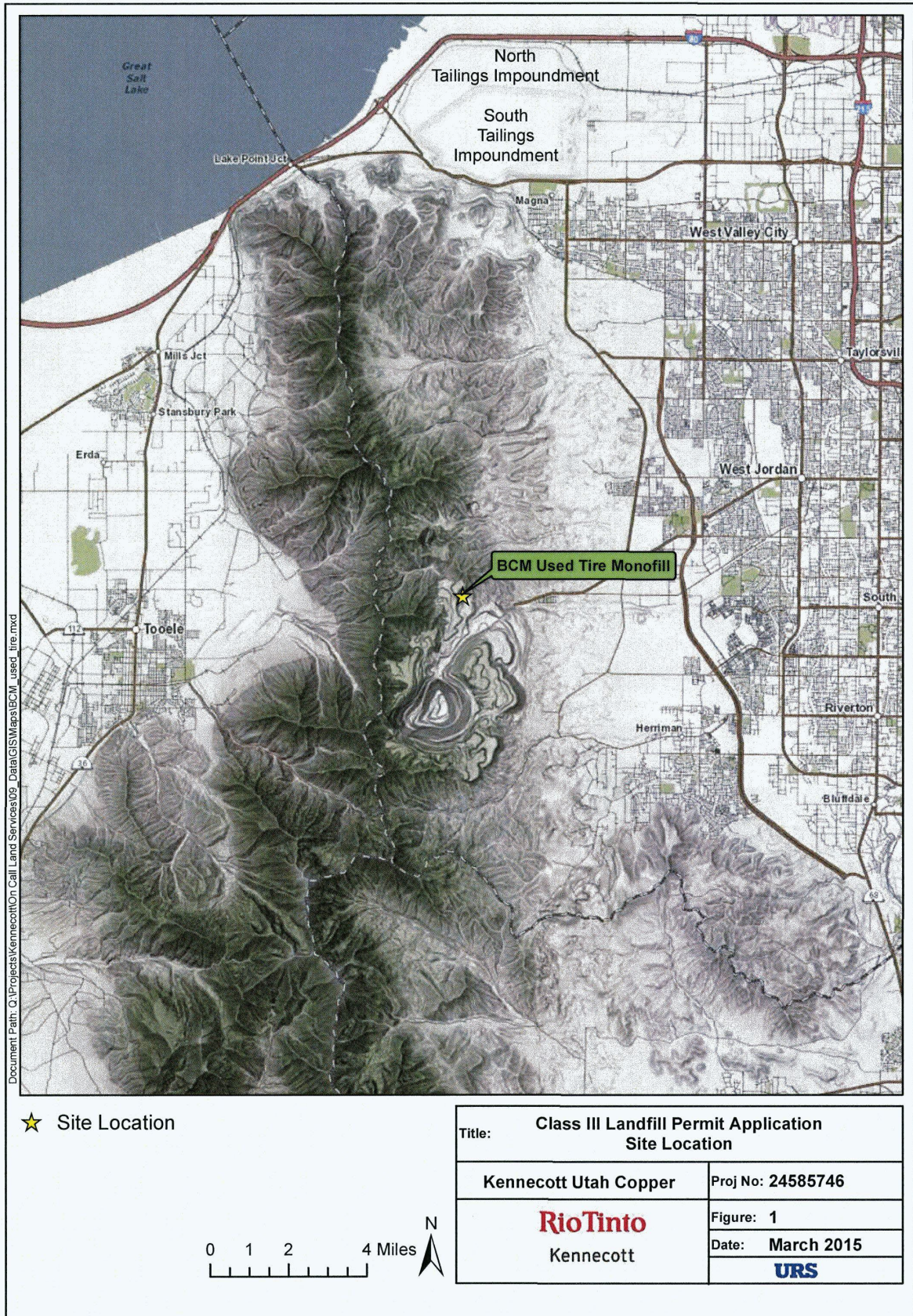
PUBLIC PARTICIPATION

- a. As required by Utah Administrative Code R315-311-3, the Director provided an initial 30-day public comment period on the draft permit began August 4, 2020 and ended September 2, 2020.
- b. There were no comments.

CONCLUSION

The Director has determined that the applicant has met all required items in the permit application.

Figure 1
Used Tire Monofill Landfill Location



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 September 29, 2020.

This Permit shall expire at midnight September 28, 2030.

