

**Alaska Department of Environmental Conservation
Air Permits Program**

**Public Comment - August 16, 2024
Alyeska Pipeline Service Company
Trans-Alaska Pipeline System (TAPS) Pump Station 9 (PS-9)**

**STATEMENT OF BASIS
for the terms and conditions of
Permit No. AQ0079TVP05**

**Prepared by Jonathon Rea
ADEC AQ/APP (Anchorage)**

INTRODUCTION

This document sets forth the statement of basis for the terms and conditions of Operating Permit No. AQ0079TVP05.

STATIONARY SOURCE IDENTIFICATION

Section 1 of Operating Permit No. AQ0079TVP05 contains information on the stationary source as provided in the Title V permit application.

The Trans-Alaska Pipeline System (TAPS) Pump Station 9 (PS-9) is owned and operated by, Hilcorp Alaska, LLC; ConocoPhillips Transportation Alaska, Inc; ExxonMobile Pipeline Company, and Alyeska Pipeline Service Company (APSC) is the Permittee for the stationary source's operating permit. The SIC code for this stationary source is 4612 Crude Oil Pipelines. The NAICS code for the stationary source is 486110 (Pipeline Transportation of Crude Oil).

The stationary source is a crude oil pumping facility. The purpose of Pump Station 9 (PS-9) is to support the transportation of crude oil by the Trans-Alaska Pipeline System (TAPS), which transports crude oil from the North Slope of Alaska to the Valdez Marine Terminal. The operation of PS-9 is supported by several auxiliary activities due to its remote location, including maintenance and support facilities and operations of a crude oil break-out tank. Electrical power for the stationary source including the power to drive the crude oil pumps is provided commercially by Golden Valley Electric Association. The stationary source has capacity to generate backup power onsite in the event of commercial power outages.

EMISSIONS UNIT INVENTORY AND DESCRIPTION

Under 18 AAC 50.326(a), the Department requires operating permit applications to include identification of all emissions-related information, as described under 40 C.F.R. 71.5(c)(3).

The emissions units at the Trans-Alaska Pipeline System (TAPS) Pump Station 9 (PS-9) that have specific monitoring, recordkeeping, and reporting requirements are listed in Table A of Operating Permit No. AQ0079TVP05. These include three diesel electric generator sets and one crude oil breakout storage tank; EU 12 specifically was reclassified as a non-emergency engine under 40 C.F.R. 63 Subpart ZZZZ in this permit. The stationary source also owns insignificant emissions units that include 13 small diesel-fired heaters and a small incinerator (Smart Ash waste burn barrel).

Table A of Operating Permit No. AQ0079TVP05 contains information on the emissions units regulated by this permit as provided in the application. The table is provided for informational and identification purposes only. Specifically, the emissions unit rating/size provided in the table is not intended to create an enforceable limit.

EMISSIONS

A summary of the potential to emit (PTE)¹ and assessable PTE as indicated in the application from the Trans-Alaska Pipeline System (TAPS) Pump Station 9 (PS-9) is shown in the table below.

Table D - Emissions Summary, in Tons Per Year (TPY)

Emissions	NO _x	CO	PM	SO ₂	VOC	CO _{2e} ¹	HAPs	Total ²
PTE	401	14	3.8	34	411	23,902	12.4	864
Assessable PTE	401	14	3.8	34	411	Not Applicable		864

Notes:

1. CO_{2e} emissions are defined as the sum of the mass emissions of each individual GHG adjusted for its global warming potential.
2. Total PTE and total assessable PTE shown in the table do not include CO_{2e} and HAPs.
3. HAP emissions are a subset of either VOC emissions or PM₁₀ emissions and are excluded from the assessable emissions total to avoid double counting.

The assessable PTE listed under Condition 31.1 is the sum of the PTE of each individual air pollutant, other than greenhouse gases (GHGs). The emissions listed in Table D are estimates that are for informational use only. The listing of the emissions does not create an enforceable limit for the stationary source.

For criteria pollutants and GHGs, emissions are as provided in Forms D1 and D2 of the application to this Title V renewal. The applicant estimated PTE's for NO_x, CO, PM₁₀, VOC, and HAPs based on AP-42 emission factors current as of the date of the permit renewal application submittal, manufacturer's data, and any allowed emission rates and/or operational limits applicable to emissions units at the stationary source. The applicant estimated potential emissions of SO₂ based on mass balance and allowable fuel sulfur content limits (0.24 percent sulfur by weight), except for the SO₂ PTE of the Smart Ash burn barrel, which was estimated based on the AP-42 emission factor. For the crude oil breakout storage tank, VOC and HAPs PTEs were calculated using EPA TANKS 4.0 and the procedure set out in Section 11, respectively. For GHG emissions, the applicant estimated CO_{2e} emissions using the emission factors found in AP-42 for CO₂, and emission factors in 40 C.F.R. 98, Subpart C, Table C-2 for CH₄ and N₂O and respective global warming potential values found in Table A-1.

The stationary source is not a major source of HAPs. The highest PTE for an individual HAP is n-hexane (8.16 TPY) and cumulative PTE for HAPs is 12.4 TPY, as shown in the table above. These amounts are below the 10/25 TPY significant emissions thresholds for a HAPs major source.

BASIS FOR REQUIRING AN OPERATING PERMIT

In accordance with AS 46.14.130(b), an owner or operator of a Title V source² must obtain a Title V permit consistent with 40 C.F.R. Part 71, as adopted by reference in 18 AAC 50.040.

¹ *Potential to Emit or PTE* means the maximum capacity of a stationary source to emit a pollutant under its physical or operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source, as defined in AS 46.14.990(22).

² *Title V source* means a stationary source classified as needing a permit under AS 46.14.130(b) [ref. 18 AAC 50.990(111)].

