STATE OF ALASKA DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL AND GAS STATE PIPELINE COORDINATOR'S SECTION

ANALYSIS AND PROPOSED DECISION

AMENDMENT TO THE RIGHT-OF-WAY LEASE FOR THE NUIQSUT NATURAL GAS PIPELINE, ADL 416202 NATURAL GAS PROCESSING SKIDS INSTALLATION

Proposed Action: The North Slope Borough (NSB) submitted a request to amend the Nuiqsut Natural Gas Pipeline, (NNGP) Right-of-Way (ROW) Lease, ADL 416202, to add approximately 1.5 acres of land for the installation of upgraded gas processing skids. The NSB is proposing to install pilings and foundation supports for a pre-fabricated module; supports for new piping and cable tray; new process, utility and flare piping; and power and controls to integrate the module for removal of hydrogen sulfide. The natural gas pipeline related facilities will be located on the Alpine Development Pad upstream of NNGP. The gas processing facility upgrades will increase the safety of the pipeline and the gas delivered to Nuiqsut by removing hydrogen sulfide (H₂S) and water from the gas stream.

The land is located within the N2N2 Section 5, Township 11 North, Range 5 East, and the SW4SE4 Section 32, Township 12 North, Range 5 East, Umiat Meridian; containing approximately 1.5 acres, more or less.

<u>Authority</u>: AS 38.35.015 and Right-of-Way Lease for the Nuiqsut Natural Gas Pipeline, ADL 416202, are the authorities for this decision.

Administrative Record: Right-of-Way Lease for the Nuiqsut Natural Gas Pipeline, ADL 416202, and the associated case file constitute the administrative record used in this decision.

Background: The NNGP transports natural gas from the ConocoPhilips Alpine oil field to the town of Nuiqsut via a 15-mile long, 3.5-inch diameter (OD) steel pipeline. Approximately 9 miles of the NNGP is aboveground with the remaining 6 miles residing below-ground; approximately 2.66 miles are on state land. The Nuiqsut Gas Utility (owned by the NSB) gas source is from the Alpine Production Facility operated by ConocoPhillips. The original design basis for the Nuiqsut Gas Conditioning Module assumed the H₂S level in the natural gas was 0 parts per million (ppm). Data obtained by the NSB, indicates that since 2003, the H₂S levels for the Alpine Fuel Gas System that supplies gas to Nuiqsut has gradually increased each year ranging from 0 to 15 ppm.

The North Slope Borough is concerned that the high H_2S and water content in the natural gas will accelerate corrosion and/or cause hydrogen stress cracking in the piping system and associated components. As the pipeline lessee and operator of the Nuiqsut Gas Utility, the NSB is responsible for the condition of the gas for pipeline transport, and has determined a new conditioning skid with increased H_2S removal capacity is a necessary improvement for the NNGP.

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The purpose of this proposed amendment, is to add state land to the pipeline ROW lease to accommodate the new H_2S conditioning skid and associated components. The ROW would be expanded to comprise both the existing gas processing or dehydration skid depicted as the "N9 Gas Skid" and the H_2S conditioning skid known as the "N7 H2S Skid", as well as approximately 430 feet of the NNGP on the Alpine pad. The on-pad pipeline is positioned on the Alpine operator's pipe rack until the edge of the pad where the NNGP originates (See Attachment A).

<u>Title</u>: The State of Alaska received Tentative Approval to the lands in Section 5, Township 11 North, Range 5 East, Umiat Meridian and Section 32, Township 12 North, Range 5 East, Umiat Meridian, pursuant to (GS 1285 and GS 1286) on February 7, 1969.

<u>Planning and Classification</u>: The lands encompassed by this application are classified as Resource Management (RMG) under classification, CL-618; are subject to ADL 50666, North Slope Area Special Use Lands. The lands within Section 5, Township 11 North, Range 5 East are closed to mineral entry by Mineral Closing Order (MCO) 740, dated August 1, 2014.

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 a number of important resources, but for which a specific resource allocation decision is not possible at this time, or land that contains one or more resource values, none of which is of sufficiently high value to merit designation as a primary use. Classification (CL-618) did 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 Area Special Use Lands, under 11 AAC 96.014, designates all lands in the Umiat Meridian as "special use lands." This designation as special use lands requires that, in addition to permitting requirements under 11 AAC 96.010, a permit is required for motorized vehicle use, unless that use is for subsistence purposes or is on a graveled road. The requirement for a permit or authorization would be fulfilled through the issuance of this proposed right-of-way lease amendment. This requirement does not prohibit the development of lands within the Umiat Meridian, and does not prohibit the proposed action.

