



STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES

PRELIMINARY DECISION

Material Site ADL 421444

AS 38.05.550

This Preliminary Decision (PD) serves as a preliminary State's best interest finding regarding the designation of a material site and is subject to comments received during the agency and public notice periods, which are being done concurrently. The public and the agencies to whom the notice will be sent are invited to comment on this PD. The deadline for commenting is **5:00 p.m. on August 10, 2020**. Please see the Comments section of this PD for details on sending comments for consideration. Only the applicant and those who comment have the right to appeal the Final Finding and Decision (FFD).

Proposed Action:

The Department of Natural Resources (DNR) received a material sale application, ADL 421454, from Alyeska Pipeline Service Company (Alyeska), agent for the Trans-Alaska Pipeline System (TAPS) lessees, to extract up to 100,000 cubic yards (cy) of fluvial sand and gravel from dry gravel bars below Ordinary High Water (OHW), on the inactive floodplain, west of the main channel of the Sagavanirktok River on the North Slope of Alaska from 2020 to 2021. The location of the proposed project area is 129 acres within Sections 22, 23, 26, and 27, Township 4 North, Range 14 East within the Umiat Meridian. Refer to Attachment B for the site map. DNR proposes to deny designation of a material site approximately 320 acres in size located below OHW within the Sagavanirktok River floodplain.

Alyeska's request requires that the proposed material extraction location be designated as a material site, serialized as ADL 421444, as required by Alaska Statute (AS) 38.05.550(b). This designation would allow for issuance of the requested material sale application, ADL 421454, and subsequent issuance of material sale contracts, under AS 38.05.550-565 for AS 38.35 pipeline right-of-way purposes.

Scope of Review:

The scope of this PD is to determine if it is in the State's best interest to designate material site ADL 421444 and to determine what, if any, project-specific operating requirements should apply to the subsequent sale of 100,000 cy of material to Alyeska requested in material sale application ADL 421454. Under AS 38.05.550, the scope of the administrative review is limited to the opening of a material site for the continuous sale and extraction of materials by purchasers until the site is

closed by DNR. Under AS 38.05.550(b), future contracts for the sale of material from the designated site may be issued without further finding or notice. Contracts for the sale of material may be issued by DNR either by negotiated, competitive, limited, or public and charitable material sale methods. Contracts issued under AS 38.05.550-565 will be at the representative regional sales prices (RRSP) determined by the commissioner, or fair market value (FMV) determined by an independent appraisal, or at less than appraised FMV determined under AS 38.05.810(a).

Authority:

Material site ADL 421444 is being adjudicated pursuant to AS 38.05.550 Disposal of Materials. Other authority includes AS 38.05.035(e) Powers and Duties of the Director; AS 38.05.945 Public Notice; AS 27.19 Reclamation; and 11 AAC 05 Fees; 11 AAC 71 Timber and Material Sales; and 11 AAC 97 Mining Reclamation.

Under DNR Department Order 003, the State Pipeline Coordinator has delegated authority to designate material sites under AS 38.05.550 and to negotiate material sales under AS 38.05.555 when pipeline right-of-way leases under AS 38.35 are involved.

Administrative Record:

Material site ADL 421444 and material sale application ADL 421454 constitute the administrative records in this case.

Legal Description, Location, and Geographical Features:

The state land where the proposed material site and material sale application are located is described as follows:

- **Legal Description:** SE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 22, SW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 23, W $\frac{1}{2}$ NW $\frac{1}{4}$, NW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 26, and E $\frac{1}{2}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 27, Township 4 North, Range 14 East, Umiat Meridian.
- **Geographical Location:** Lower Sagavanirktok River floodplain, below OHW and west of the main channel. Approximately 42 miles south of Pump Station 1 in Deadhorse on the North Slope.
- **Approximate Latitude/Longitude:** 69° 40.7311' N, 148° 38.7384' W
- **Material Site Area Geographical Features:** Unvegetated, inactive and active floodplain, dry gravel bars, fluvial material deposits
- **Existing surveys:** None
- **Municipality/Borough:** North Slope Borough (NSB)
- **Native Corporations/Federally Recognized Tribes:** Arctic Slope Regional Corporation
- **USGS Map:** Sagavanirktok C-3 and C-4
- **Adjacent Landowners:** The material site is surrounded by state land
- **Site Size:** 320 acres, more or less
- **Sale Size:** 129 acres, more or less