Except for sources exempted or deferred by AS 46.14.120(e) or (f), AS 46.14.130(b) lists the following categories of sources that require an operating permit:

- A major source;
- A stationary source, including an area source, subject to federal New Source Performance Standards (NSPS) under Section 111 of the Clean Air Act or National Emission Standards for Hazardous Air Pollutants (NESHAP) under Section 112 of the CAA;
- Another stationary source designated by the Federal Administrator by regulation.

The Permittee is required to obtain an operating permit for the Trans-Alaska Pipeline System (TAPS) Pump Station 9 (PS-9) as specified under 18 AAC 50.326(a) and 40 C.F.R. 71.3(a), because the stationary source is:

- A major stationary source as defined in Section 302 of the CAA that directly emits, or has the potential to emit, 100 TPY or more of any air pollutant subject to regulation.

AIR QUALITY PERMITS

Permits to Operate

Permit to Operate No. 9572-AA005. The last Permit to Operate issued for this stationary source is Permit to Operate No. 9572-AA005. This permit was issued March 4, 1996 and revised on January 17, 1997 and July 2, 1997 (settlement agreement amendment). This permit was amended through Construction Permit No. 9872-AC028 issued on December 4, 1998.

Title I (Construction and Minor) Permits

Construction Permit No. 9872-AC028. The Department issued Permit No. 9872-AC028 (also identified as AQ0079CPT01) on December 4, 1998. This permit revised (deleted) terms and conditions of Permit to Operate No. 9572-AA005. All of the emissions units authorized under Permit No. 9872-AC028 permit have been decommissioned from PS-9; therefore, terms and conditions from this permit have not been carried over to the succeeding Title V permits.

Construction Permit No. AQ0079CPT02. The Department issued Permit No. AQ0079CPT02 to this stationary source on March 11, 2005 to authorize installation of new EUs (EU IDs 10 – 12) and decommissioning old EUs (EU IDs 1 – 7 in Table 1 of Permit No. AQ0079TVP01; APSC requested to retain EU ID 8) as part of the Strategic Reconfiguration (SR) Project. However, APSC requested deletion of EU ID 8 in its application for Title V permit renewal (Permit No. AQ0079TVP03) because the EU has been decommissioned.

All stationary source-specific requirements established in this permit are included in Operating Permit No. AQ0079TVP05 as described in Table E.

Construction Permit No. AQ0079CPT03. The Department issued Permit No. AQ0079CPT03 on October 28, 2005. This permit implemented owner requested emission limits to avoid PS-9 classification as a HAP major source.

All stationary source-specific requirements established in this permit are included in Operating Permit No. AQ0079TVP05 as described in Table F.

Title V Operating Permits

Permit No. AQ0079TVP01. The Permittee submitted an application for an initial Title V operating permit dated October 1, 1997 and supplements to the application on November 1998, March 2000, and December 2001. The Department issued Operating Permit No. AQ0079TVP01 on October 13, 2003.

Permit No. AQ0079TVP02. The Permittee submitted an application to renew Operating Permit No. AQ0079TVP01 on May 20, 2008, with supplements to the application dated August 18, 2009. The Permittee amended the application on October 30, 2008 and April 1, 2009 to withdraw the Permittee's previous applicability determination on 40 C.F.R. 63 Subpart CCCCCC and HHHHHH and also to request for permit shields from the requirements of these subparts. The Department concurred with APSC and granted these requests in the renewal permit. The Department issued Operating Permit No. AQ0079TVP02 on May 14, 2010. The permit expired on May 14, 2015.

- Revision No. 1. The Department issued AQ0079TVP02 Revision 1 on January 8, 2013 to include a diesel engine-driven booster pump, EU ID 14, in the permit. 40 C.F.R. 60 Subpart IIII is applicable to the engine which was included in the modification. In a letter to Alyeska, dated May 26, 2011, the Department determined that the emissions from EU ID 14, when used only for maintenance checks, readiness testing, and for cold starts of TAPS, increased the PTE of the source by 0.8 TPY of NO_x which is below the minor permitting thresholds. Therefore, the Department did not require Alyeska to obtain a minor permit for the modification project.
- Revision No. 2. The Department issued AQ0079TVP02 Revision 2 on May 6, 2014. The Permittee submitted an application for an administrative amendment to the Title V permit on January 30, 2014 to correct the emissions unit number for the conditions of 40 C.F.R. 60 Subpart IIII included in AQ0079TVP02 Revision 1. EU ID 11 was inadvertently included in these conditions instead of EU ID 14.

Permit No. AQ0079TVP03. The Permittee submitted an application to renew Operating Permit No. AQ0079TVP02 on January 30, 2014. The application included requests to delete EU ID 8 because it has been decommissioned and include the requirements of 40 C.F.R. 63, Subpart ZZZZ as applicable to EU IDs 10, 11, and 12. The Department issued Operating Permit No. AQ0079TVP03 on June 23, 2015. The permit expired on June 23, 2020.

Permit No. AQ0079TVP04. The Permittee submitted an application to renew Operating Permit No. AQ0079TVP03 on September 3, 2019. The application was deemed complete on September 17, 2019. Additional information was received through email correspondences on September 19 and 20, 2019. This permit incorporates the terms and conditions of Construction Permit Nos. AQ0079CPT02 and AQ0079CPT03. This permit will expire on March 6, 2025.

Permit No. AQ0079TVP05. The Permittee submitted an application to renew Operating Permit No. AQ0079TVP04 on January 4, 2024. The application was deemed complete on February 15, 2024. This permit reclassifies EU ID 12 as a non-emergency engine under 40 C.F.R. 63 Subpart ZZZZ.

COMPLIANCE HISTORY

The stationary source has operated at its current location since 1977. PS-9 is classified as Prevention of Significant Deterioration (PSD) major because it emits or has the potential to emit 250 TPY or more of a regulated air pollutant. Although the stationary source as a whole is designated as major under PSD, a PSD permit has not been required because the source commenced construction prior to August 7, 1977 (the effective date of the PSD regulations) and has not been modified to a level above PSD emission thresholds. The two construction permits (AQ0079CPT02 and AQ0079CPT03) contained owner requested limits to avoid classification of the projects as PSD modifications. Review of the permit files during the most recent 10-year period for this stationary source, which includes the past inspection reports and compliance evaluations, indicates a stationary source generally operating in compliance with its operating permit.

