



THE STATE
of **ALASKA**
GOVERNOR MICHAEL J. DUNLEAVY

Department of Natural Resources

DIVISION OF MINING, LAND, & WATER
Water Resources Section
Northern Office

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AMENDED TEMPORARY WATER USE AUTHORIZATION TWUA F2019-082

ISSUED: October 1, 2019
EXPIRES: December 31, 2023

Pebble Limited Partnership
3201 C Street, Suite 505
Anchorage, AK 99503

Dear Environmental Management,

Re: Water Withdrawal –Hydrogeological Site Investigation APMA A6118 / TWUA F2019-082

The Alaska Department of Natural Resources (ADNR) Water Resources Section, has completed the review of your above referenced APMA and/or TWUA F2019-082 amendment request to withdraw, divert, impound, and/or use water in support of continuing characterizing site hydrogeologic conditions as detailed in the applicable sections of the APMA submitted to the ADNR Mining Section or in the TWUA F2019-082 amendment request 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 Pebble Limited Partnership, 3201 C Street, Suite 505, Anchorage, AK 99503 (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 of the 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.

This Amended Temporary Water Use Authorization is issued to amend Temporary Water Use Authorization TWUA F2019-082 issued July 26, 2019 to extend the season of use through November 30 of each authorized year.

Project Description

Water will be used in support of Pebble Project pump test activities to continue characterizing site hydrogeologic conditions. The authorization holder proposes to withdraw water from a total of three geotechnical drill hole (groundwater) sources:

identified as proposed pump test wells PW19-A and PW19-B, and an existing pump test well GH18-406S. The water withdrawal amounts requested on the TWUA F2019-082 application equate to a combined seasonal total of 14.23 acre-feet per year at a maximum withdrawal rate of 100 gallons per minute per well for wells PW19-A and PW19-B, and 30 gallons per minute for well GH18-406S. Pump test wells PW19-A and PW19-B will be drilled and developed in 2019. Pump test well GH18-406S was drilled in 2018. Pump test activities begin with a step-discharge pump test, which may be repeated multiple times, and then followed by a constant-discharge pump test requiring 24-hour continuous pumping (at the maximum sustainable rate observed during the step-discharge pump test phase) lasting up to 7 consecutive days per test. All water produced during the pump testing activity will be discharged to upland areas, which discharge areas will be monitored by the authorization holder's site staff during active pump testing.

Daily Duration and Months of Use

Water use activities will be conducted up to 24 hours per day within the May 1 through November 30 season of each authorized year (or as otherwise limited by the maximum authorized acre-feet per day and acre-feet per season).

Quantity of Water to Be Used

- Groundwater Pump Test Wells: A combined maximum withdrawal of 1.02 acre-feet per day (from all three source wells combined) at an approximate maximum withdrawal rate of 100 gallons per minute (gpm) from each of source wells PW19-A and PW19-B (utilizing two simultaneously operating 50-gpm rated pumps per well), and an approximate maximum withdrawal rate of 30 gallons per minute from source well GH18-406S, but subject to a combined seasonal limit of 14.23 acre-feet of water from all three source wells combined. Water withdrawal will simultaneously occur from source wells PW19-A and PW19-B, with the potential for simultaneous pumping from all three source wells.

Legal Description of Water Sources. (See attached Figure 1 Pump Test Well Locations map)

1. A proposed pump test well (PW19-A) to be drilled to an approximate depth of 500 to 550 feet below ground surface, and to be located within NE1/4SW1/4 Section 22, Township 3 South, Range 35 West, Seward Meridian.
2. A proposed pump test well (PW19-B) to be drilled to an approximate depth of 150 feet below ground surface, and to be located within NE1/4SW1/4 Section 22, Township 3 South, Range 35 West, Seward Meridian.
3. An existing drill hole to be used as a pump test well (GH18-406S), 151.5 feet in depth, located within SE1/4SE1/4 Section 11, Township 3 South, Range 36 West, Seward Meridian.

Conditions of Amended Temporary Water Use Authorization TWUA F2019-082

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, at reasonable times, one or more authorized representatives of the Water Resources Section to inspect on the same inspection trip or trips any facilities, equipment, practices, or operations regulated or required under this authorization. Authorization holder shall provide and bear the cost of all transportation and associated expenses necessary to facilitate said inspection(s).
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, including but not limited to changing water intake locations, 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 written 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 and stream flow measurement equipment) 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. Drill holes shall not be drilled within 100 feet of a water body.
20. When conducting activities under this authorization, authorization holder shall adhere to the terms of the current State-approved Pebble Project Water Withdrawal Plan (see Revision 1 dated July 13, 2010 attached hereto) and any future amendments thereto, except as otherwise required by other conditions on this authorization.
21. The placement of exploration and pumping equipment shall not unnecessarily hinder public access, if any, to the above-described water sources.
22. Per 11 AAC 05.260(e), an annual administrative service fee shall be assessed on this authorization.