Title:

On December 6, 1968, the State of Alaska applied for title to all lands within all sections of Township 4 N, Range 14 E, Umiat Meridian through General Selection 1669. The State received title under U.S. Patent Number 50-74-0096, on April 1, 1974, recorded as Document Number: 401-1974-003778-0 and rerecorded in 2012 as Document Number: 2012-000649-0. The Bureau of Land Management placed the following restriction on the title: Standard reservations of right-of-way apply. In 1992 the Bureau of Land Management modified the patent by issuing a Notice of Meanderable Water Acreage Credit, recorded as Document Number 413-1992-000512-0, crediting approximately 11,528.12 acres Township 3 & 4 North, Range 13 & 14 East, Umiat Meridian. Title interest in all lands within these sections remain with the state.

Third Party Interests:

A Water Right, serialized as LAS 20644, issued to the Alaska Department of Fish and Game (ADF&G) May 5, 2010, reserves a specified flow rate of water for each month of the year, from river mile 0 to 68 of the Sagavanirktok River and its associated sloughs, side channels, and floodplain to protect fish and wildlife habitat, migration, and propagation within Anadromous Waters Catalog No. 330-00-10360. The proposed project is not within active water channels, thus, is not anticipated to impact the Water Right.

The Oil and Gas Lease, serialized as ADL 392773, issued June 12, 2015 and currently issued to Accumulate Energy Alaska, Inc (Accumulate) grants Accumulate the “exclusive right to drill for, extract, remove, clean, process, and dispose of oil, gas, and associated substances and the nonexclusive right to conduct geological and geophysical exploration for oil, gas, and associated substances and to install pipelines and build structures to find, produce, save, store, treat, process, transport, take care of, and market all oil, gas, and associated substances and to house and board employees in its operations until lease expirations on June 30, 2025”. ADL 392773 encompasses Section 22 All, Section 23 W½ including the bed of the Sagavanirktok River, Section 26 NW¼ including the bed of the Sagavanirktok, and Section 27 N ½ including the bed of the Sagavanirktok, all within Township 4 North, Range 14 E, Umiat Meridian. The state reserved the following rights under this lease:

- The right to explore for, develop, and remove natural resources other than oil, gas, and associated substances on or from the leased area; and
- The right otherwise to manage and dispose of the surface of the leased area or interests in that land by grant, lease, permit, or otherwise to third parties.

The proposed project would not provide Alyeska the ability to drill for, extract, remove, clean, process, or dispose of oil, gas, and associated substances and is not anticipated to impact the Oil and Gas Lease.

A non-competitive Pipeline Right-of-Way Lease application, serialized as ADL 421297, was submitted to the Alaska Department of Natural Resources on November 13, 2019 by the Alaska Gasline Development Corporation – AKLNG (AGDC), for the purpose of building an 807 mile

long, 42 inch diameter natural gas pipeline from the Gas Treatment Plant to the project's Liquefaction Facility in Nikiski. The application encompasses related facilities which includes approximately 632 access roads, 153 potential material sites, 108 potential excess material disposal sites, 57 various work areas and camps, 8 compressor stations, 1 heater station, 11 launcher/receivers, and the Mainline Material Offloading Facility at Beluga. One of the potential material sites for AKLNG is in the same location as this application's proposed material site ADL 421444. If designated, the proposed material site would be designated solely for AS 38.35 pipeline use, opening the material site for use by AKLNG. If denied, AKLNG can apply to designate this site in the future and DNR will consider the application at that time. The proposed project would not deny access of this site to AKLNG, thus, is not anticipated to impact the Pipeline Right-of-Way Lease.

Planning and Classification:

The lands to be designated for a material site were classified as Resource Management under classification order CL-617; are subject to ADL 50666, North Slope Special Use Area; and are within the Dalton Highway Corridor designated by the legislature, AS 19.40.010.

