Permit Issued By: Northwest Arctic Borough
Planning Department
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PO Box 1110
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Permittee: Native Village of Buckland
PO Box 67
Buckland, AK 99727
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Permittee Contact Information:
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Project Description:

The Native Village of Buckland (BUCKLAND) submitted a Title 9 application to extract sand, gravel, and rip-rap by truck-shovel and blasting at a previously permitted material source near the community of Buckland (‘Gravel extraction’ is a Major Use in the General Conservation District and a Conditional Use in the Subsistence Conservation District). The project will continue to develop the Kanik Creek Quarry and provide material to support anticipated community projects for Buckland. The proposed start date is January 2020 and will be completed by December 2024.

Specific details of the project are contained in the Title 9 application (20-02-104) and documents submitted by BUCKLAND to the Borough Planning Department. These documents are incorporated into the Borough’s administrative record. Project Activities are summarized below.
Project Location:

The project site is located within Township 7 North, Range 12 West, Section 31 and 32, USGS Quad Map Candle D-5, Kakeel River Meridian. The Kanik Creek Quarry is located approximately 4.4 miles southwest of Buckland.

The project is located in the General Conservation (Section 31) and Subsistence Conservation Districts (Section 32).

![Location of Kanik Creek Quarry](image)

Figure 1. Location of Kanik Creek Quarry

Gravel Extraction:

The Kanik Creek Quarry has enough material to support anticipated gravel demands at Buckland for the next 25+ years. The methods of mining will include truck-and-shovel operations and occasional blasting. BUCKLAND owns excavators, loaders, haul trucks, dozers, graders, and a mechanical screen to use in truck-and-shovel mining operations. Gravel extraction activities proposed:

- Excavators will be used to extract loosened material from the pit walls and place material in haul trucks for transport.
- Loaders will be used to add or remove material from stockpiles and/or feed material through the mechanical screen or crusher. If a crusher is required, BUCKLAND will hire a contractor that owns the equipment.
- Haul trucks will be used to move material from active areas of the pit to staging areas. Depending on the quality of the material extracted and the quality needed for projects, the material will either be stockpiled for use or staged for crushing and/or screening. After processing, the high-quality material will be placed in gravel stockpiles and the
waste material will be placed in a designated unusable material stockpile in the south-central area of the pit.

- Dozers will be used to move material short distances and to regrade exposed slopes for stabilization and reclamation.
- Graders will be used to maintain roads and staging surfaces.

Blasting will be done by a qualified blasting contractor hired by BUCKLAND. The exact schedule and size of the blasting will depend on projects approved for construction and funding received, but is not expected to occur until 2022.

Site Plan

The mining phases planned for the Kanik Creek Quarry were based on gravel demand over the next 5-years according to annual maintenance needs and village improvement projects that are expected prior to 2025. Most of the material available within the pit is intact rock and requires blasting to make it accessible for processing into material that meets gradation requirements. A total volume of approximately **72,300 cubic yards** (CY) of material is expected to be mined from the quarry in the 5-year period of this permit.

**Phase 1a:** Phase 1a of mining at the Kanik Creek Quarry will focus on material that was processed and stockpiled during previous mining operations. Four existing stockpiles are located in the southern area of the active mining area and can be loaded for use without disturbing additional ground. This material is expected to require little to no additional processing. Approximately **2,700 CY** of material is available in this phase.

**Phase 1b:** If needed, additional loose material is expected to be available in a portion of the haul road located near the center of the active mining area. Approximately **4,600 CY** of material is available in this phase.

Phase 1a and 1b have a combined total of 7,300 CY, which is estimated to meet Buckland’s short-term needs through 2022. Projected projects between 2020 and 2022 include annual road maintenance, pond infills for safety, and completion of a small subdivision road. All material in Phase 1a and 1b is currently stockpiled in the southern area of the pit. If additional screening is required, gravel will be stockpiled near the east entrance and unusable material will be stockpiled in the designated area in the south-central area of the pit.

