



**TEMPORARY WATER USE AUTHORIZATION (TWUA)
TWUA F2024-057**

ISSUED: May 31, 2024

EXPIRES: December 31, 2028

Constantine North Inc
800 West Pender St, Ste 320
Vancouver, BC, Canada V6C 2V6

Constantine Mining LLC
102 2nd Ave North
Haines, AK 99827

Alyu Mining/Haines Mining
PO Box 130
Haines, AK 99827

Dear Environmental Management,

Re: Water Withdrawal - Exploration Operation - APMA J5690/TWUA F2024-057

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 Constantine North Inc, 800 West Pender St, Ste 320, Vancouver, BC, Canada V6C 2V6; Constantine Mining, LLC, 102 2nd Ave North, Haines, AK 99827; and Alyu Mining Inc and Haines Mining-Exploration Inc, PO Box 130, Haines, AK 99827 (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 mineral exploration activities as described in the multi-year APMA J5690 Palmer Project. There are a total of five (5) water withdrawal sources being authorized under TWUA F2024-057: Pump Valley/Sara Creek, Upper Argillite Creek, "B" Creek, Stryker Well, and 61b aka Brazil Well. Water use activities are required for exploration drilling activities.

Daily Duration and Months of Use

Water use activities will be conducted up to 24 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 May 1st through October 31st of each authorized year (2024-2028).

Quantity of Water to Be Used

- Exploration Activities: A maximum combined daily withdrawal of 86,400 gpd utilizing up to three pumps per source at a maximum combined pump withdrawal rate of 60 gpm (0.078 cfs) for up to 24 hours per day for no more than 180 days per season from each of water sources; Pump Valley/Sara Creek, Upper Argillite Creek, "B" Creek, Stryker Well, and 61b aka Brazil Well.

Water withdrawals are only authorized from within applicants mining claims and only within the source areas as described below and displayed in APMA J5690.

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

- Source 1. The reach of an unnamed stream locally known as Pump Valley/Sara Creek flowing from NW1/4NW1/4 Section 34, through SW1/4SW1/4 Section 27, and through to SE1/4SE1/4 Section 28, Township 28 South, Range 53 East, Copper River Meridian.
- Source 2. The reach of an unnamed stream locally known as Upper Argillite Creek within SW1/4NE1/4 Section 34, Township 28 South, Range 53 East, Copper River Meridian.
- Source 3. The reach of an unnamed stream locally known as "B" Creek within NE1/4NE1/4 Section 6, Township 29 South, Range 54 East, Copper River Meridian.
- Source 4. A drilled well, Stryker Well, within SW1/4SW1/4 Section 34, Township 28 South, Range 53 East, Copper River Meridian.
- Source 5. A drilled well, 61b aka Brazil Well, within NW1/4NE1/4 Section 6, Township 29 South, Range 54 East, Copper 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 online at ReportSpills.alaska.gov or by phone at 1-800-478-9300 per their Notification Requirements and to the appropriate Alaska Department of Natural Resources office, preferably by email at dnr.nro.spill@alaska.gov or by phone at (907) 451-2739 for the Northern Region; dnr.scro.spill@alaska.gov (907) 269-8528 for the Southcentral Region; or dnr.sero.spill@alaska.gov (907) 465-3513 for the Southeast Region.
19. All equipment, including pumps, hoses, screened intakes, and other in-water equipment used at or adjacent to water bodies and water sources must be thoroughly inspected, cleaned, and free from contamination and invasive species (including but not limited to elodea) after pumping and when moving between bodies of water. Any plant material must be removed and discarded to an upland location, and withdrawn water containing plant material may not be discharged into any other waterbodies except after treatment that prevents the spread of Elodea.

See <https://dnr.alaska.gov/ag/akpmc/invasives/elodea.htm> for elodea Best Management Practices (BMPs) and <https://www.fws.gov/media/aquatic-invasive-species-prevention-guidelines-pdf> for a full list of invasive species Best Management Practices. If elodea or other invasive plants and/or animals (e.g., zebra mussels) are found before or during project operations, call the Invasive Species Hotline: 1-877-INVASIV (1-877-468-2748). See <https://plants.alaska.gov/invasives/index.htm> for a list of invasive species.
20. The placement of mining and pumping equipment shall not unnecessarily hinder public access, if any, to the above-described sources.
21. 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 by email at jenny.march@alaska.gov or by phone at 907-451-2793.

Signature for Issuance of TWUA:

Approved: Kindra Geis

Kindra Geis, Natural Resource Specialist 3

An eligible person affected by this decision may appeal 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 Court System establishes 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)(1)(F), which has been set at \$200 under the provisions of 11 AAC 05.160 (a)-(b). A copy of 11 AAC 02 is available on the department's website at <https://dnr.alaska.gov/mlw/pdf/DNR-11-AAC-02.pdf>.