APPLICABLE REQUIREMENTS FROM PRECONSTRUCTION PERMITS

Incorporated by reference at 18 AAC 50.326(j), 40 C.F.R. Part 71.2 defines “applicable requirement” to include the terms and conditions of any preconstruction permit issued under rules approved in Alaska’s State Implementation Plan (SIP).

Alaska’s SIP includes the following types of preconstruction permits:

- Permit to Operate issued on or before January 17, 1997 (these permits cover both construction and operations);
- Construction permits issued on or after January 18, 1997; and
- Minor permits issued on or after October 1, 2004.

Preconstruction permit terms and conditions include both source-specific conditions and conditions derived from regulatory applicable requirements such as standard conditions, generally applicable conditions, and conditions that quote or paraphrase requirements in regulation. These requirements include, but are not limited to, each emissions unit- or source-specific requirement established in these permits issued under 18 AAC 50 that are still in effect at the time of issuance of Operating Permit No. AQ0079TVP05.

Table E and Table F below list the requirements carried into Operating Permit No. AQ0079TVP05 to ensure compliance with the preconstruction permit requirements.

Table E - Comparison of Construction Permit No. AQ0079CPT02 Conditions to Operating Permit No. AQ0079TVP05 Conditions¹

AQ0079CPT02 Condition No.	Description of Requirement	AQ0079TVP05 Condition No.	How Condition was Revised
1	Authorization to install EU IDs 10 – 12 for the Strategic Reconfiguration	None	Emissions units are already installed.
2 and 3	ORLs for Ambient Air Quality Protection – NO _x , SO ₂ , PM ₁₀ (EU IDs 8, 10, 11, & 12)	10 and 11	Same limits and requirements except deleted requirements pertaining to EU ID 8; EU ID 8 has been removed from the stationary source. Reworded MR&R to clarify conditions, avoid redundancy, and to

AQ0079CPT02 Condition No.	Description of Requirement	AQ0079TVP05 Condition No.	How Condition was Revised
			be consistent with current Title V permitting language.
4	ORLs to Avoid PSD Major Modification – NO _x (EU IDs 10 – 12)	12	Same limits. Added MR&R conditions.
5 and 6	State VE and PM emissions requirements for EU IDs 10 – 12	1 through 8	Used the adopted Standard Permit Condition (SPC) IX language.
7	State Sulfur Compound emissions requirements for EU IDs 10 – 12	9	Same limit; streamlined MR&R requirements through compliance with the more stringent sulfur content limit and associated MR&R in Condition 11.

Note:

1. This table does not include all standard and general conditions.

Table F - Comparison of Construction Permit No. AQ0079CPT03 Conditions to Operating Permit No. AQ0079TVP05 Conditions¹

AQ0079CPT03 Condition No.	Description of Requirement	AQ0079TVP05 Condition No.	How Condition was Revised
1	HAP ORL (Tank 190, EU ID 13)	13	Same limits. Replaced reference to the obsolete 18 AAC 50.300(f) with the current relevant citation 18 AAC 50.316.
2.1	Sampling frequency of the discharge crude stream at Pump Station 1	13.1.a	Did not carry over quarterly and semiannual sampling requirements – already fulfilled.
2.2	Determine the amounts of 1,3 butadiene, N-hexane...	13.1.b	Same requirements, except removed “use equivalent methods approved by the Department.” (See below.)
2.2, 2.3, 2.5b, and 2.6a	HAP monitoring and testing methods	13.1.b, 13.1.c(ii), 13.1.d, and 13.1.h(i)	Did not carry forward Conditions 2.2, 2.3, 2.5b, and 2.6a where the Permittee is allowed to “use equivalent methods approved by the Department.” This text was discarded during the Revised Action Plan submitted to EPA on July 15, 2007, as a result of the EPA Audit of the September 2006 Title V Program Review and is not to be used in subsequent permits since it allows a Permittee to bypass the public process for changing monitoring requirements by submitting off-record requests to change monitoring standards.
2.3 and 2.4	Monitor and record flow rate data of the crude oil	13.1.c	Merged conditions. Same requirements; itemized, re-organized, and rephrased requirements for better readability and accurate cross-references.

AQ0079CPT03 Condition No.	Description of Requirement	AQ0079TVP05 Condition No.	How Condition was Revised
2.5, 2.5a and 2.5b	HAP emissions calculations methodology	13.1.d	Same requirements; reworded and reorganized conditions to simplify and for clarity.
2.5c through 2.5e	Monthly or semiannual HAP emissions calculations and recordkeeping	13.1.e through 13.1.g	Same requirements; reworded and reorganized conditions to simplify and for clarity.
2.6	If HAP emissions exceed 90 percent...	13.1.h	Same requirements; reworded and reorganized conditions to simplify and for clarity.
3	Reporting requirements	13.2	Same requirements.

Note:

1. This table does not include all standard and general conditions.

NON-APPLICABLE REQUIREMENTS

This section discusses standard conditions that have not been included in the permit and other requirements that are not included for specific reasons.

- **NSPS Subpart DDDD:** The Department has adopted 40 C.F.R. 60, Subpart DDDD by reference into 18 AAC 50.040(a)(LL), but has not yet developed or submitted a state plan for existing Commercial and Industrial Solid Waste Incineration (CISWI) units to the U.S. EPA in accordance with the procedures outlined within the Subpart. As of the publication date for this decision, U.S. EPA has not developed a federal plan according to 40 C.F.R. 60.27 to implement these guidelines. 40 C.F.R. 60.2545 states that this Subpart does not directly affect CISWI unit owners or operators in the state. Instead, the Subpart obligates owners and operators to comply with the state plan. Therefore, the model rule is currently not an applicable requirement for the purpose of this operating permit as defined in 40 C.F.R. 71.2.
- **40 C.F.R. 64 Compliance Assurance Monitoring (CAM):** None of the emissions units at the stationary source use a control device to achieve compliance with emission limits or standards. Therefore, CAM requirements are not applicable.
- **40 C.F.R. 68 Chemical Accident Prevention Provisions:** The Risk Management Plan (RMP) requirements do not apply because the stationary source has no threshold quantities of a regulated substance used in a process as defined in 40 C.F.R. 68.10.

