
Appendix C

Port Gravina Quarry Final EA Stipulations,
Recommendations, and Monitoring
Requirements

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Stipulations

General

Chugach Alaska Corporation must comply with all required permits and plans and provide a copy of approved permits to the Forest Service, which may include the following:

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

- Alaska Pollutant Discharge Elimination System (APDES) (AS 0.10, AS 09.25, AS 11.81, AS 12.55, AS 22.10, AS 31.05, AS 38.05, AS 39.52, AS 40.25, AS 44.46, AS 44.62, AS 44.64, AS 45.50, AS 46.03, 18 AAC 75, 18 AAC 72, 18 AAC 83, 2 AAC 96, 11 AAC 110, 18 AAC 50, 18 AAC 60, 18 AAC 70, 20 AAC 25) (this results in adoption of a Storm Water Pollution Prevention Plan (SWPPP))
- Solid waste disposal permit. (AS 46.03.020, AS 46.03.100, AS 46.03.110, AS 46.03.120, 18 AAC 15, 18 AAC 60)
- Approval to construct engineered wastewater disposal system. (18 AAC 72)
- Waste disposal permit (wastewater discharge). (AS 46.03.020, AS 46.03.100 & 110, AS 46.03.120 & 710, 18 AAC 15, 18 AAC 70, 18 AAC 72)
- 401 Water Quality Certification-Certificate of Reasonable Assurance Section 401. (AS 46.03.020, 18 AAC 15, 18 AAC 70, 18 AAC 72)

DEPARTMENT OF FISH AND GAME

- Title 16 Fish Habitat Permit
- Fish Resource Permit – Removing fish/diverting water (5 AAC 41)

DEPARTMENT OF NATURAL RESOURCES

Division of Mining, Land and Water

- Lease of Tidelands. (AS 38.05.070-075, 11 AAC 62).
- Water Use Permit. (AS 46.15, 11 AAC 93)
- Water Rights (AS 46.15, 11 AAC 93)
- Mining reclamation plan approval. (AS 27.19, 11 AAC 97).
- Temporary water use permits for water withdrawals, except for withdrawals from sources classified as categorically consistent or generally consistent approvals. (AS 46.15.155, 11 AAC 93)
- Tideland use permit. (AS 38.05.850, 11 AAC 96)

U.S. FOREST SERVICE

(Code of Federal Regulations: Title 36 - PARKS, FORESTS, AND PUBLIC PROPERTY)

- Notice to Proceed (FSM 2832), which accepts the operating plan and associated stipulations.
- Approval of Mining Reclamation Plan, in collaboration with ADNR.
- Temporary access road special use permit. (36 CFR 251.110)

DEPARTMENT OF ARMY – CORPS OF ENGINEERS

- Compliance with section 10 of the Rivers and Harbors Act of 1899. (33 U.S.C. 403)

- Compliance with section 404 of the Clean Water Act. (33 U.S.C. 1344)

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

- Compliance with Endangered Species Act and Marine Mammal Protection Act through consultation with the National Marine Fisheries Service (50 CFR 222.101-309, 50 CFR 223.101-209, 50 CFR 224.101-104, 50 CFR 226.101-214, 50 CFR 228.1-21)

U.S. FISH AND WILDLIFE SERVICE

- Compliance with the Endangered Species Act, as needed, for Threatened or Endangered Species through consultation with the U.S. Fish and Wildlife Service (Endangered Species Act, 87 Stat. 844)
- Compliance with the Bald and Golden Eagle Protection Act
- Compliance with Migratory Bird Treaty Act

US Environmental Protection Agency/State Fire Marshal

- Aboveground Storage Tanks (Clean Water Act - 33 U.S.C. §1251, 40 CFR 112)

Heritage Resources

1. Discovery and Education Stipulation: Any cultural and/or paleontological resources (historic or prehistoric site or object) discovered by the Chugach Alaska Corporation or any person working on the Chugach Alaska Corporation's behalf, on public or Federal land shall be immediately reported to the Chugach National Forest Responsible Official in Cordova, Alaska. The Chugach Alaska Corporation or its contractors shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Responsible Official. An evaluation of the discovery will be required and presented to the Responsible Official to determine the appropriate actions to follow to prevent the loss of significant cultural or scientific values. Any decision as to proper mitigation measures to be taken will be made by the Responsible Official after consultation with the Alaska State Historical Preservation Office. Collection or disturbance of artifacts and other archaeological, historical, and paleontological materials by the Chugach Alaska Corporation employees, its representatives, or contractors, shall not be allowed. Offenders shall be subject to prosecution under the appropriate State and Federal laws.
2. The proposed project will comply with Section 106 of the National Historic Preservation Act and FSM 2361.03, if the heritage resource recommendations above are followed. If the undertaking would likely alter the characteristics of these sites as defined in 36 CFR parts 800.2(0) and 800.9 or if additional prehistoric or historic materials are found during the course of this project, work in that area should cease until the District Ranger has been notified. Work in the area of the cultural resource may not resume until the cultural materials and the potential effects have been evaluated by a professional archaeologist. Final notification to proceed will be given by the District Ranger.
3. The areas that include COR-00579 and COR-00580 are outside of the project area and therefore these sites should not be affected by project implementation. Any actions in these areas would be outside of the project area and is therefore not authorized.