A land classification establishes the apparent best use of an area, but all other uses are presumed as compatible unless otherwise prohibited. According to 11 AAC 55.200, land classified as Resource Management is either land that might have several important resources, but for which a specific resource allocation decision is not possible at that time, or land that contains one or more resource values, none of which is of sufficiently high value to merit a designation as a primary use. The classification of Resource Management does not prohibit the proposed use for the lands in the subject area and the proposed use is compatible under the classification.

ADL 50666, North Slope Special Use Area, under 11 AAC 96.014(b)(1), designates all lands in the Umiat Meridian as "special use lands". This designation requires a permit for motorized vehicle use, unless that use is for subsistence purposes or is on a graveled road. This requirement prohibits neither the development of lands within the Umiat Meridian nor the designation of a material site for material sales.

The designated area for the Dalton Highway Corridor does not prohibit a material site designation. Pursuant to AS 19.40.200(a), the state may not dispose of state land under AS 38 that is within five miles of the highway right-of-way; however, AS 19.40.200(b)(4) states the prohibition on disposal of state land under (a) does not apply to a disposal of lands necessary for exploration, development, production or transportation of oil or gas.

AS 19.40.200(c) requires that "[b]efore the sale of materials under (b)(4)(C) of this section to a private entity or person or to a state agency the state shall give due consideration to the availability of materials from private sources in the area where the materials are needed." DNR is unaware of any private sources for material in the vicinity of this material site. However, DNR is aware of other DNR designated material sites in the vicinity of this proposed material site.

The proposed material site and subsequent sale of material would provide materials used to protect the integrity of AS 38.35 pipelines and AS 38.35 pipeline rights-of-way including TAPS. This use is consistent with the management intent of the area. There is nothing in the classification, special use designation, or the Dalton Highway Corridor Designation that prohibits the designation of a material site for sale of materials for oil and gas purposes.

Borough Zoning:

The proposed site is located within the North Slope Borough (NSB). The NSB is the municipal planning authority for the material site. Development of the material site is subject to the NSB Comprehensive Plan, the NSB Comprehensive Transportation Plan, and any other municipal plans or ordinances relevant to the site.

The proposed site is within the NSB Transportation Corridor. The Transportation Corridor Policies section, provided in section 19.70.060 of the NSB Municipal Code, provides several provisions relevant to material sites, including:

- (D) Sand and gravel use for operation, maintenance and construction of a new natural gas pipeline, and the existing road and pipeline have first priority. Essential government and industrial uses are allowed gravel use but only if it is not feasible and prudent to use existing pads and developed areas.
- (E) Extraction must be conducted in accordance with reclamation plans that provide for enhancement to wildlife habitat, or minimize environmental impacts or improvement to the affected area for human use.
- (F) Reclamation of all upland and floodplain mined sites shall be required unless such reclamation would cause greater adverse impact to the environment than leaving the area unreclaimed. Excavated areas should be converted to fish or waterfowl habitat whenever feasible and prudent.
- (G) Where feasible and prudent, stream banks and lake shores of fish-bearing waters and drinking water supplies shall be protected by providing an adequate buffer strip of undisturbed vegetation to mitigate adverse impacts.
- (H) Where feasible and prudent, all development shall be located outside active floodplains.

Traditional Use Finding

The proposed material site is located within the NSB. A traditional use finding is not required for sites located within a borough.

Waterbodies

The proposed material site is located within the active floodplain of the Sagavanirktok River.

Access:

Proposed material site ADL 421444 has one legal access point from private, non-exclusive easement ADL 414571, also known as 130-APL/AMS-5, intersecting the Dalton Highway at

milepost 374.5. A temporary access ramp, approximately 70 feet in length and 50 feet in width may be installed at each end of the access road, if needed, and then removed after mining is completed.

Development Plan:

Alyeska’s development and reclamation plan is under consideration by DNR. Should the proposed material sale contract be granted, it is anticipated the plans may need to be updated throughout the life of the material sale contract as activities are added or subtracted. All updates must be approved in writing by DNR before any construction, deconstruction, placement of infrastructure, or change in activity will be permitted. DNR reserves the right to require additional agency review and/or public notice for changes that are deemed by DNR to be beyond the scope of this decision.

Hazardous Materials and Potential Contaminants:

Alyeska did not submit an Environmental Risk Questionnaire with their material sale application.