STATEMENT OF BASIS FOR THE PERMIT CONDITIONS

The Department adopted regulations from 40 C.F.R. 71, as specified in 18 AAC 50.040(j), to establish operating permit regulations. The EPA fully approved the Alaska Operating Permit Program on November 30, 2001, as noted in Appendix A to 40 C.F.R. 70. This Statement of Basis, required under 40 C.F.R. 71.11(b), provides the legal and factual basis for each condition of Operating Permit No. AQ0079TVP05. Additionally, and as required by 40 C.F.R. 71.6(a)(1)(i), the state and federal regulations for each permit condition are cited in the permit.

Conditions 1 through 4, Visible Emissions Standard and MR&R

Legal Basis: These conditions require compliance with the applicable requirements in 18 AAC 50.055(a).

- 18 AAC 50.055(a) applies to the operation of fuel-burning equipment and industrial processes. EU IDs 10 through 12 are fuel-burning equipment.

U.S. EPA approved the addition of these standards to the SIP, as noted in 40 C.F.R. 52.70. The Department included permit conditions for MR&R as required by 40 C.F.R. 71.6(a)(3) and 71.6(c)(1).

Factual Basis: Condition 1 prohibits the Permittee from causing or allowing visible emissions in excess of the applicable standard in 18 AAC 50.055(a)(1). MR&R requirements are listed in Conditions 2 through 4 of the permit. These conditions have been adopted into regulation as Standard Permit Condition (SPC) IX – Visible Emissions and Particulate Matter Monitoring Plan for Liquid Fuel-Burning Equipment and Flares. The Department has modified these conditions, as follows:

- The Department deleted the Smoke/No Smoke parts of the standard condition because the Permittee elected not to use that option.
- Added Condition 1.1 to address MR&R for emissions units that have actual emissions below the significant emissions thresholds in 18 AAC 50.326(e) but are considered significant per 18 AAC 50.326(d).

Beyond as noted above, the Department has determined that the standard conditions adequately meet the requirements of 40 C.F.R. 71.6(a)(3). No additional emissions unit or stationary source operational or compliance factors indicate that unit-specific or stationary-source-specific conditions would better meet the requirements. Therefore, the Department concludes that the standard conditions, as modified, meet the requirements of 40 C.F.R. 71.6(a)(3).

The Permittee must establish by visual observations of emissions unit exhaust, which may be supplemented by other means (e.g., a defined stationary source operation and maintenance program), that the stationary source is in continuous compliance with the state emission standards for visible emissions.

These conditions detail a stepwise process for monitoring to determine compliance with the state's visible emissions standard for liquid fuel-burning equipment. Equipment types covered by these conditions are stationary internal combustion engines, turbines, heaters, boilers, and flares. Initial monitoring frequency schedules are established along with subsequent reductions or increases in frequency depending on the results of the self-monitoring program.

Reasonable action thresholds are established in these conditions that require the Permittee to progressively address potential visible emission problems from emissions units either through maintenance programs and/or more rigorous tests that will quantify whether a specific emission standard has been exceeded.

Liquid Fuel- Burning Equipment:

Monitoring – The emissions unit exhaust must be observed by the Method 9 Plan. Corrective actions such as maintenance procedures or more frequent observations may be required depending on the results of the observations.

Recordkeeping - The Permittee is required to record the results of all observations of emissions unit exhaust and record any actions taken to reduce visible emissions.

Reporting - The Permittee is required to report emissions in excess of the state visible emissions standard and deviations from permit conditions. The Permittee is also required to include copies of the results of all visible emission observations in the operating report.

Significant Emissions Units under 18 AAC 50.326(d)(1):

EU IDs 10 through 12 do not qualify as insignificant per 18 AAC 50.326(d)(1) because they are subject to operational limits established under NESHAP Subpart ZZZZ. As long as the emissions units operate within these limits, they are insignificant by emissions rate as specified in 18 AAC 50.326(e) and no monitoring is required in accordance with Department Policy and Procedure No. 04.02.103, Topic # 3. The Permittee must annually certify compliance under Condition 56 with the visible emissions standard based on reasonable inquiry. Should any of EU IDs 10 through 12 exceed any of the significant emissions thresholds in 18 AAC 50.326(e), the unit would be subject to the VE and PM MR&R requirements.

Conditions 5 through 8, Particulate Matter (PM) Standard and MR&R

Legal Basis: These conditions require compliance with the applicable requirement in 18 AAC 50.055(b).

- 18 AAC 50.055(b)(1) applies to the operation of fuel-burning equipment and industrial processes. EU IDs 10 through 12 are fuel-burning equipment.

This PM standard applies because it is contained in the federally-approved SIP. The Department included permit conditions for MR&R as required by 40 C.F.R. 71.6(a)(3) and 71.6(c)(1).

Factual Basis: Condition 5 prohibits emissions in excess of the applicable state PM standard. MR&R requirements are listed in Conditions 6 through 8 of the permit. These conditions have been adopted into regulation as SPC IX. The Department has modified these conditions, as follows:

- Deleted the requirements to record and report the exhaust stack diameters of EU IDs 10 through 12. These one-time requirements have already been fulfilled.

Beyond as noted above, the Department has determined that the standard conditions adequately meet the requirements of 40 C.F.R. 71.6(a)(3). No additional emissions unit or stationary source operational or compliance factors indicate that unit-specific or stationary-source-specific conditions would better meet the requirements. Therefore, the Department concludes that the standard conditions, as modified, meet the requirements of 40 C.F.R. 71.6(a)(3).

