

ALASKA DEPARTMENT OF NATURAL RESOURCES

Water Resources Section

TO: Mike Walton, NRM

DATE: May 7, 2019

FROM: Jenny March, NRS II

FILE NUMBER: TWUA F2019-048 and F2019-049
Constantine Mining, LLC- Palmer Project

The subject Temporary Water Use Authorization case files have been reviewed for accuracy and conformance with statutes and regulations. The following comments, recommendations, or corrections are presented.

Check for duplicate water use authorization:

There are no existing water rights or temporary water use authorizations for the water sources requested under the TWUA F2019-048 and F2019-049 applications.

Agency Notice:

- Agency notice dated: April 3, 2019.
- Deadline for comments: April 18, 2019.
- ADF&G Habitat: Per May 7, 2019 email from K. Kanouse, ADF&G Habitat haven't issued any fish habitat permits, since most of the project's work is in non-fish-bearing waters.
- Alaska Department of Environmental Conservation: No Comment.
- DNR-Mining: Reclamation plan approval issued 5/6/2019, expires 12/31/2023.

Project Description

Water will be used in support of exploration activities associated with the multi-year APMA J5690 Palmer Project.

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) May 1st through October 31st of each authorized year (2019-2023).

Quantity of Water to Be Used

- ☒ Exploration Activities: A maximum withdrawal of 86,400 gpd, except for TWUA F2019-049 Source 5 (Marble), from which the maximum withdrawal is limited to 6,000 gpd, all at a maximum pump withdrawal rate of 20 gpm (0.04 cfs) per pump for up to 24 hours per day for no more than 184 days per season from each of ten streams (up to three pumps per source with the exception of TWUA F2019-049 Source 5).

Effect on fish and game:

No effect on fish and game is anticipated for this project, as no fish habitat permits were required for this requested water withdrawal activity. When a fish habitat permit is required for a project, any ADF&G Habitat approval of the proposed use of water is subject to the project description TWUA F2019-048 and F2019-049, Review and Determination

and any listed stipulation(s) on said fish habitat permit. Any issued Fish Habitat permits are listed above. When ADF&G Habitat issues a fish habitat permit for a proposed use of water, it represents that ADF&G Habitat is satisfied that the proposed use of water will still leave enough water flow and/or water level in the requested water source to provide for fish, fish habitat, and/or fish passage.

The conditions on an issued TWUA authorization are designed to minimize near-term, long-term and cumulative impacts to the environment. Pursuant to AS 46.15.155(d), both ADF&G-Habitat Division and Alaska Department of Environmental Conservation (ADEC) were notified about these applications. If either ADF&G or ADEC had concerns about near-term, long-term, or cumulative impacts to the environment attributable to the withdrawal, transport, use or discharge of the pumped water, they would have commented with those concerns. These case files do not contain any actual proof of likely to be harmful near-term or long-term impacts or documented harmful cumulative impacts to the environment attributable to the requested or previous water withdrawal activities associated with this project.

Prior Appropriators and Nearby Temporary Water Use:

A land information search for Case Category 8 (water) within Sections 1, 3, 11, 12, and 22, Township 29 South, Range 53 East, Copper River Meridian; Sections 28 and 33, Township 28 South, Range 53 East, Copper River Meridian; Sections 6 and 7, Township 29 South, Range 54 East, Copper River Meridian, and Section 28, Township 28 South, Range 54 East, Copper River Meridian did not reveal any active temporary water use authorization(s) or active surface water rights for the water sources (stream reaches) requested for this project.

There is currently one issued TWUA for this project, TWUA F2015-080, which is not for the same water sources that are being requested in the TWUA F2019-048 and F2019-049 applications. Nearby authorization ADL 101710 is in Permit Issued status for 50,000 gpd from Porcupine Creek for placer mining (this operation is currently suspended and the camp is being rented by Constantine Mining, LLC for this project and will be submitting a TWUA application soon for camp water withdrawals from a groundwater source). Application LAS 28386 is for 540,000 gpd from Porcupine Creek for placer mining (currently only performing reclamation at this operation). LAS 21243 is a nearby instream flow reservation of water certificate for the reach of the Klehini River that goes from the Canadian border to the confluence with the Chilkat River.

