



**TEMPORARY WATER USE AUTHORIZATION (TWUA)
TWUA F2022-107**

ISSUED: November 18, 2022

EXPIRES: November 17, 2027

Teck American, Inc
Attn: Leslie Olmstead
501 N. Riverpoint Blvd, Suite 300
Spokane, WA 99202

Dear Environmental Management,

Re: Water Withdrawal - Road Construction Operation - APMA F9339/TWUA F2022-107

The Alaska Department of Natural Resources (ADNR) Water Resources Section, has completed the review of your above referenced APMA and/or Application for Temporary Use of Water (TWUA) to withdraw, divert, impound, and/or use water in support of mining activities as detailed in the applicable sections of the APMA submitted to the ADNR Mining Section or in the TWUA Application submitted to the ADNR Water Resources Section. Pursuant to AS 46.15 (Alaska Water Use Act), and 11 AAC 93.210 and 220 (Temporary water use/Procedure for temporary water use) as amended and the rules and regulations promulgated thereunder, permission is hereby granted to Teck American, Inc, Attn: Leslie Olmstead, 501 N. Riverpoint Blvd, Suite 300, Spokane, WA 99202 (hereinafter authorization holder), and to the authorization holder's contractor(s) to conduct water use activities as described herein and on any attachment hereto.

Please note all conditions on this authorization. If changes to this project are proposed during its siting, construction, or operation, please contact this office to determine if further review is necessary.

Project Description

Water sources and uses being authorized will be used in support of road construction activities as described in the Application for Temporary Use of Water for the Anaraaq and Aktigirug Exploration Program (AAEP Project) and the approved Plan of Operations. There are a total of five (5) sources of water being authorized under TWUA F2022-107: Ikalukrok Creek, Red Dog Creek, Grayling Jr. Creek, West Fork Ikalukrok Creek, and Bons Creek Reservoir (all for water withdrawals). Water use activities are required for winter seasonal ice road and ice bridge construction, access road construction, and dust control as needed.

Daily Duration and Months of Use

Water use activities will be conducted up to 4 hours per day (or as otherwise limited by the maximum authorized gallons per day (gpd), gallons per minute (gpm), or cubic feet per second

(cfs)). All water withdrawal activities will be conducted year-round for each authorized year (2022-2027).

Quantity of Water to Be Used

Winter Seasonal Ice Road and Ice Bridge Construction, Access Road Construction, and Dust Control activities from five water sources:

- A maximum combined daily total of 28,800 gpd is to be withdrawn from Ikalukrok Creek utilizing up to four pumps at a maximum pump withdrawal rate of 30 gpm per pump for up to four hours per day for up to 358 days per year.
- A maximum combined daily total of 24,000 gpd is to be withdrawn from Red Dog Creek utilizing one pump at a maximum pump withdrawal rate of 100 gpm per pump for up to four hours per day for up to 358 days per year.
- A maximum combined daily total of 7,200 gpd is to be withdrawn from Grayling Jr Creek utilizing one pump at a maximum pump withdrawal rate of 30 gpm per pump for up to four hours per day for up to 358 days per year.
- A maximum combined daily total of 7,200 gpd is to be withdrawn from West Fork Ikalukrok Creek utilizing one pump at a maximum pump withdrawal rate of 30 gpm per pump for up to four hours per day for up to 358 days per year.
- A maximum combined daily total of 27,600 gpd is to be withdrawn from Bons Creek Reservoir utilizing one pump at a maximum pump withdrawal rate of 115 gpm per pump for up to four hours per day for up to 358 days per year.

Water withdrawals are only authorized from within applicants mining claims and only within the source areas as described below and displayed in APMA F9339. A water source map is attached to this authorization.