Closure Cost Revision Date: September 29, 2025.

Signed this 29th day of September 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 1 - Landfill Design and Construction



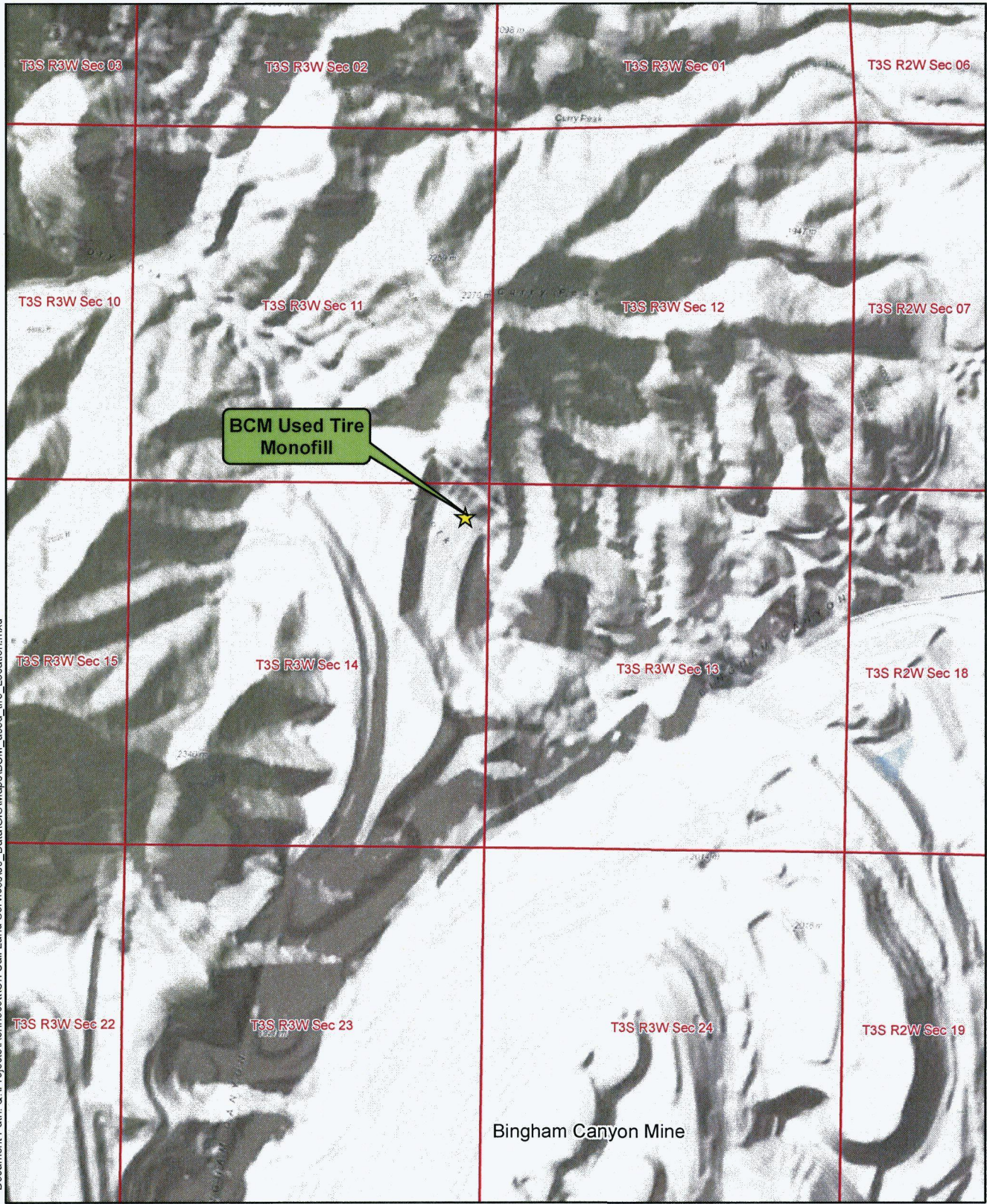
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★ Site Location



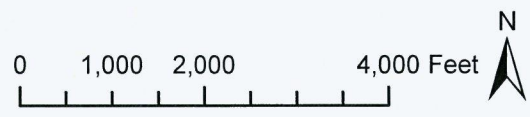
Title: Class III Landfill Permit Application Site Location	
Kennecott Utah Copper	Proj No: 24585746
RioTinto Kennecott	Figure: 1
	Date: March 2015
URS	