Visuals

4. Retain a no-disturbance strip of beach fringe timber on the west-side of the dock/lay down area to minimize visual impacts of the laydown area from Port Gravina.

5. Post Construction, utilize excavated soil and other organics where practicable (i.e. road and pad fill slopes), after initial construction, to mask the white color of the rock and provide a seedbed for revegetation.

Soils

6. Vehicular traffic and other surface impacts to adjacent, non-project areas are prohibited.
7. Develop an erosion control plan for road, quarry, and work pad construction to minimize or mitigate erosion and sedimentation.
8. Silt and sediment should not enter waterbodies. Use appropriate control or containment measures such as filter or fabric fences, fiber matting, settling ponds, drainage control, and trenches and waterproof covers over material piles and exposed soils.
9. Stockpile excavated soil, vegetation and organics in a designated area away from water bodies.
10. Design the quarry plan to ensure the retention of soils upon hillslopes at quarry sites until areas are planned for active blasting/quarrying.
11. Minimize traffic and other surface disturbance to soils until they are to be removed for development.
12. Armor outlets as necessary to avoid scour and erosion of adjacent slopes.

Fish/Hydrology

13. All bridges and structures crossing No-Name Creek will be designed and constructed to pass fish and floods in accordance with State regulations, EO 11988, and BMPs 14.14 and 14.17 (FSH 2509.22).
14. Service and refuel equipment a minimum of 100 feet away from streams or waterbodies when practicable. Equipment operators will carry absorbent pads and spill response kits, provide containment and cleanup for portable fuel tanks (including hose and nozzle), follow approved disposal methods for waste products and repair leaky equipment promptly (FSH 2509.22).
15. Complete a Spill Prevention Control and Countermeasure (SPCC) plan as required by state and federal regulations.
16. Re-establish and maintain a vegetated buffer strip a minimum of 20-foot wide above the ordinary high water level on each bank of the constructed channel.
17. In the deep pool(s) proposed for the constructed channel, placement of spawning gravel will replace the spawning area lost in the dewatered section of the creek. A 1-foot layer of 1/2 to 1.5-inch gravel should be placed in the tailout of the pool centered on the thalweg. The gravel mixture should have less than 15% sand or smaller material. The gravel area should be a minimum of 9 square meters per pool to allow multiple pairs of fish to spawn. Additionally, ensure lateral flow connectivity to the stream such that adequate portions of the pool and tailout are suitable winter habitat. This will maintain overwintering salmonid habitat and ensure capacity for egg development in spawning gravels. This stipulation may be modified by the Forest Service to ensure consistency with ADF&G fish habitat permit requirements and ensure minimized impacts to fish during stream diversion.

Invasive Species

18. All heavy equipment used in project area shall be cleaned prior to entry on Forest Service lands to prevent the introduction or spread of invasive species. The DOI Technical Memorandum (No. 86-

68220-07-05: Inspection and Cleaning Manual for Equipment and Vehicles to prevent the Spread of Invasive Species) is a good reference for equipment cleaning.

Wildlife

19. The sport harvest of mountain goats, black bears, and brown bears on Chugach National Forest lands in Port Gravina by employees of the project operation is prohibited.
20. Food and garbage must be secured or stored in bear-proof containers or by other acceptable methods that makes it unavailable to bears or other wildlife. Garbage shall be disposed on a routine schedule to prevent creating a wildlife attractant.
21. Bald eagle nest protection standards to be followed are outlined in a Memorandum of Understanding (MOU) with the U. S. Fish and Wildlife Service (Appendix G of the 2002 Chugach National Forest Land and Resource Management Plan, processes referenced in standards and guidelines, Bald Eagle MOU). There is a minimum 330-foot retention zone (no tree removal) around known eagle locations. The active bald eagle nesting season is generally from March 1 to August 31. Refer to the MOU for restrictions pertaining to other management activities.

Special Uses

22. The occupancy and use of National Forest System surface lands may not directly impact a larger area than is as described and accepted in the Operating Plan, without advanced notification to the Forest Service.
23. The use of roads and associated infrastructure on National Forest System surface lands is limited to purposes directly associated with accessing and developing the subsurface estate.

