

Red Dog Mine

Reclamation Plan Approval

No. F20169958



DEPARTMENT OF NATURAL RESOURCES
Division of Mining, Land and Water

September 28, 2016

The Alaska Department of Natural Resources, Division of Mining, Land and Water (ADNR), in accordance with and subject to Alaska Statutes 27.19 (Reclamation) and the Alaska Administrative Code, Title 11 (Natural Resources) and Chapter 97 (Mining Reclamation), approves the Reclamation and Closure Plan (August 2016) for the Red Dog Mine submitted by:

Teck Alaska Incorporated
3105 Lakeshore Drive
Building A, Suite 101
Anchorage, Alaska 99503
United States

Throughout this document, unless otherwise specifically indicated, reference to Teck Alaska, Teck, TAK, Red Dog, and “the Permittee” are considered a reference to Teck Alaska Incorporated an Alaska corporation, operating through an agreement with NANA Regional Corporation, Inc. (NANA), an associate in the operation of the Red Dog Mine.

Throughout this document, unless otherwise specifically indicated, reference to the State, Department, ADNR, DNR, DMLW or Division are considered a reference to the State of Alaska – Department of Natural Resources – Division of Mining, Land & Water.

Throughout this document, the Reclamation Plan is considered to consist of:

- Reclamation and Closure Plan, Red Dog Mine, Alaska, USA (August 2016); and
- Integrated Waste Management Plan, Red Dog Mine, Alaska USA (August 2016).

Reference to any of these plans throughout this document is considered to be a reference to the Reclamation Plan. Likewise, any and all stipulations associated with the approval of any of these individual plans are considered to be a requirement of the Reclamation Plan Approval.

Effective dates of this plan approval are September 28, 2016 through September 28, 2021, unless sooner revoked; however, Teck’s obligations under the terms and conditions of this plan approval shall continue, unless sooner terminated in accordance with the provisions of this plan approval, until completion of all requirements under and pursuant to the Reclamation and Closure Plan.

This plan approval is for activities upon private and State managed lands encompassed by the Red Dog Mine as described in the Reclamation and Closure Plan, Red Dog Mine, Alaska, USA (August 2016).

This plan approval does not constitute certification of any property right or land status claimed by the applicant.

The Reclamation and Closure Plan was found to be complete and is approved with the following conditions:

General Stipulations

Financial Assurance. This Reclamation Plan Approval does not take effect until the Permittee submits a bond in a form and substance approved by ADNR. The bond can be released or decreased as allowed per 11 AAC 97.435. Modifications to this Reclamation and Closure Plan may, at ADNR's discretion, require bond review and update. The total financial assurance amount of \$558,350,000 has been accepted for the Red Dog Mine. This amount shall be adjusted annually to account for inflation based on the Anchorage CPI. The annually adjusted amount shall be submitted by one year from the effective date of this approval, and each year thereafter for the term of this approval.

Terms of this Plan Approval. The Terms and Conditions contained within the:

- Reclamation and Closure Plan, Red Dog Mine, Alaska, USA (August 2016); and
- Integrated Waste Management Plan, Red Dog Mine, Alaska USA (August 2016),

are hereby included as stipulations of this plan approval. If there is a difference between the Reclamation and Closure Plan as submitted and the terms contained within this plan approval, the terms contained within this plan approval take precedence. Changes to the documents incorporated herein must be approved by ADNR if they affect this plan approval. If ADNR approves the changes, they become terms of this Reclamation Plan Approval.

Authorized Officer. The Authorized Officer for ADNR is the Director of the Division of Mining, Land and Water or his designee. The Authorized Officer is designated as the Mining Section Chief within the Division of Mining, Land and Water, currently Marty Lentz. The Authorized Officer may be contacted at 550 West 7th Avenue, Suite 900D, Anchorage, Alaska 99501-2577, Attention: Marty Lentz, telephone (907) 269-8621, and fax (907) 269-8930 or at marty.lentz@alaska.gov. The Permittee will be notified of changes to the authorized officer as needed.

Reporting. The results of monitoring required by the Red Dog Mine Waste Management Permit (2016DB0002), the Red Dog Mine Reclamation and Closure Plan (August 2016) and any other monitoring required by this plan approval obtained during a reporting period, shall be summarized and submitted to the Authorized Officer or designee quarterly, no later than 60 days after the last day of the first through third calendar quarters, in an electronic format acceptable to ADNR. Any other monitoring required by state or federal authorizations shall be provided upon request of the Authorized Officer or designee.