There are no known environmental contaminants within the considered material site. Alyeska has no plans to store fuel at the material site; all vehicle fueling and/or maintenance will occur outside the material site on the TAPS Right-of-Way.

Adherence to standard material sale contract operating requirements will minimize the risk of leaks or spills. Alyeska is expected to follow the Department of Environmental Conservation’s (DEC) Best Management Practices for Gravel/Rock Aggregate Extraction Projects and must adhere to all DEC environmental regulations.

Alyeska is expected to inspect the material site and familiarize itself with the condition and quality of the land. The State makes no representations and no warranties, express or implied, concerning the existence or absence of any hazardous substances, hazardous wastes, contaminants, or pollutants on the land proposed for this material site designation and material extraction. The State of Alaska does not assume liability for the removal of hazardous substances, hazardous wastes, contaminants, or pollutants, nor for the remediation of the site should such substances ever be identified.

Performance Guaranty (Bonding) and Insurance:

Alyeska is the agent for the TAPS owner companies, who holds the RIGHT-OF-WAY LEASE FOR THE TRANS-ALASKA PIPELINE (TAPS Lease), ADL 63574, issued under AS 38.35 for a common-carrier pipeline. At this time, Alyeska is not required to post a bond, nor is insurance required. The lessee and their activities associated with the site shall be subject to the terms, conditions, sections and stipulations of the TAPS Lease.

Survey:

The State of Alaska reserves the right to require a survey of the material site or sale. A survey is not required at this time.

Compensation:

In accordance with AS 38.05.550(d)(1), Disposal of materials, and AS 38.05.555(b) Negotiated sales and personal use of materials, materials will be sold at RRSP periodically determined by the Commissioner for each type of material and for defined geographic regions, under procedure established by regulation; unless the applicant, at its own cost, elects to provide an appraisal, acceptable to the department, determining the fair market value of the materials to be sold.

The 2020 RRSP schedule for negotiated material sale contracts within the subject region is \$3.00/cubic yard (cy). Alyeska must submit payment and accounting for material removed at the end of each calendar year that a material sale contract is in effect.

In accordance with 11 AAC 71.045, Negotiated Sales, the applicant must provide a deposit of 10% of the negotiated price. The department will retain the deposit to cover administrative costs incurred in offering the negotiated material sale, except that if the purchaser removes and pays for at least 75 percent of the material volume covered by the contract, the deposit may be applied, in whole or in part, to the final payment that becomes due under the contract.

- **Potential \$30,000 Initial Deposit for ADL 421444:** Initial Deposits provide a means to rectify accounts if the buyer fails to extract at least 75% of the authorized volume. In accordance with 11 AAC 71.045(d), Alyeska would be required to submit an initial deposit at 10 percent of the total value of the sale. The potential sale is projected to be \$300,000 based on 100,000 cy at \$3.00/cy.

Reclamation:

In accordance with AS 27.19 Reclamation, a mining operation shall be conducted in a manner that prevents unnecessary and undue degradation of land and water resources, and the mining operation shall be reclaimed as contemporaneously as practicable to leave the site in a stable condition.

Alyeska proposes to reclaim the developed mining areas as contemporaneously as possible by recontouring and smoothing the area at the end of the operating season and the downstream end of the mined area will be daylighted to the river edge.

Public Notice of the Preliminary Decision:

Pursuant to AS 38.05.945, this PD will be advertised for a 30-day agency and public comment period, which is being done concurrently. Notice will be posted on the State of Alaska Online Public Notice System at <https://aws.state.ak.us/OnlinePublicNotices/Default.aspx>, the DNR Division of Oil and Gas Newsroom at <http://dog.dnr.alaska.gov/Newsroom/>, and the post offices in Prudhoe Bay and Utqiagvik.