The Permittee must establish by visual observations, which may be supplemented by other means (e.g., a defined stationary source operation and maintenance program), that the stationary source is in continuous compliance with the state's emission standards for PM.

Liquid Fuel-Burning Equipment:

Monitoring – The Permittee is required to either take corrective action or conduct PM source testing, if opacity threshold values are exceeded. For liquid fuel-burning engines and turbines, the Department set opacity threshold values of 15 percent for stack diameters less than 18 inches and 20 percent for stack diameters equal to or greater than 18 inches. These opacity thresholds are based on a study conducted by the Department in an effort to establish a correlation between opacity and PM. The data was collected from diesel engines of various stack sizes and the results are as follows:

- For stacks normalized to 21 inches – 0.05 gr/dscf corresponds to 27% opacity
- For stacks normalized to 18 inches – 0.05 gr/dscf corresponds to 23% opacity
- For stacks normalized to 12 inches – 0.05 corresponds to 16.8 % opacity
- For stacks normalized to 10 inches – 0.05 corresponds to 14.3 %

This means that the trend line for the complete data set predicts that 20% opacity corresponds to a little less than the PM limit for an 18-inch stack. There may be engines that exceed the thresholds but the intent of the standard condition is not to guarantee that each engine that might exceed the PM standard will be tested. The Department expects few, if any, engines to actually be tested under this condition. What the Department does expect is that with the adopted condition in place, operators that find an opacity above or near the testing threshold will take corrective action necessary to reduce PM emissions. This would achieve the desired environmental outcome without the added cost of testing. The Department expects this to be the case with both thresholds.

The method is premised on the fact that a five percent difference in opacity is distinguishable. The conditions mean that if opacity readings as measured using Method 9 – with all of its limitations – exceed the threshold, the Permittee must either take corrective action or conduct a PM source test. The compliance conditions for PM do not draw a legal conclusion about whether the method shows compliance with the visible emissions standard.

Recordkeeping - The Permittee is required to record the results of PM source tests and visible emissions observations conducted during the source tests.

Reporting - The Permittee is required to report incidents when emissions in excess of the opacity threshold are observed and the results of PM source tests. The Permittee is also required to include copies of the results of all visible emission observations taken during PM source testing in the operating report.

Condition 9, Sulfur Compound Emissions Standard and MR&R

Legal Basis: This condition requires compliance with the sulfur compound emissions standard under 18 AAC 50.055(c).

- 18 AAC 50.055(c) applies to the operation of fuel-burning equipment and industrial processes. EU IDs 10 through 12 are fuel-burning equipment.

The sulfur compound standard applies because it is contained in the federally-approved SIP. The Department included permit conditions for MR&R as required by 40 C.F.R. 71.6(a)(3) and 71.6(c)(1).

Factual Basis: The Permittee may not cause or allow the affected equipment to violate the applicable sulfur compound standard. Sulfur dioxide comes from the sulfur in the fuel (e.g., coal, natural gas, fuel oils).

Liquid Fuels:

Fuel sulfur testing will verify compliance with the SO₂ emission standard. Liquid fuel containing no more than 0.75 percent sulfur by weight will always comply with the emission standard (e.g., No. 2 diesel fuel is 0.6 wt% S_{fuel} or less by grade specification).

For the liquid fuel-burning generators, EU IDs 10 through 12, to protect the SO₂ ambient air quality standards, the Permittee is required to limit sulfur contents of diesel fuel burned in the emissions units to concentrations lower than necessary, as shown in Condition 11. Therefore, the MR&R requirements for compliance with the state SO₂ standard in Condition 9 have been streamlined based on the more stringent fuel sulfur content limits of 0.24 percent by weight rather than have two sets of MR&R.

Condition 10 through 13, Preconstruction Permit Requirements

Legal Basis: The Permittee is required to comply with all stationary source-specific requirements that were carried forward from previous SIP-approved Permits to Operate (PTO) issued on or before January 17, 1997 and operating permits issued between January 18, 1997 and September 30, 2004, and with all stationary source-specific requirements in EPA PSD permits, SIP-approved construction permits, SIP-approved minor permits, and owner requested limits (ORLs) established under 18 AAC 50.225. These requirements include Best Available Control Technology (BACT), limits to ensure compliance with the attainment or maintenance of ambient air quality standards or maximum allowable ambient concentrations, and owner requested limits. Requirements from the permits listed above apply because they were originally developed through case-by-case action under a federally-approved SIP or approved operating permit program.

Factual Basis: These conditions require the Permittee to comply with preconstruction permit terms and conditions. The Air Quality Permits section and Table E and Table F to the SOB describe which emissions units were authorized and how the terms and conditions have been revised, rescinded, and replaced in each Title I permit issued for the stationary source and how they are carried forward into the Title V permit.

Conditions 10 through 12 incorporate owner requested limits to protect ambient air and avoid PSD major modification as developed in Permit to Operate No. 9572-AA005 (revised through Construction Permit No. 9872-AC028 on December 4, 1998) and Construction Permit No. AQ0079CPT02.

Condition 13 incorporates owner requested limits developed in Permit No. AQ0079CPT03 to avoid PS-9 classification as a HAP major source. The permit incorporates associated monitoring, recordkeeping, and reporting requirements.

Condition 14, Insignificant Emissions Units

Legal Basis: The Permittee is required to meet the state emission standards in 18 AAC 50.055 for all industrial processes and fuel-burning equipment regardless of size. 18 AAC 50.055 is contained in the federally-approved SIP. The Department also added permit conditions for MR&R as required by 40 C.F.R. 71.6(a)(3) and 71.6(c)(1).

Factual Basis: The condition requires insignificant emissions units to comply with the state emission standards for visible emissions, particulate matter emissions, and sulfur-compound emissions. Insignificant emissions units are not generally listed in operating permits unless specific monitoring, recordkeeping, and reporting are necessary to ensure compliance with the state emission standards. However, the Permittee may not cause or allow insignificant emissions units at the stationary source to violate these standards whether or not they are listed in the operating permit.