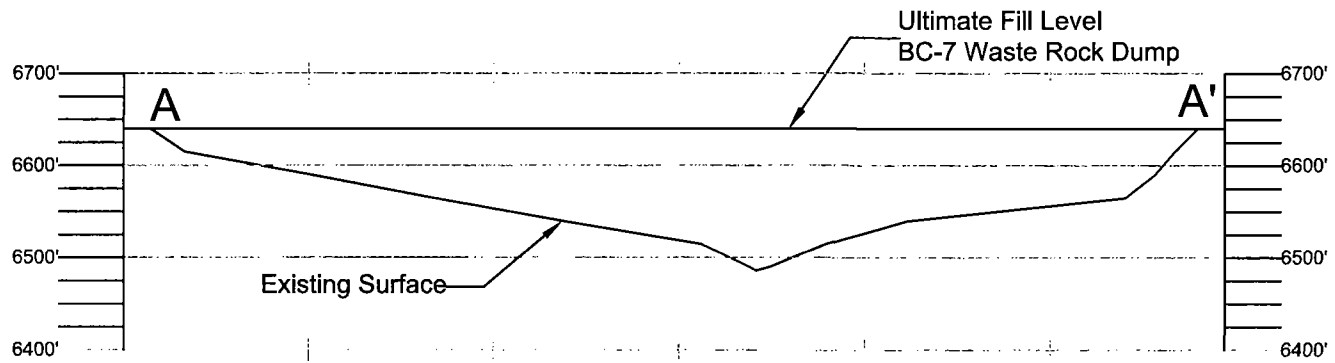
Document Path: Q:\Projects\Kennecott\On Call Land Services\09_Data\GIS\Maps\BCM_used_tire_Location.mxd



★ Site Location

Title: Class III Landfill Permit Application Location Map	
Kennecott Utah Copper	Proj No: 24585746
RioTinto Kennecott	Figure: 2
	Date: March 2015
URS	





ENVIRONMENTAL		KENNECOTT UTAH COPPER	
SCALE: 1"=200'	DATE:	Class III Landfill Permit Application	
BY: JI	DATE:	Bingham Canyon Mine	
BY: JI	DATE:	Used Tire Monofill	
BY:	DATE:	Monofill Cross Section	
BY:	DATE:	Job No. -----	Dep. No. Figure 4

Attachment 2
Operations Plan

Submitted with the permit application
Dated April 11, 2019

Attachment 2 - Plan of Operations

If. Plan of Operations for All Class III Landfills

Waste Handling Procedures (weight/volume of waste received)

Used tires generated at all RTKC vehicle maintenance shops greater than 24.5 inches in rim diameter are to be disposed of at the BCM Tire Monofill. Supervisors of each shop will arrange for storage and pick up of tires and will record the number and types of tires transported to the monofill. The Bingham Canyon Mine Facility Environmental Engineer performs periodic inspections.

Schedule of Inspections and Monitoring

Periodic inspections are conducted by RTKC to help ensure that permit requirements are being met. Inspections consist of recorded visual observations. Facility personnel understand that only used tires are to be disposed of in the BCM Tire Monofill.

Contingency plans in the event of fire or explosion

In case of a fire or explosion, the RTKC Emergency Response Plan will be activated. The facility maintains an on-site fire truck and Emergency Response Team located at the Bingham Canyon Mine.

Fugitive Dust Control

Fugitive emissions are monitored and controlled as per the requirements of RTKC's Air Quality Permits and Fugitive Dust Control Plan.

Plan for Litter Control

Due to the weight of the waste rock cover material and consistency of the waste (used tires), there is no dispersal of waste anticipated. Mine waste rock is readily available to be used as a cover.

Procedure for Excluding Prohibited Wastes

All loads will be accompanied by an approved manifest or waste profile and inspection. Qualified personnel on RTKC's Bingham Canyon Mine and environmental staff are trained in the recognition of non-permitted wastes.

Controlling Disease Vectors

Periodic inspections are conducted with observations regarding presence of mosquitos, burrowing animals, birds, and other wildlife. Waste material cover is readily available in the event that corrective action is needed.

Alternative Waste Handling

Waste materials are restricted to non-recyclable used tires. All light vehicle tires are recycled. Approximately 90% of the large diameter tires are reused for another purpose. If the BCM Used Tire Monofill is temporarily unable to accept waste, all tires will be repurposed.