In addition to affected third parties, the following agencies will be provided a copy of this PD for review and comment:

- DNR Division of Mining, Land and Water (DMLW) Northern Region Office
- DNR DMLW Water Resources

- DNR DMLW Realty Services Section
- DNR DMLW Resource Assessment & Development Section
- DNR DOG Permitting
- DNR Division of Geological & Geophysical Surveys (DGGS)
- DNR Office of History and Archaeology (OHA) / State Historic Preservation Office (SHPO)
- Alaska Department of Fish & Game (ADF&G)
- Alaska Department of Environment Conservation (DEC)
- Alaska Department of Labor and Workforce Development (DOL&WD)
- Alaska Department of Revenue (DOR)
- Alaska Department of Transportation & Public Facilities (DOT&PF)
- Alaska Department of Commerce, Community, and Economic Development (DCCED)
- U.S. Army Corps of Engineers (USACE)
- North Slope Borough

Comments:

This decision is subject to both public and agency comments. All comments received by the comment deadline will be addressed in the FFD. Only those who comment and the applicant have the right to appeal the FFD. A copy of the FFD will be sent to any person who comments on the PD, which will include an explanation of the appeal process. If public comments result in significant changes to this PD, additional public notice will be given.

Written comments must be received in this office no later than 5:00 p.m. on August 10, 2020 to be considered.

All comments must be received in writing at the following address:

Department of Natural Resources
 State Pipeline Coordinator's Section
 550 West 7th Ave., Suite 1100
 Anchorage, Alaska 99501
 Phone: 907-269-8800, Fax: 907-269-6587
 Email: SPCO.Records@alaska.gov

Background of Site

According to the 2009 Alaska Department of Transportation and Public Facilities' (DOT&PF's) Statewide Material Site Inventory Material Site Status report for MS 65-9-040-2, the site was originally developed by Alyeska for construction of the Dalton Highway and the TAPS. Alyeska also used the site (known as Alyeska material site 131-3) for maintenance operations. In 1981, MS 65-9-040-2 was combined with a second material site, MS 659-010-2 (ADL 400618), which occupied the E1/2 NE1/4 of Section 27 and N ½ of Section 26, Umiat Meridian, Township 4 North, Range 14 East. At that time, the site was located on the active floodplain of the Sagavanirktok River and the materials consisted of sand and gravel. The Material Site Status report explains that

after review by ADF&G in 1981, the site was closed in 1982 because major channels of the river flowed through the site.

DNR records show that five material sale contracts have been issued to Alyeska for this site.

- This material site was one of 23 material sites included in a material sale contract issued to Alyeska in 1974 (ADL 64855)
- This material site was one of 14 material sites included in a material sale contract issued to Alyeska in 1974 (ADL 65468)
- Alyeska was issued a material sale contract for this site in 1975 (ADL 66814)
- Alyeska was issued a material sale contract for this site in 1991 (ADL 414563) and the sale was closed in 1994
- Alyeska was issued a material sale contract for this site in 1992 (ADL 414969) and the sale was closed in 1998 because the contract expired

DOT&PF also submitted a material sale contract at this material site in 1981 (ADL 403091) which was closed in 1982 because the site was deemed unsuitable. DOT&PF reapplied for this site in 2002, but the ADL was closed because a mining reclamation plan was never submitted. In 2013, DOT&PF applied to designate the area adjacent to this proposed site between the TAPS and above the OHW of the west side of the Sagavanirktok River as a material site under ADL 419945 with associated material sale application ADL 419944. DOT&PF withdrew their application before the site was designated because the other material sites in the area filled their material needs.

Alaskan Northwest Natural Gas Transportation Company applied for 2 material sales at this site in 1981 (ADL 403396 and ADL 403399), but they withdrew both applications for pipeline right-of-way lease.

Discussion:

During the winter/spring 2019 season, there was severe aufeis buildup and rapid snowmelt that damaged existing TAPS flood control structures along the Sagavanirktok River from TAPS Pipeline Milepost (PLMP) 19-48. During this flooding event, a portion of the TAPS was exposed at PLMP 28. Alyeska needed larger amounts of gravel than they had planned for the 2019 summer field season to repair the flood control structures and rebury the exposed portion of the pipeline. This emergency need for gravel resulted in the request to SPCS to designate a new in river material site adjacent to Dalton Highway Milepost (DHMP) 390 (PLMP 25). SPCS processed the application per regulatory guidelines, which resulted in designated material site ADL 421216. Alyeska is continuing their efforts in summer 2020 to repair damaged flood control structures and perform planned maintenance of flood control structures at PLMP 22, 30 and 47. The work planned for 2020 is not considered emergency work as TAPS was not threatened during the 2020 spring break up of the Sagavanirktok River. Repairing damage and maintaining flood control structures is a routine procedure to protect TAPS from future Sagavanirktok River flood events.