An annual report will be due by March 1st and shall summarize activities (surface disturbance, reclamation, mining, and milling) conducted during the previous calendar year and include fourth quarter monitoring data. The annual report shall also address the adequacy of the financial responsibility, including, but not limited to, inflation, significant changes in reclamation activity costs, concurrent reclamation, expansion or other changes to the operation of the facility. Electronic copies should also be sent to ADNR (Jim Vohden at jim.vohden@alaska.gov and dnr.water.reports@alaska.gov), and (Brent Martellaro at brent.martellaro@alaska.gov), Alaska Department of Fish & Game (ADFG) (Audra Brase at audra.braser@alaska.gov), and Alaska Department of Environmental Conservation (ADEC) (Tim Pilon at tim.pilon@alaska.gov). Amendments to this distribution list will be provided to the Permittee as needed.

Maps. The Permittee shall submit to ADNR an annual set of maps illustrating the current development of all facilities within the project area as described in the Reclamation Plan. The plan maps shall show cleared and grubbed areas; growth medium stockpiles; roads; waste rock dump development; material site development; and facility construction. Maps shall be appropriately scaled to review the development of individual facilities.

Environmental Audit. A periodic third-party environmental audit shall be completed during the final year of the permit term or sooner if final closure starts during the permit term. However, the field inspection portion of the audit shall be conducted during the snow free season the year before permit expiration. The audit will include all aspects of this Reclamation Plan Approval. The environmental audit is required to verify the Permittee's compliance with applicable environmental laws associated with this permit. The third party contractor should be mutually agreed on by the State and the Permittee, but in the event that agreement cannot be reached, the State retains the final contractor selection decision. Costs for the third-party contractor shall be borne by the Permittee. The intent of the audit is to evaluate whether both Permittee management and agency permit administration provide reasonable assurances that the facility and environmental controls are functioning as intended. The environmental audit shall include an evaluation of the adequacy of the approved financial assurance.

Temporary Closure. The Permittee shall notify the Authorized Officer in writing at least thirty (30) days prior to any planned Temporary Closure of ninety (90) days or longer. The Permittee shall notify the Authorized Officer of any unanticipated Temporary Closure expected to last ninety (90) days or more within ten (10) days of the first day of the Temporary Closure. The notice shall state the nature and reason for the Temporary Closure, the anticipated duration of the Temporary Closure, what actions will be taken to maintain compliance with project permits and plan approvals, and any event which would reasonably be anticipated to result in the resumption of mining or the permanent cessation of mining. Mining operations must resume for not less than ninety (90) consecutive days in order to terminate the running of the Temporary Closure. If a Temporary Closure extends beyond three (3) years, the Department may deem mining operations to be permanently abandoned or ceased, and whereupon final reclamation must commence unless otherwise agreed by the Department.

The Permittee shall ensure that the project area and facilities are maintained in a safe condition during a Temporary Closure and the Permittee shall not allow the project area or facilities to be degraded / eroded or facilities to fall into a state of disrepair during or as a result of the Temporary Closure. Action shall be taken to prevent or mitigate any impacts to ground or surface waters from project facilities. All collection, treatment, maintenance, and monitoring activities required under project permits or plan approvals shall be performed under any Temporary Closure.

Abandonment or Cessation of Operations. Not later than thirty (30) days after the permanent cessation or abandonment of mining and milling operations, the Permittee shall notify the Authorized Officer of the cessation of mining operations.

Within ninety (90) days of the decision to permanently cease operations, an updated final Reclamation and Closure Plan, schedule, and Monitoring Plan must be submitted to ADNR for approval. The updated plans must address current conditions at the site.

Permanent reclamation of individual facilities must be implemented and completed in accordance with the conditions of this Reclamation Plan Approval.

Permanent reclamation of a facility will be complete when the following criteria are met:

- All terms of the current Reclamation Plan and conditions of this Reclamation Plan Approval have been met; and
- The performance standards under Alaska Administrative Code, Title 11 (Natural Resources) and Chapter 97 (Mining Reclamation) Article 2 (Reclamation Performance Standards) have been achieved.