**Phase 2:** Phase 2 is located in the northwest portion of the active area of the pit, near the western entrance, and will require blasting. A qualified blasting contractor will be hired to complete the work, develop a blasting plan, and submit necessary permits. Screening and/or crushing will likely be required of blasted material. Approximately **65,000 CY** of material is estimated to be available in this phase. This quantity should be sufficient for a large landfill project anticipated in 2022, ongoing annual maintenance projects, and to begin stockpiling for an airport rehabilitation project anticipated in 2025. Processed gravel will be stockpiled in a staging area near the eastern entrance and unusable material will be stockpiled in the designated pile in the south-central area of the pit.
Reclamation Plan

Reclamation at the Kanik Creek Quarry will consist of interim reclamation on exposed slopes at seasonal closures and Best Management Practices (BMPs) during mining to prevent excessive water and wind erosion. A Storm Water Pollution Prevention Plan (SWPPP), administered by the Alaska Department of Environmental Conservation (ADEC), will be developed for the pit and will outline BMP installation, maintenance, monitoring, and inspection requirements. BMPs will include, but may not be limited to, equipment tracking on exposed slopes, berms or straw waddles on long slopes and around stockpiles, temporary seeding, and fuel containment.

During mining and seasonal closures, all slopes will be no steeper than 3H:1V to prevent sloughing or slides, minimize gullying, and encourage natural revegetation. Slopes that have reoccurring failures will be lowered until they are stabilized. Stockpiled material will be protected by berms or waddles to prevent sediments from entering drainageways or washing into haul roads or staging areas. Discharge from the outlet of the sediment pond in the southeast corner of the pit will be monitored for sediments.

The mining footprint during the 5-year period of this permit will stay relatively unchanged since all mining is contained within currently active areas of the pit. As a result, no additional ground disturbance will occur and areas of the pit that are currently stabilized from previous operators will not be disturbed. The final 3H:1V cut face of Phase 2, consisting of approximately 1.3 acres, will be permanently stabilized at the end of this 5-year permit. No final reclamation (i.e., pit closure) is anticipated in the next 5 years because the Kanik Creek Quarry has ample material available for mining to continue beyond the terms of this permit.
Current Approvals:

- Mining & Reclamation plan, approved by NANA Regional Corporation and the Alaska Department of Natural Resources (ADNR)
- Mine Safety and Health Administration (MSHA) Part 46 Safety Training Plan and Mine ID
- ADNR Demonstration of Financial Assurance for Reclamation
- Multi-sector General Permit (MCGP) for Stormwater Discharge and a Storm Water Pollution Prevention Plan (SWPPP), administered by the Alaska Department of Environmental Conservation (ADEC)
- US Army Corp of Engineers (USACE) Section 10/404 Permit to work in/adjacent to wetlands

When operations commence, the following permits will be required when applicable:

- Rock Crusher Minor General Permit (MG9) from the ADEC
- Explosives License and/or Permit from the Bureau of Alcohol, Tobacco, & Firearms (ATF)
- Blasting Safety Plan, approved by MSHA

Permit Authorization and Documentation:

BUCKLAND submitted a Title 9 Land Use Permit application (20-02-104) for the following Uses: ‘Gravel extraction’ is a Major Use in the General Conservation District and a Conditional Use in the Subsistence Conservation District.

The Title 9 application was received on November 11, 2019. On November 21, 2019 the Borough Planning Department deemed the application was complete.

Permit fees due totaled $250. The applicant requested a waiver for permit fees because the project will benefit the community of Buckland by providing needed material to support community projects. The Planning Director granted the waiver of fees.

The Planning Director has the authority to permit ‘Gravel extraction’ as a Major Use in the General Conservation District and a Conditional Use in the Subsistence Conservation District, pursuant to NABC 9.12.050 and 9.12.030. A Conditional Use Permit requires a 20-day public comment period. There were no public comments.

Permit Terms and Conditions:

1. The Native Village of Buckland (BUCKLAND) shall comply with the terms of the permission, permits and/or agreements granted by the federal government, State of Alaska, Northwest Arctic Borough and other applicable agencies.
2. BUCKLAND shall comply with any and all applicable local, borough, state and federal laws. Failure to abide by any part of this permit, or violations of any pertinent borough ordinances or state or federal law or regulation, will be considered grounds for revocation of the permit or denial of future permit requests and may result in issuance of fines or other penalties. This provision applies to all persons working under the authority of this permit.