Authorized Source(s) Legal Description for Water Withdrawal, Impoundment, or Diversion

- Source 1. The reach of Ikalukrok Creek flowing from SE1/4 Section 13, Township 32 North, Range 19 West, Kateel River Meridian; through SW1/4 Section 18, as it flows through Sections 19, 30, and NW1/4 Section 31, Township 32 North, Range 18 West, Kateel River Meridian; through SE1/4 Section 36, Township 32 North, Range 19 West, Kateel River Meridian; and then as it flows through Section 1, SE1/4SE1/4 Section 2, E1/2 Section 11, and W1/2NE1/4 Section 14, Township 31 North, Range 19 West, Kateel River Meridian.
- Source 2. The reach of Red Dog Creek flowing from SW1/4 Section 18, Township 31 North, Range 18 West, Kateel River Meridian as it flows through Section 13, to NE1/4 Section 14, Township 31 North, Range 19 West, Kateel River Meridian.
- Source 3. The reach of an unnamed stream locally known as Grayling Jr Creek within S1/2S1/2 Section 30, Township 32 North, Range 18 West, Kateel River Meridian.

Source 4. The reach of West Fork Ikalukrok Creek flowing from S1/2 Section 13, to SE1/4 Section 14, Township 32 North, Range 19 West, Kateel River Meridian.

Source 5. Bons Creek Reservoir within NW1/4SW1/4 Section 20, Township 31 North, Range 18 West, Kateel River Meridian.

Conditions of TWUA

1. This authorization does not authorize the authorization holder or contractor(s) to enter upon any lands until proper rights-of-way, easements, or permission documents from the appropriate landowner have been obtained.
2. Follow acceptable engineering standards in exercising the privilege granted herein.
3. Comply with all applicable laws, and any rules and/or regulations issued thereunder.
4. Except for claims or losses arising from negligence of the State, defend and indemnify the State, the State's agents, and the State's employees against and hold each of them harmless from any and all claims, demands, suits, loss, liability and expense, including attorney fees, for injury to or death of persons and damages to or loss of property arising out of or connected with the exercise of the privileges covered by this authorization.
5. Notify the Water Resources Section upon change of address.
6. The authorization holder is responsible for obtaining, maintaining, and complying with other permits/approvals (state, federal, or local) that may be required prior to beginning water withdrawal, diversion, impoundment and/or use, including but not limited to fish habitat permit(s) from the Alaska Department of Fish and Game (ADF&G), Habitat Division.
7. The authorization holder shall allow an authorized representative of the Water Resources Section to inspect, at reasonable times, any facilities, equipment, practices, or operations regulated or required under this authorization.
8. Failure to respond to a request for additional information during the term of the authorization may result in the termination of this authorization.
9. This authorization, or a copy thereof, shall be kept at the site of the authorized project described herein. The authorization holder is responsible for the actions of contractors, agents, or other persons who perform work to accomplish the approved project, and shall ensure that workers are familiar with the requirements and conditions of this authorization. For any activity that significantly deviates from the approved project during its siting, construction, or operation, the authorization holder is required to contact the Water Resources Section and obtain approval before beginning the activity.
10. The Water Resources Section may modify this authorization to include different limitations, expand monitoring requirements, evaluate impacts, or require restoration at the site.