Erosion Standard. Erosion features which form in areas that have been recontoured and covered with topsoil must be stabilized if they affect the long-term stability of the reclaimed area or may result in additional erosion or sedimentation. Actions to stabilize erosion features shall be conducted in a manner that minimizes disturbance to adjacent areas. Subsequent inspections shall be completed to verify that rills and gullies do not persist. If chronic or long-term erosion features are identified, then remediation of the site drainage that is contributing to the formation of the rills and gullies shall be completed.

Inspection and Entry. The Permittee shall permit authorized representatives of ADNR to enter into and upon the area and facilities covered under this plan approval at all reasonable times without notice for the purpose of inspecting the area and activities covered under this plan approval. Said inspections shall be subject to such safety and security procedures as the Permittee may from time to time adopt.

At any time upon ADNR's written request, the Permittee shall promptly make any and all records, documents, or other information required to be kept or maintained by law, regulation, ordinance or this Reclamation Plan Approval available to ADNR for inspection and copying as reasonably required by ADNR to determine the Permittee in

compliance with local, state and federal laws applicable to the operations authorized under this plan approval.

Violations. This authorization is revocable immediately upon violation of any of its terms, conditions, stipulations, nonpayment of fees, or upon failure to comply with any other applicable laws, statutes and regulations (federal and state).

Assignment. This plan approval may be transferred or assigned with prior written approval from ADNR. ADNR will only disapprove a transfer with good cause and will evaluate whether the proposed assignee (1) is qualified to hold interests in state mining rights under AS 38.05.190 and to acquire all other permits and authorizations necessary to conduct operations under the plan; (2) is on notice of default or subject to an enforcement action by any state agency on any lease, reclamation bond, or other permit within the state. Any assignee must commit in writing to be bound by this plan approval to the same extent as the Permittee, and must provide to ADNR all proofs of insurance, bonds, or undertakings required by this plan approval. Transfer of this plan approval may, at ADNR's discretion, require bond review and update.

Other Authorizations. The issuance of this authorization does not alleviate the necessity of the Permittee to obtain authorizations required by other agencies for this activity.

Change of Address. Any change of address must be submitted in writing to the Authorized Officer.

Modifications. Any request for modification of the Reclamation and Closure Plan and any other affected permits or authorizations must be made by written application to ADNR. Amendments to these plans may, at the discretion of ADNR, require bond review and update.

Statutes and Regulations. This plan approval is subject to all applicable state and federal statutes, including state, federal, and any local statutes and ordinances in effect on the effective date of this plan approval, new statutes, regulations, and ordinances enacted or promulgated after said effective date, and changes to existing statutes and regulations made after the effective date, to the extent constitutionally permissible.

Severability. If any clause or provision herein contained shall be adjudicated to be invalid, it shall not affect the validity or effect of any other clause or provision of this plan approval, nor constitute any cause of action in favor of either the Permittee or ADNR as against the other.

Save Harmless. The recipient of this Reclamation Plan Approval shall indemnify, save harmless, and defend the ADNR, its agents and its employees from any and all claims, actions or liabilities for injuries or damages sustained by any person or property arising directly or indirectly from approved activities or the Permittee's performance

under this Reclamation Plan Approval. However, this provision has no effect, if, and only if, the sole proximate cause of the injury is the ADNR's negligence.

Project Specific Stipulations

Permit Renewal. At least 120 days before the expiration of this plan approval, the Permittee must submit to the department an updated reclamation plan and cost estimate for approval.

Commencement of permitted activities will be considered an acceptance by Teck of these stipulations.

Approved: 
Marty Lentz
Chief, Mining Section
Division of Mining, Land & Water
Alaska Department of Natural Resources


Date

Appeal Right and Procedure

A person affected by this decision may appeal it, in accordance with 11 AAC 02. Any appeal must be received within 20 calendar days after the date of "issuance" of this decision, as defined in 11 AAC 02.040(c) and (d) and may be mailed or delivered to the Commissioner, Department of Natural Resources, 550 W. 7th Avenue, Suite 1400, Anchorage, Alaska, 99501; faxed to 1-907-269-8918, or sent by electronic mail to dnr.appeals@alaska.gov. If no appeal is filed by the appeal deadline, this decision becomes a final administrative order and decision of the department on the 31st calendar day after issuance. An eligible person must first appeal this decision in accordance with 11 AAC 02 before appealing this decision to Superior Court. A copy of 11 AAC 02 may be obtained from any regional information office of the Department of Natural Resources.