<u>Agency/Public Notice</u>: Notice of the Right-of-Way Amendment Application was published in the Anchorage Daily News on February 6, 2018 and in the Arctic Sounder on February 8, 2018. The Notice was sent for posting in the Prudhoe Bay, Coldfoot, and Fairbanks Post Offices and posted on the State of Alaska, the Division of Oil and Gas Newsroom and the State of Alaska public notice web pages.

In accordance to AS 38.35.070(2), the following coordinate agencies were notified of the application: Alaska Department of Environmental Conservation, Alaska Department of Labor and Workforce Development, Alaska Department of Transportation and Public Facilities, and the Regulatory Commission of Alaska. Any objections to the proposed lease amendment pursuant to AS 38.35.200 must be submitted in writing to the SPCS by 5:00 p.m. on April 9, 2018.

A determination from the State Historic Preservation Office was not requested by the SPCS because the additional land for the NNGP expansion is on a production pad that has been extensively developed.

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Public notice of this Analysis and Proposed Decision will be published in the Anchorage Daily News and Arctic Sounder on March 22, 2018. The Notice will be sent for posting in the Prudhoe Bay, Coldfoot, and Fairbanks Post Offices and posted on the State of Alaska and the Division of Oil and Gas Newsroom public notice web pages. If public comment indicates the need for significant changes in the proposed decision, additional public notice will be given on or after April 24, 2018.

Analysis: AS 38.35, the Alaska Right-of-Way Leasing Act, sets forth the procedures by which certain right-of-way leases are granted by the State of Alaska and the conditions under which they can be amended. As set out in 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 right-of-way purposes. The Commissioner found it to be in the best interest of the residents of the State of Alaska to issue the Right-of-Way Lease for the Nuiqsut Natural Gas Pipeline, ADL 416202.

AS 38.35.020(a) requires the applicant to obtain a right-of-way lease of state land from the Commissioner. The installation of upgraded gas processing skids and associated infrastructure is consistent with the original purpose of the lease. These upgrades to the NNGP require a disposal of an interest in state land beyond what was included during the original adjudication. 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 installation of the H_2S condition skid is an improvement to the NNGP as it will increase the H_2S removal capacity and protect the integrity of the pipeline system. The Lease provides for the new infrastructire, which is defined in 48(r) of the Right-of-Way Lease for the Nuiqsut Natural Gas Pipeline, ADL 416202, as "Related Facilities," the substantial and continuous use of which is necessary for the operation or maintenance of the Pipeline.

Findings: A high H_2S and water content in natural gas being transported in the NNGP can accelerate corrosion in the pipline system and associated components. The installation of upgraded gas processing skids, pilings and foundation supports for the pre-fabricated module; supports for new piping and cable tray; new process, utility and flare piping; and power and controls, integrating the module for removal of hydrogen sulfide are integral to the protection of the pipeline. The gas processing skids and associated components are 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 Right-of-Way Lease for the Nuiqsut Natural Gas Pipeline, ADL 416202, is consistent with the lease.

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The terms, conditions and stipulations contained in the right-of-way lease adequately address and protect the interest of the State of Alaska. The installation of upgraded gas processing skids and associated components that remove H₂S and wagter is necessary to protect the integrity of the pipeline. The lessee is required to secure all necessary permits or authorizations required by other state, federal, and municipal agencies.

The Right-of-Way Lease Amendment will require an as-built survey that depicts the additional state lands to be added for the processing skids and additional pipeline be submitted for review and acceptance by the Commissioner, pursuant to Section 29(e) of the right-of-way lease.

The addition of these lands to the right-of-way 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.

Proposed Decision: I find that the application to amend the Right-of-Way Lease for the Nuigsut Natural Gas Pipeline, ADL 416202, 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 as a result 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 April 23, 2018, without further notice. The amendment to add state lands to the ROW Lease, ADL 416202 will be completed following construction, and the review and acceptance of the as-built survey.

Jason Walsh State Pipeline Coordinator

Date

Attachment A: Nuiqsut Natural Gas Pipeline, ADL 416202, Alpine Pad Master Site Plan, Alpine Facility, Rev. 43B, Dated 10/17 (1 Page)