11. Any false statements or representations, in any application, record, report, plan, or other document filed or required to be maintained under this authorization, may result in the termination of this authorization.
12. Pursuant to 11 AAC 93.220 (f), this authorization may be suspended or terminated by the Department of Natural Resources to protect the water rights of other persons or the public interest.
13. Except as otherwise specifically noted herein or by attachment hereto, only one authorized pump may be operated at a time from the same authorized source of water.
14. No damming or diversion of waters is permitted unless specifically authorized by the Alaska Department of Natural Resources and the Alaska Department of Fish and Game.
15. Adequate flow and water levels, as determined by the Alaska Department of Fish and Game, Habitat Division, must remain to support indigenous aquatic life and provide for the efficient passage and movement of fish if any are present. Except as otherwise specifically noted herein or by attachment hereto, issuance of this authorization does not give the authorization holder the right to block or dam a water course. Any water intake structures in fish bearing waters, including a screened enclosure, well-point, sump, or infiltration gallery, must be designed, operated, and maintained to prevent fish entrapment, entrainment, or injury at the maximum withdrawal rate, unless specifically exempted by the Alaska Department of Fish and Game, Habitat Division. Inspect the intake screen for damage (torn screen, crushed screen, screen separated from intake ends, etc.) after each use and prior to each deployment. Any damage must be repaired prior to use of the structure. The structure must always conform to the original design specifications while in use. The suction hose at the water source take point must be clean and free from contamination.
16. Except as otherwise authorized or required herein, in-water activity to facilitate water withdrawal shall be limited to placement and removal of the intake structure only. No other in-water activities will occur to facilitate water withdrawal pursuant to this authorization. There shall be no wheeled, tracked, excavating, or other machinery or equipment (with the exception of the non-motorized screened intake box) operated below the ordinary high water line to facilitate water withdrawal pursuant to this authorization. Except as otherwise authorized herein, water sources shall not be altered to facilitate water withdrawal or disturbed in any way. If banks, shores, or beds are inadvertently disturbed, excavated, compacted, or filled, they shall be immediately stabilized to prevent erosion and sedimentation of the water source. Any disturbed areas shall be recontoured and revegetated with native vegetation.
17. Any discharge shall comply with the Alaska Water Quality Standards (18 AAC 70). This may require the installation and maintenance of settling ponds or similar systems to reduce turbidity and settleable solids in the discharges. Water discharge (including runoff) shall not be discharged at a rate or location resulting in sedimentation, erosion, or other disruptions to the bed or banks of water bodies, causing water quality degradation.
18. Pumping operations shall be conducted in such a way as to prevent any petroleum products or hazardous substances from contaminating surface or ground water. Pumps shall not be fueled or serviced within 100 feet of a pond, lake, or stream unless the pumps are situated within a catch basin designed to contain any spills. Absorbent pads shall be readily available at the water withdrawal sites. Hazardous and non-hazardous spills must be reported to the

Alaska Department of Environmental Conservation at 1-800-478-9300 per their Notification Requirements and to the Alaska Department of Natural Resources.

19. The placement of mining and pumping equipment shall not unnecessarily hinder public access, if any, to the above-described sources.
20. Per 11 AAC 05.260(e), an annual administrative service fee shall be assessed on this authorization.

This TWUA is issued pursuant to 11 AAC 93.220. No water right or priority is established by a TWUA issued pursuant to 11 AAC 93.220. Water so used is subject to appropriation by others.

Pursuant to 11 AAC 93.210 (b), an authorized TWUA is subject to amendment, modification, or revocation by the Department of Natural Resources if the Department of Natural Resources determines that an amendment, modification, or revocation is necessary to supply water to lawful appropriators of record or to protect the public interest.

Any questions or concerns about this TWUA may be directed to the preparer of this authorization, Natural Resource Specialist, Jenny March at 907-451-2793 or by email at jenny.march@alaska.gov.

Signature for Issuance of TWUA:

Approved: Kindra Geis

Kindra Geis, Natural Resource Specialist 3

An eligible person affected by this decision, and who provided timely written comment or public hearing testimony to the department, may appeal the decision to the DNR Commissioner per AS 44.37.011 and 11 AAC 02. Any appeal must be received within twenty (20) calendar days after issuance of this decision under 11 AAC 02.040. An eligible person must first appeal a decision to the Commissioner before seeking relief in superior court. The Alaska State Courts establish its own rules for timely appealing final administrative orders and decisions of the department.

Appeals may be mailed or hand-delivered to the DNR Commissioner's Office, 550 W. 7th Avenue, Suite 1400, Anchorage, Alaska, 99501; or faxed to (907)-269-8918; or sent by electronic mail to dnr.appeals@alaska.gov. Appeals must be accompanied by the fee established in 11 AAC 05.160(d)(6), which has been set at \$200 under the provisions of 11 AAC 05.160 (a)-(b). A .pdf or print copy of 11 AAC 02 may be obtained by contacting Erik Fossum via phone at (907) 269-8429, via email at erik.fossum@alaska.gov, and is also available on the department's website at <https://dnr.alaska.gov/mlw/pdf/DNR-11-AAC-02.pdf>.