STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES

ANALYSIS AND PROPOSED DECISION

TRANS-ALASKA PIPELINE RIGHT-OF-WAY LEASE AMENDMENTS
ADL 63574

SAGAVANIRKTOK RIVER REVETMENT AND FLOOD CONTROL STRUCTURES
AT PIPELINE MILEPOSTS 24.3 AND 28.0

Proposed Action: The Department of Natural Resources (DNR) received a request from Alyeska Pipeline Service Company (APSC), agent for the Trans-Alaska Pipeline System (TAPS) lessees, to amend the Trans-Alaska Pipeline Right-of-Way (ROW) Lease, ADL 63574 to add lands approximately 24 and 28 miles south of Pump Station 1 in Deadhorse, Alaska. During the winter of 2018-2019, there was severe aufeis buildup and rapid snowmelt from a warm spring, producing high water levels that damaged existing flood control structures along the Sagavanirktok (Sag) River. The proposed projects would install a new revetment at TAPS Pipeline Milepost (PLMP) 24.3 and install a revetment cap at PLMP 28.0.

At PLMP 24.3, APSC proposes to add lands to accommodate the installation of a 500’ long revetment to protect TAPS from further bank erosion on the Sag River. The revetment is proposed to consist of riprap with gravel-filled voids and would be constructed with a 40’ long trench key on the upstream end. The proposed construction ROW is approximately 1,000’ long by 150’ wide; located within the SE4SW4 of Section 30 and the NE4NW4 of Section 31, Township 7 North, Range 14 East, Umiat Meridian; and containing approximately 3.4 acres.

At PLMP 28.0, APSC proposes to add lands to accommodate the installation of a 150’ revetment cap to protect TAPS from further bank erosion on the Sag River. The revetment cap is proposed to consist of gravel with a riprap armor nose. The proposed construction ROW is located within the SE4 of Section 13, Township 6 North, Range 13 East, Umiat Meridian; and containing approximately 2.2 acres.

These amendment requests are necessary for protecting the integrity of TAPS from high water events and further erosion and are discussed in more detail in the Project Description section. Once construction activities are concluded, the added land to the operational ROW will be surveyed and may include less acreage than approved for construction.

The additional lands are necessary to support the existing pipeline system as defined in AS 38.35.230(7) and authorized by the Trans-Alaska Pipeline ROW Lease, ADL 63574. See drawings for more details (Attachments A and B).

Authority: AS 38.35.015 and Trans-Alaska Pipeline ROW Lease, ADL 63574.

Administrative Record: Trans-Alaska Pipeline ROW Lease, ADL 63574, and the associated ROW Lease Amendment case files (74 and 75) constitute the administrative record.
Background: Public notice of the ROW amendment applications was published in the Anchorage Daily News, posted on the State of Alaska online Public Notice and Division of Oil and Gas Newsroom webpages, and sent for posting in the Z.J. Loussac Libary in Anchorage, Tuzzy Consortium Library in Utqiagvik, U.S. Post Offices in Prudhoe Bay and Utqiagvik on August 5, 2019. Notice was also published in the Arctic Sounder on August 8, 2019.

Pursuant to AS 38.35.070, the following coordinate agencies were notified of the applications and associated documents: Department of Labor & Workforce Development, Department of Transportation & Public Facilities, Department of Environmental Conservation, and Regulatory Commission of Alaska. Additionally, the following agencies received the link to the applications and associated documents: Department of Administration, Department of Law, Department of Fish & Game (ADF&G), Department of Commerce, Community, & Economic Development; and Department of Public Safety.

The Office of History and Archaeology (OHA) State Historic Preservation Office (SHPO) reviewed the proposed revetment construction zones. On August 29, 2019, OHA determined there are no known culture resource sites in the proposed activity areas. If inadvertent discoveries of cultural resources occur, OHA must be notified to evaluate whether the resource should be preserved in the public interest pursuant to AS 41.35.070(d). Examples of cultural resource sites that can be encountered include: historical cabin remains, adits, dredges, mining equipment, cultural depressions or pits, graves or cemeteries, tools, artifacts, and paleontological remains.

Project Description: The project sites for the revetment and flood control structures are located approximately 24 and 28 miles south of Pump Station 1, east of the Dalton Highway, east of TAPS, and west of the main channel of the Sag River. The Sag River is the second largest river on the North Slope, Alaska. In this area, the Sag River floodplain is over a mile wide with several braided channels. The anadromous river carries a bedload of fluvial sediment but is not glacially fed. Historically, this section of the river has not affected TAPS operations, however, severe auffeis was observed in the winter of 2018-2019 with an unusually warm spring resulting in rapid melt and high water levels. On May 17-2019, a high water event impaired existing bank erosion control infrastructure and exposed a portion of the buried pipeline near PLMP 28. The proposed projects are intended to mitigate future high water events from a dynamic river system.