The LAS 21243 certificated amounts on the Klehini River (Table 1 - below) range from a low of 800 cfs October 1-31 to a high of 3,350 cfs July 1-31 within the May 1 to October 31 period covered in the subject F2019-048 and F2019-049 TWUA applications. Historic stream flow data from USGS is available for the Klehini River for the period October 1981 through September 1993. Note that the 0.13 cfs (60 gpm) maximum combined pump rate per source requested in the TWUA F2019-048 and F2019-049 applications represents just 0.029 percent of the lowest (May 1 to May 31) remaining mean of monthly discharge flow (480 cfs in excess of the LAS 21243 reservation) in the Klehini River. The review of historic data revealed that in only 12 out of the 72 applicable months of data (detailed below) available from USGS was the monthly mean flow of the Klehini River below the corresponding instream flow reservation certificated amounts established by certificate issued August 18, 2009. There is currently no gauging station in the Klehini River.

- 1982-May (787.1cfs)
- 1983-September (1,025cfs)
- 1984-July (2,932 cfs), September (989.1cfs)
- 1985-May (1,086cfs), June (2,820cfs), August (2,494cfs), October (525.8cfs)
- 1986-May (1,111cfs)

- 1989-June (2,551cfs), August (2,492cfs)
- 1990-October (667.7cfs)

A pump withdrawal rate of 0.13 cfs from the requested stream reaches under the F2019-048 and F2019-049 subject TWUA applications would be practically undetectable in the LAS 21243 certificated Klehini River reach which is approximately 5 or more MTR sections (5 miles) distant from the stream reaches requested in the TWUA F2019-048 and TWUA F2019-049 applications (the separation distance exception is the Marble source which is approximately 1-mile distant, but only requests 6,000 gpd at a pump rate of 20-gpm (0.04 cfs)).

A 0.13 cfs water withdrawal from sources upstream from stream reaches certificated or applied for in a reservation of water would likely not be detectable by stream gages (such as utilized by USGS) that usually report stream flows to the nearest 1 cfs. It is also noted that an application for water right or an application for reservation of water is not a vested appropriative right. Chuitna Citizens Coalition V. Sullivan, Superior Court for State of Alaska 3AN-11-12095 CI. It has been determined that the TWUA F2019-048 and F2019-049 requested water withdrawals should not unduly affect the flows of the Klehini River, because the TWUA F2019-048 and F2019-049 applications do not request any water withdrawals directly from the Klehini River. Therefore, based on the above calculations and the separation distances involved, no water right prior appropriators would be adversely affected by issuing authorizations for the TWUA F2019-048 and F2019-049 applications.

Table 1

KLEHINI RIVER	Mean of Monthly Flows (cubic feet/sec)	Reservation Flows (cubic feet/sec)	Available Water after Reserv. Flows (cubic feet/sec)	Available Water after Reserv. Flows (gal/day)
January	285	235	50	32,336,350
February	242	215	27	17,461,629
March	222	190	32	20,695,264
April	390	250	140	90,541,780
May	1,780	1,300	480	311,722,414
June	3,730	2,840	890	575,587,030
July	4,150	3,350	800	518,028,327
August	3,200	2,540	660	429,426,728
September	1,810	1,200	610	394,176,167
October	1,320	800	520	338,238,221
November	518	370	148	95,715,596
December	375	285	90	58,205,430

It has been determined that issuing temporary water use authorizations for the TWUA F2019-048 and F2019-049 applications will not unduly impact any prior appropriators (including instream flow reservations) or applications for water rights or instream flow/lake level reservations in the area that require further consideration on account of such use.

No water right or priority is established by a temporary water use authorization. The Department may suspend operations authorized under an issued temporary water use authorization whenever such suspension shall in its judgment be necessary to protect the public interest or that of a prior appropriator. Authorization as to one or more of the requested sources could be amended, modified or revoked as necessary (without revoking the entire temporary water use authorization)

to supply water to lawful appropriators of record or to protect the public interest, or the entire temporary water use authorization could be revoked.

Proposed means of construction:

Adequate. A site plan was included with the application packet.

Effect upon access to navigable or public water:

No foreseeable effects upon access to navigable or public water ways.

It is interpreted that the proposed use of water is in the public interest. This file contains no evidence of a likelihood of harm to the public interest. Furthermore, it is inferred that the applicant has the intent and ability to complete the project.

Recommendation: Issue Temporary Water Use Authorizations

Concurrence [] Other: _____

mwalt
Signature

May 9, 2019
Date

Michael Walton, Natural Resource Manager II
Title

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 907-269-8918, or sent by electronic mail to dnr.appeals@alaska.gov. This decision takes effect immediately. 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. Under 11 AAC 02.030, appeals and requests for reconsideration filed under 11 AAC 02 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) and (b).