Alyeska has limited access to upland and in river designated material sites from 2020 - 2022 due to DOT&PF's project to repave the northern most 60 miles of the Dalton Highway from 2020 -

2022. Prior to project initiation, DOT&PF had reserved areas within designated material sites via material sale contracts in order to have the amount of gravel needed for their project. DOT&PF has requested that Alyeska does not enter the material sale contract areas DOT&PF has reserved because of the Army Corps of Engineers (Corps) permits DOT&PF obtained for the material sale contracts. The Corps permits are issued to DOT&PF and if Alyeska entered those areas it would cause difficulties for DOT&PF to remain compliant with their Corps permits. Alyeska could obtain their own Corps permit and open an unclaimed section within an already designated upland material site. However, the upland designated material sites with enough acreage within the material site for Alyeska to do this in 2020 are at least 30 miles from the proposed material site. The closest designated in river material sites Alyeska could utilize in 2020 to this proposed site at DHMP 374 are ADL 421216 at DHMP 390 (16 miles North) and ADL 419432 at DHMP 344 (30 miles South). After DOT&PF has completed the paving project, their gravel needs will decrease in the near future allowing Alyeska access to seven designated material sites within 30 miles of the proposed site.

Material Site ADL 421216 is a practical alternative because the material site has already gone through the process to become a designated material site, contains enough suitable gravel for Alyeska's planned 2020 projects, and is within 16 miles of the proposed site, which is a reasonable distance to travel for gravel on the North Slope. Material Site ADL 421216 contains two material sale contract areas known as Site A (72 acres) and Site B (94 acres). According to calculations performed by an SPCS engineer there is approximately 600,000 cy of gravel remaining in Material Site ADL 421216 in Sites A and B combined assuming no additional material was deposited or removed during the 2020 spring break up of the Sagavanirktok River. (Calculations include the 30-foot buffer zone.) This is enough suitable gravel to cover Alyeska's material request of 100,000 cy. Travelling long distances in order to perform the duties associated with running a pipeline is a known and accepted reality for pipeline operators on the North Slope. The projects at PLMP 22, 30, and 47 also require rip rap, which Alyeska is acquiring from the Bureau of Land Management site OMS 112-3.1 located at DHMP 261. This material site is 108 miles away from the closest project area, PLMP 47 (DHMP 369). Requiring Alyeska to travel an additional 16 miles to access a material site is not an unreasonable distance on the North Slope.

Alyeska submitted material sale application ADL 421454 requesting 100,000 cy of material from the proposed material site ADL 421444, a location east of the Dalton Highway at milepost 374, situated below OHW on the west side of the Sagavanirktok River because Alyeska has limited access to the already designated nearby material sites from 2020 - 2022. The material is for Alyeska to repair flood control structures at PLMP 22, 30, and 47. According to the Issued for Review construction packages for these projects, Alyeska needs 94,000 cy of gravel.

Alyeska has proposed access to this site via TAPS access road 130 APL/AMS-5. Alyeska proposes to excavate from one inactive, dry gravel bar within the unvegetated floodplain of the Sagavanirktok River, as depicted in the attached maps. Material would be excavated with graders, dozers, excavators and light plants or similar equipment. The equipment would be used to scrape shallow, even lifts across the dry gravel bar to a maximum depth of three feet or depth of water

table, whichever is less. Operations would include no mining within 30 feet of an active channel, a 30 ft buffer zone and temporary berms between the mining area and river edge. Other best management practices, to be used as needed, would include a temporary culvert/low water crossing, silt fence, and waddles.

The perimeter berms and ramp would be removed at the end of each mining season. The site would be re-graded to the best of Alyeska's ability to prevent ponding. The downstream end of the mined area would be daylighted to the river edge. All stockpiles, equipment and any artificial materials such as culverts, silt fence or waddles, would be removed before each seasonal demobilization is complete.