3. The Permittee is responsible for ensuring that all employees, contractors, sub-contractors, and any other persons working for the permittee and conducting activities allowed by this permit are familiar with and adhere to the conditions of this permit.

4. All trash and human waste generated at the property must be properly disposed of in accordance with Northwest Arctic Borough Ordinance 9.25.020.M., establishing standards disposal of refuse, human body waste, and chemicals. All remedial activities shall comply with any and all other applicable state and federal laws, including all applicable hazardous waste and disposal requirements, all waste disposal and landfill requirements, and all open burning and air quality standards.

5. During and after mining activities, the permittee must conduct activities in a manner to maintain natural drainage patterns; water shed protection, and permafrost stability, to prevent runoff and erosion into water supplies and to minimize alteration of vegetation.

6. All project activities shall utilize measures to minimize noise and nuisance affecting surrounding residential and camp properties including excessive noise, fumes, odors, glare, smoke, vibration, dust, litter, interference in any telephone, radio or television receivers, and/or significant line voltage fluctuation.

7. Uses permitted shall cease upon the discovery of archaeological, prehistoric, historic or cultural resources during the mining activities, and BUCKLAND shall immediately contact both the Planning Director at the NAB Planning Department and Alaska State Historic Preservation Office to determine the conditions to continue.

8. The siting, design, construction and monitoring of the project activities are required to minimize alteration of shorelines, water courses, wetlands, and minimize significant disturbance to important habitats, and avoid critical fish, and other species’ migration periods.

9. Any development by the project in floodplains and shoreline areas are to be constructed to minimize loss of life or property due to seasonal flooding, ice movement, and shoreline erosion.

10. Project equipment/vehicle servicing and fueling operations are prohibited within 100 feet of any surface water body, including any rivers, drainage channels, sloughs and lakes. Equipment and vehicles are to be maintained to eliminate or minimize any fuel spills and fluid leaks. Equipment and vehicles must be monitored prior to use for hydraulic leaks.
If equipment is in continuous use, it shall be inspected daily for hydraulic leaks. Project equipment shall not be abandoned.

11. BUCKLAND shall immediately notify the Borough (at least within 24 hours) of any damage to the tundra and shoreline due to project activities in excess of those identified in or different from those notes in the permit application, including but not limited to scraping of vegetation and spill of fuel or other chemicals.

12. BUCKLAND shall immediately notify the Borough (at least within 24 hours) of any change in the project plans and seek modification of the permit. BUCKLAND shall suspend uses until approval is given by the Planning Director/Title 9 Administrator. If the proposed action(s) constitutes an emergency, BUCKLAND shall comply with NABC 9.16.040 for emergency actions and shall make reasonable efforts to conduct modified uses in a manner that avoids or minimizes significant harm to the environment, consistent with the need to protect property and human life.

13. BUCKLAND shall be required in consultation with the Administrator to post a cash bond or other suitable surety in an amount and form consistent with the requirements of NABC 9.08.040A to guarantee performance of all obligations under this permit.

14. BUCKLAND is subject to all penalties and civil actions pursuant to section 9.08.240 for violation of the permit conditions and stipulations prescribed herein.

15. During the fall, winter and spring seasons, BUCKLAND or any project contractors shall not, during the migration of caribou, locate any operation and/or equipment so as to block or cause diversion of the migration of caribou. BUCKLAND and/or any project contractors shall cease any activity that may interfere with the seasonal spring and fall caribou migrations and/or caribou fall/winter/spring movements, such as marine, ground and airborne transports, ground and airborne surveys or movement of equipment, until such time as the migration or spring movements have cleared ¼ of a mile from the location of the project activity. Concern for human safety will be given special consideration when applying this policy.

As a general guideline, caribou migration means an area where 500 or more caribou are travelling or congregating. However, during the fall/winter/spring period of January through December, BUCKLAND shall take extra precautions to avoid deflecting even small numbers (e.g. group sizes of 5-10) of the first caribou moving through the area as these groups/bands set trails as “lead caribou” that subsequent caribou later follow during the migration. The intent of these guidelines are to ensure free passage of caribou through the area and to avoid impacting caribou and the communities that historically and currently depend upon it as well as preserving existing and important adjacent land uses. These guidelines may be revised based upon updated information and research (including local traditional knowledge).