PLMP 24.3: The revetment is proposed to be installed adjacent to the east side of TAPS along a segment of a high-water side channel. The revetment will be approximately 500’ long with a 40’ long trench key installed on the upstream end. The proposed structure will be comprised of approximately 1,650 cubic yards (cy) of class III-IV riprap and the voids filled with approximately 150 cy of sand and gravel. The revetment will be 3’ deep extending down the bank at a 2:1 grade with a 5’ long apron extending below Ordinary High Water (OHW). The trench key will be buried to an 8’ depth, with a 6’ wide base extending to 12’ wide on the surface. The surface will have re-placed organics on top, aiming towards natural revegetation.

Access to the project area will be from the TAPS ROW workpad to tundra mats to protect the vegetated ground surface. Equipment including front-end loaders, backhoes, bulldozers, compactors, trucks and off-highway trucks may be used during the 20 day duration project. The excavator bucket will contact the flowing waters, however, no other equipment or portions of the equipment will enter flowing waters. Portions of vegetated bank overhangs may be removed with an excavator, riprap installed, and the cut bank replaced on top of the structure.
PLMP 28.0: The revetment cap is proposed to be installed at the upstream end of an existing revetment at PLMP 28. The revetment cap will be approximately 150’ long and 25-40’ wide. It will be comprised of approximately 900 cy of sand and gravel with a 150 cy riprap armor nose. The revetment cap will be 3-7’ deep with a 14’ wide flat surface and 2:1 grade slope extending to 25’-40’ total width.

Access to the project area will be from the TAPS ROW workpad to tundra mats, if needed. Equipment including front-end loaders, backhoes, bulldozers, compactors, trucks, and off-highway trucks may be used during the 120 day project timeline. This project coincides with several flood response projects within the existing ROW. Any fish encountered during construction will be captured and released in accordance with the Letter of Authorization for Unintentional Take from the US Fish and Wildlife Service.

Title: On November 27, 1968, the State of Alaska applied for title to all lands within Sections 30 and 31, Township 7 North, Range 14 East, Umiat Meridian, and Section 13, Township 6 North, Range 13 East, Umiat Meridian through General Selection 1609. The State received title under U.S. Patent Number 50-74-0107, on March 27, 1974, recorded as Document Number: 401-1974-003789-0, and rerecorded in 2012 as Document Number: 413-2012-000618-0. On June 19, 1992, the Bureau of Land Management modified the patent by issuing a Notice of Meanderable Water Acreage Credit, recorded as Document Number 413-1992-000576-0, crediting submerged lands per Sec. 101 of the Submerged Lands Act Amendment of August 16, 1988, P.L. 100-395, 43 U.S.C 1631. Title interest in all lands within these sections remain with the state.

Planning and Classification: The proposed lands to be added to the TAPS ROW were classified as resource management under classification order CL-617; are subject to ADL 50666, North Slope Special Use Area; and are within the legislatively designated Dalton Highway Corridor, 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 to add the proposed lands for river revetments to the TAPS ROW.

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 Dalton 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 north of 68 degrees north latitude.
The proposed revetments will provide essential bank erosion mitigation along the pipeline. These actions are to protect the integrity of 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 proposed additional of lands to the TAPS ROW to protect the transportation of oil resources.

**Public Notice:** Notice of this Analysis and Proposed Decision for both lease amendment requests will be published in the Anchorage Daily News, posted on the State of Alaska online Public Notice webpage, and on the Division of Oil & Gas Newsroom webpage on September 9, 2019, and published in the Arctic Sounder on September 12, 2019. It will also be sent for posting in the Z.J. Loussac Library and Tuzzy Consortium Library in Utqiagvik and U.S. Post offices in Prudhoe Bay and Utqiagvik on September 9, 2019.

If public comment indicates the need for significant changes in the proposed decision, additional public notice will be given on or after October 9, 2019. If no significant change is required, the proposed decision, including any minor changes, will be issued as the final decision of the Department of Natural Resources after October 9, 2019, without further notice.

**Analysis:** AS 38.35, the Alaska Right-of-Way Leasing Act, sets forth the procedures by which certain ROW leases are granted by the State of Alaska and the conditions under which they can be amended. Pursuant to AS 38.35.010, it is the policy of the state that development, use, and control of a pipeline transportation system make the maximum contribution to the development of the human resources of this state, increase the standard of living for all its residents, advance existing and potential sectors of its economy, strengthen free competition in its private enterprise system, and carefully protect its incomparable natural environment.