Reclamation *These stipulations apply to different phases of reclamation including: post construction (following development in a particular area), interim reclamation (following completion of a portion of the project area or as an aspect of continued operations) and final reclamation (at the conclusion of the project).*

24. The presence of infrastructure associated with site access and other surface occupancies is limited to the term of the project. During reclamation all disturbed areas including roads and pad footprints will be reclaimed through contouring, top soiling, and revegetation.
25. The reclamation shall provide for all roads and pad footprints to be contoured to resemble natural conditions upon project completion.
26. In reclaimed areas: soil should be at least 6 inches deep, as the minimum soil depth observed naturally pre-activity.
27. During reclamation, heavily trafficked or compacted areas (i.e. roads, work/lay down pads, stockpile areas, etc.) shall be ripped.
28. After reclamation (soil spreading), further equipment traffic and/or other surface impacts will be avoided.
29. The reclamation plan shall specify that removed soil must be retained and stockpiled in USFS approved designated areas, located away from waterbodies, for future reclamation. Soil stockpiles should be located outside of quarry sites, when practicable, to avoid relocation/material loss and ensure that soils remain relatively clean. Soil stockpiles will be stabilized to prevent soil loss. Trees cut for project area clearing may be used to stabilize soil stock piles and for mulching in future reclamation efforts.
30. Any soil and organic material dredged from settling ponds must be stored in soil stockpiles for reclamation.

31. The quarry development plan shall specify that soil removal and recovery will be maximized utilizing equipment most suitable for this goal. An excavator should be utilized in areas where there is uneven/variable subsurface rock contact.
32. Natural revegetation should be utilized where seed source and site conditions are favorable or use native plant species in revegetation/restoration projects when natural revegetation conditions are not favorable. Preference should be given to plant materials from the local project area to maximize adaptation to that environment and maintain local genetic composition. Under no circumstance may nonindigenous plant material be used for revegetation. Application of any seeded plant materials must be coordinated in advance with the Forest Service.
33. Interim reclamation shall be implemented in quarry areas that are no longer being utilized as per the approved quarry and reclamation plans.

Safety

34. Prior to each operating season, CAC shall inform the Forest Service of its intent to operate the quarry and anticipated operation dates. CAC will post any Forest Closure order at the project site as specified by and in cooperation with the Forest Service to provide for public safety during and following project implementation. CAC will notify the Forest Service if public safety hazards, as a result of operations, exist at the project site during periods when operations are not occurring.

Recommendations

Heritage Resources: There is an opportunity to remove the significant portion of the culturally modified tree (CMT) at COR-00581 for use as an interpretive medium (i.e. Ilanka Cultural Center, Cordova Forest Service Office) and also to core and date the scar. It is also recommended that a “cookie” be cut from the base of the CMT to include a portion of the scar and can also be used for dating and mobile interpretation on dendrochronology and cultural practices. This could be a valuable tool in sharing information regarding this cultural practice historically done by many of the Tribes in the area. Additionally, cores of the live CMTs and wedges from a sample of the dead CMTs in the Secret Cove Grove (COR-00581), just outside of the project area, could be taken to procure additional scar dates that could better inform the chronology of the cultural practice in the general area and assist in the interpretation of the COR-00581.

Visual Resources: If the area between the cut and fill from the main work pad and the access road has adequate room, CAC should consider transplanting alder in the development of the quarry plan in order to reduce visual impacts.

Noise: Limit the hours of operations. Noise impacts are less significant during the daytime. To the extent possible, limit and consolidate blasting to minimize the extent and duration of the effects during quarrying operations. To the extent possible, take advantage of topography and dense vegetation to create noise barriers for both blasting and establishing locations to place noise producing quarrying equipment. Enclose high noise sources with acoustic barriers to dampen the sound.

Monitoring

Forest Service shall monitor operations as needed to ensure compliance with the operating plan, required stipulations and reclamation plans.

Invasive Plant Species: The project site should be surveyed for invasive plant species once every two years by CAC during project operations and for 5-years following reclamation. Any invasive plant

species within the project area must be controlled with appropriate treatment methods to eliminate introduced invasive species and control potential for spread onto areas outside of the project area.

Heritage Resources: CAC shall ensure that monitoring will occur in the lay-down area in the location of the single CMT (COR-00581) during construction by a cultural resource specialist. The area was tested for subsurface cultural deposition with negative results. However, because of the potential for this area to be a prehistoric basecamp from which people peeled trees at sites COR-00579 and COR-00580, site monitoring is required during construction at this location.