There would be no hazardous substances stored in the mining area overnight. Equipment would be taken to the access road or right-of-way offsite of the river pits for fueling and servicing. Best management practices would include but is not limited to the use of 110% containment for all stationary equipment units (ex. light plants, unattended equipment).

The TAPS is important infrastructure to the State of Alaska as it ships oil from the North Slope oil fields to Valdez for access to shipping markets. Maintaining the integrity of the TAPS is vital to the continued operation of North Slope oil fields. North Slope oil fields and TAPS are significant contributors to the State of Alaska's economy by providing royalties to the State or paying for the lease of state land (respectively) and providing jobs for Alaskans. Assisting Alyeska's projects to maintain the integrity of the TAPS in coordination with the State's and NSB's overall land management strategies for the North Slope, is in the best interest of the State.

The proposed site has a history of material extraction since the building of the Dalton Highway and TAPS in the 1970's. DOT&PF began the process to designate the upland portion of the historical site in 2013 but withdrew their application because the other material sites in the area filled their need at the time.

The designation of this material site, if deemed appropriate, would allow for the use and operation of the material site for the long-term sale and extraction of materials for AS 38.35 purposes until closed by SPCS. In accordance with AS 38.05.550(d), material may be sold from the site at the representative regional sales price as determined periodically by the commissioner, fair market value as determined by appraisal completed within two years of the date of sale, or at less than fair market value for public and charitable purposes.

The proposed material site has the following advantages:

- The proposed in river site is physically located far enough from the TAPS that there is little concern of the proposed mining activity moving the Sagavanirktok River toward the TAPS in the short term,
- Minimal adverse effects to the environment compared to upland mining in a pristine area because there is no removal of vegetation or fish habitat and wetlands,

- Short term use of the proposed shallow scrape mining method will have little to no impact on the channelization of the Sagavanirktok River,
- The potential for the gravel bar to recharge itself and become a sustainable source of gravel,
 - The University of Alaska Fairbanks (UAF) conducted a multi-year hydro-sedimentological study on the Sagavanirktok river from 2015 to 2019. The research concluded that infilling on two rectangular trenches to original conditions was achieved between two to four years. (Hydrological, Sedimentological, and Meteorological Observations and Analysis of the Sagavanirktok River: 2019 Final Report. Toniolo, H. et.al. UAF. January 2020)
 - *Note: The UAF study also mentioned that infilling rates are highly dependent on many seasonal variables and will vary year to year.*
 - *Note: There are several differences between the UAF study pits and Alyeska's proposal.*
 - *The UAF study pits were significantly deeper at 6.56 – 9.84 feet compared to Alyeska's proposal of only excavating to 3 feet in depth and the UAF study pits were much smaller in diameter at 10 – 20 meters in diameter (.02 - .075 acres) compared to Alyeska's proposal of 1,284.07 meters in diameter (320 acres). These differences will impact how the Sagavanirktok River reacts to Alyeska's proposed mining activities compared to UAF's study pits.*
 - *The UAF study pits were located in the active river channel or on gravel bars directly adjacent to the active river channel. The UAF study pit locations relative to the active river channel are less likely to change the location of the active river channel within the floodplain as a result of the mining activities. Alyeska's proposed pit is on a gravel bar directly next to the western OHW line of the Sagavanirktok River. This location is more likely to change the location of the active river channel within the floodplain towards the TAPS and the Dalton Highway, as a result of long term mining activities.*
- The proposed site would be designated for AS 38.35 purposes only, providing Alyeska with a potential gravel source regardless of future DOT&PF projects.

The proposed material site has the following disadvantages:

- The proposed material site contradicts the NSB Municipality code and the stipulations related to development of new material sites,
 - NSB Municipality code: “(H) Where feasible and prudent, all development shall be located outside active floodplains.”
 - DOT&PF's proposed material site in this area (ADL 419945) was on the upland portion of this historic material site outside of the active floodplain and is a practical alternative to the proposed in river site. *Note: Alyeska objects to mining between the Dalton Highway and the Sagavanirktok River because of the potential for a highwater or flood event filling the material site and potentially damaging the TAPS during the event. DNR has taken precautions relating to Alyeska's above*

concerns during the designation of similar upland material sites by stating that the mining plans for those sites include a 500 foot undisturbed buffer between the mined area's westerly edge and the pipeline and a minimum 100 foot wide undisturbed buffer to the TAPS Right of Way boundaries.