The Department finds that the insignificant emissions units at this stationary source do not require specific monitoring, recordkeeping and reporting to ensure compliance under these conditions.

Condition 14.4.a requires certification that the insignificant emissions units did not exceed state emission standards during the previous year and did not emit any prohibited air pollution, based on reasonable inquiry.

The Department used the language in SPC V, adopted by reference under 18 AAC 50.346(b)(4), for the permit condition.

Condition 15, NESHAP Subpart A Requirements

Legal Basis: Most sources subject to National Emission Standards for Hazardous Air Pollutants (NESHAP) requirements are subject to NESHAP Subpart A. This stationary source is subject to 40 C.F.R. 63 Subpart ZZZZ, and therefore is subject to the general provisions of Subpart A as specified in the provisions for the applicability of NESHAP Subpart A in Table 8 to NESHAP Subpart ZZZZ.

Factual Basis: Condition 15 incorporates applicable 40 C.F.R. 63 Subpart A requirements. The Permittee may not cause or allow violations of these requirements. Subpart A contains the general requirements applicable to all affected sources subject to NESHAP. In general, the intent of NESHAP is to regulate specific categories of stationary sources that emit or have the potential to emit one or more hazardous air pollutants.

Conditions 16 through 21, NESHAP Subpart ZZZZ Requirements

Legal Basis: The Department has incorporated by reference the NESHAP requirements for specific industrial activities, as listed in 18 AAC 50.040(c). NESHAP Subpart ZZZZ applies to owners and operators of any existing, new, or reconstructed stationary reciprocating internal combustion engines (RICE), whose construction commenced before June 12, 2006, located at major and area sources of HAP emissions, excluding stationary RICE units being tested at a stationary RICE test cell/stand. Trans-Alaska Pipeline System (TAPS) Pump Station 9 (PS-9) is an area source of HAP emissions accessible by the Federal Aid Highway System (FAHS). EU IDs 10 through 12 are subject to the provisions of NESHAP Subpart ZZZZ under 40 C.F.R. 63.6590(a)(1)(iii) for existing RICE whose construction commenced before June 12, 2006.

Factual Basis: Trans-Alaska Pipeline System (TAPS) Pump Station 9 (PS-9) is an area source that owns and operates existing emergency RICE units, EU IDs 10 and 11, and non-emergency RICE unit, EU ID 12, subject to NESHAP Subpart ZZZZ. Per 40 C.F.R. 63.6603(a) and Table 2d, the existing emergency and non-emergency stationary CI RICE located at area sources of HAP are not subject to the numerical CO emission and operational limitations, but are subject to work and management practices standards as specified in Table 2d items 1 and 4. Condition 18 provides the work and management practices standards as specified in Table 2d items 1 and 4. The NESHAP Good Air Pollution Control Practices requirement provided in 40 C.F.R. 63.6605(b) and 63.6625(e) and (h), as reflected in Condition 17, satisfies the State Good Air Pollution Control Practices (GAPCP) requirement under 18 AAC 50.346(b)(5).

As required under 40 C.F.R. 63.6625(f), the Permittee has installed a non-resettable hour meter on EU IDs 10 and 11 for accurate recording and monitoring to demonstrate compliance with the work and management practice requirements and operational hour limitations set out for emergency RICE. Each of EU IDs 10 and 11 is allowed to operate up to 100 hours per calendar year for maintenance checks and readiness testing unless federal, state, or local standards require beyond 100 hours per year for the same purpose. The Permittee is also allowed to operate the emergency RICE in non-emergency situations for up to 50 hours per calendar year, as allowed under 40 C.F.R. 63.6640(f). The 50 hours allowed for non-emergency situations are counted towards the 100 hours per year provided for maintenance and testing. There is no time limit on the use of emergency stationary RICE in emergency situations. If EU IDs 10 or 11 no longer meet the criteria for an emergency engine, as defined in 40 C.F.R. 63.6675, the emissions units will need to meet all applicable requirements for non-emergency engines.

The Permittee must comply with the recordkeeping requirements of 40 C.F.R. 63.6655(e) and 63.6660, as set out in Condition 20. The reporting requirements are provided in Condition 21. The Permittee is required to include reports of deviations from NESHAP Subparts A and ZZZZ requirements with the semiannual operating reports, per 40 C.F.R. 63.6650(f). The Department also added gap-fill reporting requirements for operational hours in Condition 21.1.c and an excess emissions and permit deviation gap-fill reporting requirement in Condition 21.2.

Per 40 C.F.R. 63.6645(a)(5), initial notification is not required for existing stationary CI RICES that are not subject to any numerical emission standards. The fuel requirements specified under 40 C.F.R. 63.6604(b) do not apply to EU IDs 10 and 11 because the EUs do not supply power as part of a financial arrangement with another entity as specified in 40 C.F.R. 63.6640(f)(4)(ii).

The provisions of NESHAP Subpart ZZZZ listed in Conditions 16 through 21 are current as amended through May 30, 2023. Should EPA promulgate revisions to this subpart, the Permittee shall be subject to the revised final provisions as promulgated and not the superseded provisions summarized in these conditions.

Condition 22, Asbestos NESHAP

Legal Basis: The requirements of 40 C.F.R. 61 are applicable requirements for Title V permitting purposes, as stated in item 4 of the “applicable requirement” definition under 40 C.F.R. 71.2. The condition requires the Permittee to comply with asbestos demolition or renovation requirements in 40 C.F.R. 61, Subpart M and associated general provisions under

Subpart A, as adopted by reference under 18 AAC 50.040(b)(1) and (2)(F). The asbestos demolition and renovation requirements apply if the Permittee engages in asbestos demolition or renovation. ADEC received delegation for §61.145 and §61.154 of Subpart M (Asbestos), along with other sections and appendices which are referenced in §61.145, as §61.145 applies to sources required to obtain an operating permit under Alaska's regulations. ADEC has not received delegation for Subpart M for sources not required to obtain an operating permit under Alaska's regulations.