Pursuant to AS 38.35.015, the Commissioner has the power to grant leases of state land for pipeline ROW purposes. The Commissioner found it to be in the best interest of the residents of the State of Alaska to issue the Trans-Alaska Pipeline ROW Lease, ADL 63574 on May 3, 1974, and the Renewal and Amendment of ROW Lease for the Trans-Alaska Pipeline and Associated Rights, ADL 63574, effective May 2, 2004. The terms, conditions, stipulations, and reservations contained in the Trans-Alaska Pipeline ROW Lease, ADL 63574, will apply to these lands if added to the lease.

AS 38.35.020(a) requires the applicant to obtain a ROW lease of state land from the Commissioner. The revetments and bank control structures mitigate bank erosion and therefore, exposure of the buried pipe. The proposed activities are for protecting the integrity of the pipeline and are consistent with the original purpose of the lease. The improvements require additional disposals of interest in state land beyond what was included in the original terms of the Trans-Alaska Pipeline ROW Lease, ADL 63574. Therefore, an amendment to the lease is required when there is a disposal of an interest in state land or resources beyond what was reviewed and approved during the original adjudication.

The improvements to bank erosion control infrastructure along the Sag, including the installation of the subject revetments are to mitigate bank erosion, high water events, and exposure of the buried pipeline. Revetments are addressed in Stipulation 1.1.1.36(8) of the Trans-Alaska Pipeline ROW Lease, ADL 63574. Revetments are considered “Related Facilities,” of which their substantial and continuous use is necessary for the operation or maintenance of TAPS.
Findings: The proposed projects are integral to the protection of the pipeline. The revetment projects are considered a "Related Facility," as defined by the lease, and will be managed under the lease. The proposal to add the above-described lands to the Trans-Alaska Pipeline ROW Lease, ADL 63574, is consistent with the lease. The terms, conditions and stipulations contained in Trans-Alaska Pipeline ROW Lease, ADL 63574, adequately address and protect the interest of the State of Alaska. The revetments will mitigate impacts from aufeis, high water events, erosion and exposure of the buried pipeline.

DNR will examine the project area upon completion of the construction activities to ensure all lands are in a condition acceptable to the Commissioner. An as-built survey is required for the amendments to identify the additional ROW area and to depict the location of the revetments in relation to the control line survey of the ROW. The as-built survey(s) are to be submitted for review and acceptance by the Commissioner, pursuant to Section 1(e) of the Trans-Alaska Pipeline ROW Lease, ADL 63574, as amended.

The addition of these lands to the lease does not constitute a significant amendment to the lease, since the impact on state resources will be negligible and the project does not conflict with or significantly change existing use of the land. Approval of the request for the amendment to add the described lands is consistent with state statutes and the terms of the lease. The lessee is required to secure all necessary permits or authorizations required by other local, state, and federal agencies.

Proposed Decision: I find that the request to amend the Right-of-Way Lease for the Trans-Alaska Pipeline, ADL 63574, to include the lands described in this proposed decision is in the best interest of the state and does not constitute a significant amendment to the lease.

If no significant change is required because of public comment or objection, then the proposed decision, including any minor changes, will be issued as the final decision of the Department of Natural Resources after October 9, 2019, without further notice.

Tom Stokes
State Pipeline Coordinator

9/6/19

Attachment A: Trans-Alaska Pipeline System
Pipeline MP 24.3 New Revetment
Lower Sagavanirktok River Plan,
Sheets 1-3, dated 06/12/2019 (3 pages)

Attachment B: Trans-Alaska Pipeline System
Pipeline MP 25-29 Flood Repairs and Upgrades
Lower Sagavanirktok River Plan - MP 28.0 Revetment
Sheet 5, dated 07/12/2019 (1 page)
ESTIMATED MATERIAL QUANTITIES

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TYPICAL SECTION

SCALE: 1" = 10'

EXISTING GROUND (DASHED)

NEW CLASS III-IV RIPRAP

5' ± APRON

8'

TRENCH KEY

EXISTING ORGANIC SOIL (RE-PLACED ON TOP)

NEW CLASS III-IV RIPRAP WITH GRAVEL-FILLED VOIDS (TRENCH KEY)

LIMIT OF EXCAVATION

ADJACENT PROPERTY OWNER: STATE OF ALASKA

ALYESKA PIPELINE SERVICE CO.

PIPELINE MP 24.3 NEW REVETMENT LOWER SAGAVANIRKTOK RIVER

SECTIONS

DATE: 06/12/19

PLATE 3

AUTO Cad DWG. DO NOT REVISE MANUALLY

ATTACHMENT A