Training and Safety Plan for Site Operations

Employee safety training is conducted through an online waste training module and an Environmental Standard Operating Procedure (EVSOP100055). Emergency response and communication procedures are posted. Qualified EMT's are on duty at all hours through contract security forces.

Recycling Programs

At this time, there is no economically viable technology available to recycle all tires of the size deposited in the BCM Used Tire Monofill. However, some tires are reused or repurposed as watering and feeding troughs. The number of tires reused or repurposed in this manner are recorded and maintained.

Other Plan of Operations Information

Hours and Days of Operation: The normal hours of operation at the landfill are limited, with some exceptions, to daylight hours only, Monday through Friday. It may, however, be necessary in some cases for the landfill to receive waste after hours and on weekend days.

Structures: There are no existing structures at the landfill and none are planned.

Method of Landfilling: Periodic covering with waste rock on an as needed basis.

Equipment Type and Availability: Large earth-moving equipment is available on site.

Traffic: There is a low volume of on-site traffic.

Employee Facilities: Change house and shower facilities are available on the mine premises.

Accessibility: Road and dumping areas are accessible year-round by truck.

Record Keeping: The number of tires deposited in the landfill will be recorded and maintained by the maintenance operations group. Training, number of loads, annual reports, inspections, deviations from the plan of operation, and analytical data will be kept in the landfill operator's office. Records will be maintained within a document control system.

Ig. Ground Water Monitoring for Class IIIa Landfills

Not applicable.

Attachment 3
Closure, Post Closure and Financial Assurance

Submitted with the permit application
Dated April 11, 2019

Attachment 3 - Closure, Post-Closure and Financial Assurance



SCOTT M. MATHESON
Governor

OIL, GAS, AND MINING BOARD

FRON E. HARMSTON
Executive Director,
NATURAL RESOURCES

STATE OF UTAH

I. DANIEL STEWART
Chairman

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS, AND MINING

CHARLES R. HENDERSON
JOHN L. BELL
THADIS W. BOX
C. RAY JUVELIN

CLEON B. FEIGHT
Director

1588 West North Temple
Salt Lake City, Utah 84116
(801) 533-5771

October 2, 1978

Mr. Chuck Stillman
Kennecott Copper Corporation
P.O. Box 11299
Salt Lake City, Utah 84147

ACT/35/102

Re: Final Approval for
Kennecott Copper Corporation's
Mining and Reclamation Plan
Bingham Canyon Mine

Dear Mr. Stillman:

The Board of Oil, Gas, and Mining, at its September 28, 1978 executive meeting, approved your previously submitted surety contract for reclamation of the Bingham Canyon Mine.

Enclosed herewith is Kennecott's copy of the fully executed Mined Land Reclamation Contract. Therefore I hereby issue final approval to the Kennecott Copper Corporation's Bingham Canyon Mine to operate under the Utah Mined Land Reclamation Act.

Sincerely,

Cleon Feight
CLEON B. FEIGHT
DIRECTOR

CBF/sp
enc: Reclamation Contract

Do not
re-type
copy + insert



STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
BOARD OF OIL, GAS, AND MINING
1588 WEST NORTH TEMPLE
SALT LAKE CITY, UTAH 84116

* MINED LAND RECLAMATION CONTRACT *

THIS CONTRACT, made and entered into this 28TH day of SEPTEMBER, 1978, between Kennecott Copper Corporation a corporation duly authorized and existing under and by virtue of the laws of State of Utah as party of the first part, and hereinafter called the Operator, and the BOARD OF OIL, GAS, AND MINING, duly authorized and existing by virtue of the laws of the State of Utah, as party of the second part hereinafter called the Board.

WITNESSETH:

WHEREAS, the Operator is the owner and in possession of certain mining claims and/or leases hereinafter more particularly mentioned and described in Exhibit "A" attached hereto.

WHEREAS, the Operator did on the Ninth day of August 1976, file with the Division of Oil, Gas, and Mining, a "Notice of Intention to Commence Mining Operations" and a "Mining and Reclamation Plan" to secure authorization to engage, or continue to engage, in mining operations in the State of Utah, under the terms and provisions of the Mined Land Reclamation Act, Section 40-8, U.C.A., 1953.