Factual Basis: Because these regulations include adequate monitoring and reporting requirements and because the Permittee is not currently engaged in such activity, simply citing the regulatory requirements is sufficient to ensure compliance with these federal regulations.

Conditions 23 through 25, Protection of Stratospheric Ozone, 40 C.F.R. 82

Legal Basis: The requirements of 40 C.F.R. 82 are applicable requirements for Title V permitting purposes, as stated in item 12 of the “applicable requirement” definition under 40 C.F.R. 71.2.

Condition 23 requires compliance with the applicable requirements in 40 C.F.R. 82, as adopted by reference under 18 AAC 50.040(d). The requirements apply if the Permittee engages in the recycling or disposal of certain refrigerants. The condition requires the Permittee to comply with the standards for recycling and emission reduction of refrigerants in 40 C.F.R. 82, Subpart F.

Conditions 24 and 25 also require compliance with the applicable requirement adopted under 18 AAC 50.040(d). Condition 24 prohibitions apply to all stationary sources that use substitutes for ozone-depleting compounds. Condition 25 prohibitions apply to all stationary sources that use halon for extinguishing fires and inert gas to reduce explosion risk. These conditions prohibit the Permittee from causing or allowing violations of these requirements. The Trans-Alaska Pipeline System (TAPS) Pump Station 9 (PS-9) uses halon and is therefore subject to the federal regulations contained in 40 C.F.R. 82.

Factual Basis: These conditions incorporate applicable 40 C.F.R. 82 requirements. Because these regulations include adequate monitoring and reporting requirements and because the Permittee is not currently engaged in such activity, simply citing the regulatory requirements is sufficient to require compliance with this federal regulation.

Condition 26, NESHAP Applicability Determinations

Legal Basis: This condition requires the Permittee to determine rule applicability of NESHAP, and requires record keeping for those determinations if required by the source classification.

Factual Basis: The Permittee has conducted an analysis of the stationary source and determined that it is not a major HAPs stationary source based on emissions. This condition requires the Permittee to notify the Department and EPA if the stationary source becomes an affected source subject to a standard promulgated by EPA under 40 C.F.R. 63 and to keep records of applicability determinations and make those records available to the Department.

Conditions 27 through 29, Standard Terms and Conditions

Legal Basis: These are standard conditions required for all operating permits under 18 AAC 50.345(a) and (e)-(g). As stated in 18 AAC 50.326(j)(3), the standard permit conditions of 18 AAC 50.345 replace the provisions of 40 C.F.R. 71.6(a)(5) – (7).

Factual Basis: These are standard conditions that apply to all permits.

Condition 30, Administration Fees

Legal Basis: This condition requires compliance with the applicable fee requirements in 18 AAC 50.400-403. As stated in 18 AAC 50.326(j)(1), the provisions of 18 AAC 50.400 through 50.430 are applicable and 40 C.F.R. 71.9 is not applicable.

Factual Basis: Paying administration fees is required as part of obtaining and holding a permit with the Department or as a fee for a Department action. The regulations in 18 AAC 50.400-403 specify the amount, payment period, and the frequency of fees applicable to a permit action.

Conditions 31 and 32, Emission Fees

Legal Basis: These conditions require compliance with the applicable fee requirements in 18 AAC 50.410-420. The regulations specify the time period for the assessable emissions and the methods the Permittee may use to calculate assessable emissions. As stated in 18 AAC 50.326(j)(1), the provisions of 18 AAC 50.400 through 50.430 are applicable and 40 C.F.R. 71.9 is not applicable.

Factual Basis: The Department used the language in SPC I, adopted by reference under 18 AAC 50.346(b), for the permit. SPC I requires the Permittee to pay fees in accordance with the Department's billing regulations. The billing regulations set the due dates for payment of fees based on the billing date. The assessable emissions are the lesser of the stationary source's potential or projected emissions of each air pollutant.

SPC I also allows the Permittee to recalculate the stationary source's assessable emissions based on previous actual annual emissions. According to AS 46.14.250(h)(1), assessable emissions are based on each air pollutant. Therefore, fees shall be paid on any pollutant emitted whether or not the permit contains any limitation for that pollutant.

This standard condition specifies that, unless otherwise approved by the Department, calculations of assessable emissions must be based on actual emissions for the previous calendar year. Since each current year's assessable emissions are based on the previous year, the Department will not give refunds or make additional billings at the end of the current year if the estimated emissions and current year actual emissions do not match.

As indicated in Condition 32.3, if the stationary source has not commenced construction or operation on or before March 31st, the Permittee may submit a waiver letter certified by the responsible official under 18 AAC 50.205 indicating that the assessable emissions for the source is zero for the previous fiscal year.

Condition 33, Good Air Pollution Control Practice

Legal Basis: This condition requires compliance with the requirements in 18 AAC 50.346(b)(5) and applies to all emissions units, **except** those subject to an emission

standard in 40 C.F.R. 60, 61, or 63, those subject to continuous emission or parametric monitoring requirements, and insignificant emissions units; i.e., except EU IDs 10 through 12.

Factual Basis: The condition requires the Permittee to comply with good air pollution control practices for all units.

The Department adopted this condition under 18 AAC 50.346(b) as SPC VI pursuant to AS 46.14.010(e). Records kept in accordance with Condition 33.2 for units subject to GAPCP need to be maintained for 5 years in accordance with Condition 50 even if a unit is no longer subject to this condition.

Maintaining and operating equipment in good working order is fundamental to preventing unnecessary or excess emissions. Standard conditions for monitoring compliance with emission standards are based on the assumption that good maintenance is performed. Without appropriate maintenance, equipment can deteriorate more quickly than with appropriate maintenance. If appropriate maintenance is not applied to the equipment, the Department may have to apply more frequent periodic monitoring requirements (unless the monitoring is already continuous) to ensure that the monitoring results are representative of actual emissions.