16. All project activities shall utilize measures to avoid or minimize disrupting wildlife and bird migration, or subsistence activities including fishing, trapping, waterfowl hunting,
17. Vehicles, vessels and aircraft that are likely to cause significant disturbance must avoid areas where species that are sensitive to noise or movement are concentrated. Concentrations may be seasonal or year-round and may be due to behavior (e.g., flocks or herds) or limited habitat (e.g., polar bear denning, seal haul-outs). Horizontal and vertical buffers will be required where appropriate. Concern for human safety will be given special consideration when applying this policy.

When adverse effects are likely and cannot be avoided, the Borough Planning Director/Title 9 Administrator may require BUCKLAND to prepare and submit a mitigation plan to minimize impacts. The effects addressed in this standard may result from a single project or from a series of projects. The mitigation plan, if required, shall be approved by the Borough Planning Director and/or Borough Planning Commission.

18. At the conclusion of each season the Borough Planning Department shall evaluate the effectiveness of the permit conditions. The Title 9 Administrator shall be authorized to adopt corrective measures for ineffective or inadequate permit conditions.

19. At the completion of each season, the permittee shall file a written report with the Borough Planning Department describing the following:
   (a) aggregate number of trips between Buckland and the material extraction site and season-end reclamation activities,
   (b) complete report of any fuel or other hazardous substances discharges and clean-up activities completed,
   (c) report the incidents of caribou migration and dates/times of ceased operations for allowing migration of caribou,
   (f) other matters as reasonably required by the Administrator/Planning Director.

20. Access by Borough personnel and their agents. Authorized personnel and/or their agents of the Northwest Arctic Borough when on official business and displaying proper identification shall be allowed access to the sites without interference. Borough personnel and/or agents may conduct scheduled or unscheduled inspections or tests to determine compliance with this permit or respond to emergency situations.

21. The Borough Planning Director, as the Title 9 Administrator under provision of NABC 9.08.020, will issue this permit for period of 5 years. Issuance of this permit under these terms shall require submission of an annual report for compliance with the permit terms and conditions. This permit will expire on December 31, 2024, unless revoked by the Title 9 Administrator and/or BUCKLAND.
NORTHWEST ARCTIC BOROUGH

Conditional Use Permit Approved by the Northwest Arctic Borough Planning Commission through Resolution PC 19-04
Authorized signatory: Martha Siikauraq Whiting, Planning Director/Title 9 Administrator

December 13, 2019
Date

CC: City of Buckland, NANA Regional Corporation, Maniilaq Association, AVEC, OTZ Telephone, ANTHC

Posted at: www.nwabor.org
NORTHWEST ARCTIC BOROUGH PLANNING COMMISSION
RESOLUTION PC-19-04

A RESOLUTION OF THE NORTHWEST ARCTIC
BOROUGH PLANNING COMMISSION APPROVING
NATIVE VILLAGE OF BUCKLAND’S
DRAFT CONDITIONAL USE PERMIT #104-03-20,
AND FOR RELATED PURPOSES

WHEREAS: The Northwest Arctic Borough Planning Department received a
Title 9 Permit Application (20-02-104) from the Native Village of Buckland for ‘Gravel
extraction’ in the General and Subsistence Conservation Districts on November 11,
2019; and

WHEREAS: On November 21, 2019, the Borough planning department deemed
the application complete with all necessary information; and

WHEREAS: The Borough planning department has published a public notice for
this permit on November 21, 2019, as required in borough code 9.20.030; and

WHEREAS: The Northwest Arctic Borough Planning Commission has the
authority to approve ‘Gravel extraction’ in the Subsistence Conservation District by
conditional use permit according to borough code 9.12.030 following a public hearing
as required under borough code 9.20.030E.

NOW THEREFORE BE IT RESOLVED, The Northwest Arctic Borough Planning
Commission hereby authorizes the Planning Director/Title 9 Administrator to approve
the DRAFT Conditional Use Permit #104-03-20 dated November 21, 2019, as discussed
during the commission meeting;

PASSED AND ADOPTED THIS 12TH DAY OF DECEMBER, 2019.

Harold Lambert, Planning Commission Chair

SIGNED AND ATTESTED TO THIS 12TH DAY OF DECEMBER, 2019.

Stella Atoruk, Borough Clerk