WHEREAS, the Operator is able and willing to reclaim the above mentioned, "lands affected" in accordance with the approved Mining and Reclamation Plan, the Mined Land Reclamation Act of 1975 and the rules and regulations adopted in accordance therewith.

WHEREAS, the Board has considered the factual information and recommendations provided by the Staff of the Division of Oil, Gas, and Mining as to the magnitude, type and costs of the approved reclamation activities planned for the land affected.

WHEREAS, the Board is cognizant of the nature, extent, duration of operations, the financial status of the Operator and his capability of carrying out the planned work.

NOW THEREFORE, for and in consideration of the mutual covenants of the parties by each to the other made and herein contained, the parties hereto

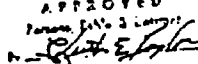
agree as follows:


1. The Operator promises to reclaim the land affected in accordance with its Mining and Reclamation Plan which was approved by the Board on February 22, 1978, the Mined Land Reclamation Act, and the rules and regulations adopted in accordance therewith.
2. The Board, in lieu of accepting the posting of a bond or other surety, accepts the personal guarantee of the Operator to reclaim the land affected in accordance with its approved reclamation plan.
3. The Board and Operator both agree that the Operator will be obligated to expend a minimum average, excluding salaries, but not operating wages, of \$50,000 - 1978 dollars per year for each three (3) year period, in maintaining a program of experimentation and in the application of the best available technology toward rehabilitation of land associated with or affected by mining or processing operations.
4. The Board and Operator further agree that the annual expenditure as set forth in paragraph three (3) above, unless waived by the Board, will continue until mining as described in the notice of intention is permanently terminated, and that said annual expenditure will not constitute the fulfillment of the obligations of the Operator as to mined land reclamation. The Operator further agrees to waive the requirements for the fixed sum as surety as required in Section 40-8-14 (8), U.C.A., 1953.
5. The Operator agrees to provide to the Board and Division annually, a detailed report of reclamation work performed during the preceeding year, including a cost accounting for said reclamation work in 1978 dollars.
6. The Operator further agrees to work jointly with the Division in establishing annual reclamation plans for each forthcoming year. Said plan will be subject to the review of the Board. Consideration will be given to the annual report of the previous year in establishing such plans.
7. The Operator agrees to designate a responsible individual who is involved in the Operator's on-going reclamation efforts, who will serve as liaison to the Division.
8. This contract shall be binding on all successors and assigns, to the Operator.

IN WITNESS WHEREOF, the parties of the first and second parts, hereto have respectively set their hands and seals this 28 day of September 1978

ATTEST:


Assistant Secretary

APPROVED
January 2, 1979


KENNECOTT COPPER CORPORATION
By: 
President
Its ~~Metal Mining Division~~

BOARD OF OIL, GAS, AND MINING

By: 
Chairman

Note: If the Operator is a corporation, the agreement should be executed by its duly authorized officer with the seal of the corporation affixed.

Closure Plan, Closure Schedule, Design of Final Cover, Capacity of Site, and Final Inspection

Closure of the BCM Used Tire Monofill will be engineered to meet all requirements of R315-302-3. Closure of the BCM Used Tire Monofill is consistent with the closure of the waste rock dumps addressed in documentation submitted to the Utah Division of Oil, Gas, and Mining (UDOGM) (See Appendix A).

IIf. Post-Closure Care Requirements for All Class III Landfills

Post-Closure Care Plan, Changes, Maintenance Activities, Office Contact

Post-closure care will meet all requirements of R315-302-3. Post-closure use will be consistent with present use, which is a waste rock dump. Post-closure care is consistent with the post-closure care of the waste rock dumps addressed in documentation submitted to the UDOGM (See

Appendix A).

Ilg. Financial Assurance Requirements for All Class III Landfills

Identification of Closure Costs

All closure costs and care will be integrated into the Bingham Mine M&RP Closure Plan under UDOGM M&RP M-035-0002.

Identification of Post-Closure Costs

All post-closure costs and care will be integrated into the Bingham Mine M&RP Closure Plan under UDOGM M&RP M-035-0002.

Identification of Financial Assurance Mechanism

Self-bonded with a Corporate Guarantee. Bonding for the waste rock dumps was waived by UDOGM in lieu of a company guarantee. Language from the Kennecott contract with UDOGM board reads: "The Board, in lieu of accepting the posting of a bond or other surety, accepts the personal guarantee of the operator to reclaim the land affected in accordance with its approved reclamation plan."