This Amended Temporary Water Use Authorization is issued pursuant to 11 AAC 93.220. No water right or priority is established by a temporary water use authorization issued pursuant to 11 AAC 93.220. Water so used is subject to appropriation by others.

Pursuant to 11 AAC 93.210(b), authorized temporary water use 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 amended temporary water use authorization may be directed to Natural Resource Manager, Mike Walton at 907-269-8609 or by email at michael.walton@alaska.gov.

Attachment: Figure 1 Pump Test Well Locations

Approved: Michael Walton

Michael Walton, Natural Resource Manager II

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).

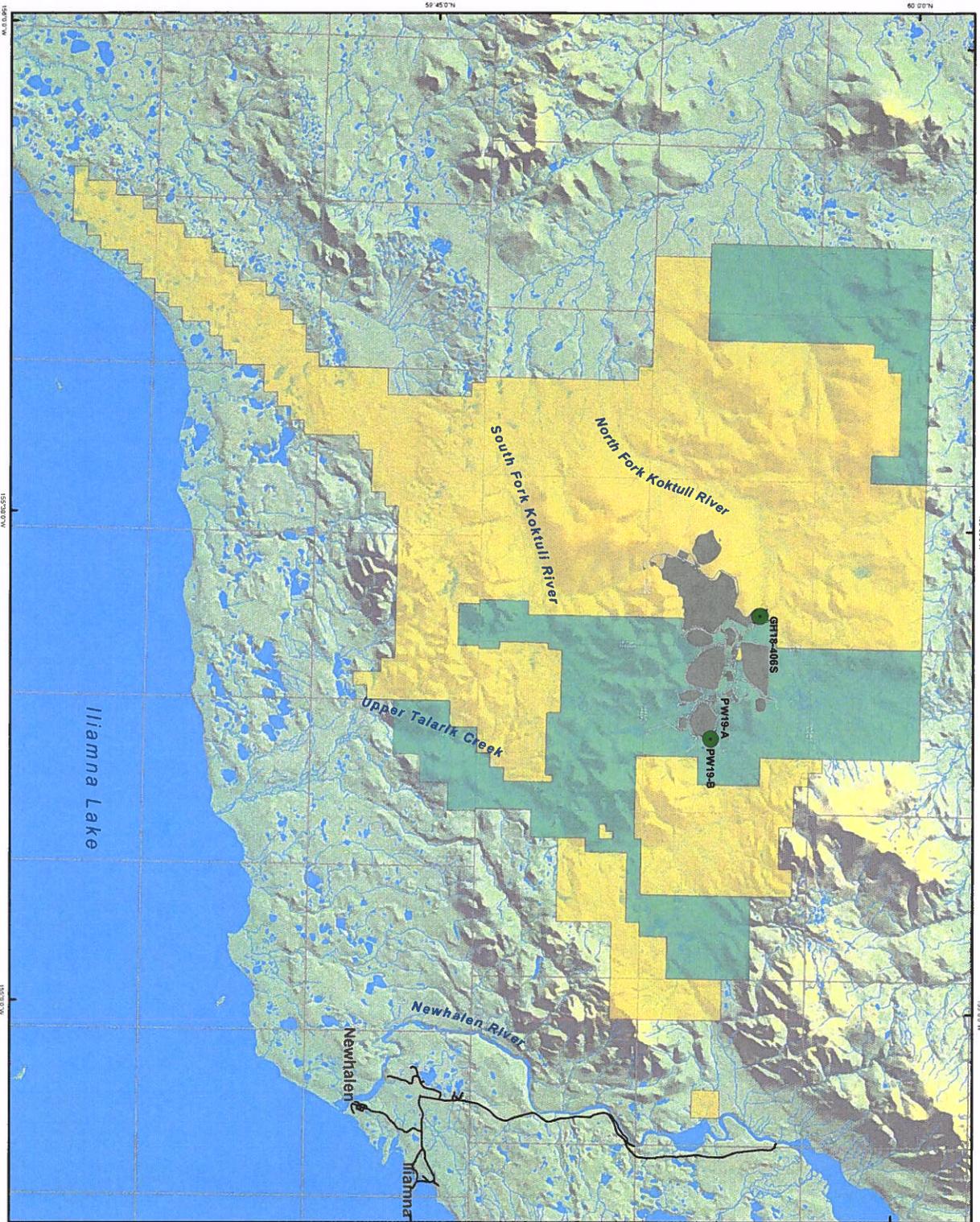


FIGURE 1
Pump Test Well Locations

- Pump Tests Wells
- Mine Site Footprints
- Mining Claims**
- Pebble East Claims Corp.
- Pebble West Claims Corp.
- Streams
- Township Boundary



Scale 1:220,000
 Alaska State Plane Zone 9 (unite feet)
 1983 North American Datum

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