- Alyeska has access to designated material site ADL 421216 located 16 miles North of the proposed material site location. Utilizing an already designated in river material site would decrease the overall footprint of the impacts of in river mining.
- There are seven designated material sites within 30 miles north or south of the proposed material site location with suitable material. Alyeska will have access to all seven sites after DOT&PF's project is completed in 2022, if not sooner, for future projects. Alyeska has access to alternative sites number three and number seven (below) from 2020 - 2022.
 - (1) ADL 419954 DHMP 403.5 (Upland site)
 - (2) ADL 419958 DHMP 390 (Between Highway and PL, Upland Site)
 - (3) ADL 421216 DHMP 390 (In River, SPCS designated)
 - (4) ADL 419572 DHMP 380.9 (Upland and in river portion)
 - **PROPOSED SITE ADL 421444 DHMP 374**
 - (5) ADL 419936 DHMP 370.5 (Upland and in river portion)
 - (6) ADL 419574 DHMP 366.5 (Upland and in river portion)
 - (7) ADL 419432 DHMP 344 (In river site, active floodplain)
 - These are practical alternatives because they are designated, contain suitable material for Alyeska's needs, and are located near the project areas.
- The potential risk of the river migrating into the proposed material site and pulling the Sagavanirktok River's active channels towards the TAPS and the Dalton Highway as a result of long-term use of the shallow scrape mining method.
 - The proposed shallow scrape mining method was used during original construction of TAPS and the Dalton Highway and is a known factor in the gradual westerly migration of the Sagavanirktok River towards the TAPS and the Dalton highway according to the research document "Sagavanirktok River Gravel Extraction Resources and Land Management Considerations" by Julie Smith for the Alaska Department of Natural Resources in July 2014. Long term use of this mining method at the proposed site has the potential to migrate the Sagavanirktok River west at this site.
 - Ronald Daanen, a subject matter expert with the State Division of Geological and Geophysical Surveys, has the following concerns on mining in the Sagavanirktok River. "I do have long term concerns in that this method of gravel mining (shallow scrape) allows faster river migration in the direction of the road and pipeline." (personal communication, 20.5.22)
- The potential risk of contamination of the Sagavanirktok Riverbed by hazardous substances if equipment leaks hazardous substances. The unconsolidated nature of the materials in the riverbed make cleanup of hazardous materials more difficult than cleanup in upland mine sites. The fluid nature of the river also increases the risk of the contamination affecting a larger area of the river if carried downstream.

Recommendation:

SPCS has completed a review of the information provided by the applicant and an examination of the documents and associated information related to the proposed action and has completed the Preliminary Finding and Decision process at this time. This decision considers ownership of the site, the need for reasonable access to material sources in the region and the project site, and project-specific needs.

The use of the material would assist Alyeska’s proposed projects to protect the integrity of the TAPS by repairing or performing maintenance on TAPS flood control structures at PLMP 22, 30 and 47. However, designating the proposed material site in the requested location would result in long-term mining which could have irreversible long-term consequences that could culminate in the Sagavanirktok River migrating toward and threatening the Dalton Highway and the TAPS. There are practical alternative material sites for Alyeska’s use from 2020 - 2022 and seven designated material sites within 30 miles of the proposed site that Alyeska will have access to in or after 2022 for future material needs in the area. These are practical alternatives because they are designated material sites, contain suitable material for Alyeska’s needs, and are located near the project areas. The risks associated with designating the proposed material site are not in the best interest of the State of Alaska at this time as there are viable alternative material site options for Alyeska’s 2020-2021 material needs.

It is recommended to not designate the material site serialized as ADL 421444.

Preliminary Decision:

I find the proposed actions as recommended above may be in the best interest of the State and approve it for public notice.

DocuSigned by:

Anthony Strupulis

7/6/2020

Anthony Strupulis, P.E., State Pipeline Coordinator
Department of Natural Resources

Date

Attachments:

- Attachment A – Permit Narrative
- Attachment B – Mining and Reclamation Plan and Maps