The Permittee is required to keep maintenance records to show that proper maintenance procedures were followed, and to make the records available to the Department. The Department may use these records as a trigger for requesting source testing if the records show that an adequate maintenance schedule is not maintained.

Condition 34, Dilution

Legal Basis: This condition reiterates 18 AAC 50.045(a), which prohibits the Permittee from using dilution as an emission control strategy. 18 AAC 50.045 is included in the SIP approved by EPA and, therefore, is an applicable requirement, per 40 C.F.R. 71.2.

Factual Basis: The condition prohibits the Permittee from diluting emissions as a means of compliance with any standard in 18 AAC 50.

Condition 35, Reasonable Precautions to Prevent Fugitive Dust

Legal Basis: This condition reiterates 18 AAC 50.045(d), which requires a person to use reasonable precautions when handling, storing or transporting bulk materials or engaging in an industrial activity. 18 AAC 50.045 is included in the SIP approved by EPA and, therefore, is an applicable requirement, per 40 C.F.R. 71.2.

Factual Basis: The Department used the language in SPC X for the permit. The condition requires the Permittee to take reasonable action to prevent particulate matter from being emitted into the ambient air in accordance with 18 AAC 50.045(d).

Condition 36, Stack Injection

Legal Basis: This condition reiterates 18 AAC 50.055(g), which prohibits the Permittee from releasing materials other than process emissions, products of combustion, or materials introduced to control pollutant emissions from a stack (i.e., disposing of material by injecting it into a stack). 18 AAC 50.055 is included in the SIP approved by EPA and, therefore, is an applicable requirement, per 40 C.F.R. 71.2.

Stack injection requirements apply to stacks of emissions units at a stationary source constructed or modified after November 1, 1982.

Factual Basis: No specific monitoring for this condition is practical. Compliance is verified by inspections, because the emissions unit or stack would need to be modified to accommodate stack injection.

Condition 37, Air Pollution Prohibited

Legal Basis: This condition requires compliance with 18 AAC 50.110. 18 AAC 50.110 is included in the SIP approved by EPA and, therefore, is an applicable requirement, per 40 C.F.R. 71.2. The condition prohibits the Permittee from causing any emission which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property. The Department also included permit conditions for MR&R as required by 40 C.F.R. 71.6(a)(3) and 71.6(c)(1).

Factual Basis: The Department used the language in SPC II for the permit. This condition spells out how to monitor, record, and report prohibited air pollution. While the other permit conditions and emissions limitations should ensure compliance with this condition, unforeseen emission impacts can cause violations of this standard. These violations would go undetected except for complaints from affected persons. Therefore, to monitor compliance, the Permittee must monitor and respond to complaints.

The Permittee is required to report any complaints and injurious emissions. The Permittee must keep records of the date, time, and nature of all complaints received and summary of the investigation and corrective actions undertaken for these complaints, and must submit copies of these records upon request of the Department.

Condition 38, Technology-Based Emission Standard

Legal Basis: The Permittee is required to take reasonable steps to minimize emissions if unavoidable emergency, malfunction, or non-routine repair activities cause an exceedance of any technology-based emission standard in this permit. This condition requires compliance with the requirement in 18 AAC 50.235. Technology-Based Emission Standard requirements apply because the stationary source contains equipment subject to a technology-based emission standard, such as BACT, MACT, LAER, NSPS or any other similar standard for which the stringency of the standard is based on determinations of what is technologically feasible, considering relevant factors.

Factual Basis: The conditions of this permit list applicable technology-based emission standards and require excess emission reporting for each standard in accordance with Condition 54. Excess emission reporting under Condition 54 requires information on the steps taken to minimize emissions. Monitoring of compliance for this condition consists of the report required under Condition 54.

Condition 39, Open Burning

Legal Basis: The condition requires the Permittee to comply with the regulatory requirements in 18 AAC 50.065 when conducting open burning at the stationary source. 18 AAC 50.065 is included in the SIP approved by EPA and, therefore, is an applicable requirement, per 40 C.F.R. 71.2. The state open burning regulation in 18 AAC 50.065 applies to the Permittee if the Permittee conducts open burning at the stationary source.

Factual Basis: The Permittee may conduct open burning by following the provisions of 18 AAC 50.065 and by following the Department guidelines posted at the website

<http://dec.alaska.gov/air/air-permit/open-burn-info>. Condition 39.1 requires the Permittee to keep records to demonstrate compliance with the standards for conducting open burning.

More extensive monitoring and recordkeeping is not warranted because the Permittee does not conduct open burning as a routine part of their business. Also, most of the requirements are prohibitions, which are not easily monitored. Compliance is demonstrated through annual certification required under Condition 56.

Condition 40, Requested Source Tests

Legal Basis: The Permittee is required to conduct source tests as requested by the Department. This requirement is under 18 AAC 50.220(a) and 50.345(k), which are included in the SIP approved by EPA.

Factual Basis: This condition applies because this is a standard condition to be included in all operating permits, as specified in 18 AAC 50.345(a). Compliance is demonstrated through the submission of the required source test plan and report.

Conditions 41 through 43, Operating Conditions, Reference Test Methods, Excess Air Requirements

Legal Basis: Conditions 41 and 43 require compliance with the applicable requirements in 18 AAC 50.220(b) and (c)(3), which are included in the SIP approved by EPA. Condition 42 specifies source test methods, as required by 40 C.F.R. 71.6(a)(3)(i) and 71.6(c)(1). These requirements apply because the Permittee is required by the permit to conduct source tests or a source test may be requested by the Department. The Permittee is required to conduct source tests in the manner set out in Conditions 41 through 43.

Factual Basis: These conditions supplement the specific monitoring requirements stated elsewhere in this permit.

Condition 44, Test Exemption

Legal Basis: This condition incorporates the source test exemption in 18 AAC 50.345(a) regarding visible emissions observations. 18 AAC 50.345(a) is included in the SIP approved by EPA.

Factual Basis: As provided in 18 AAC 50.345(a), the requirements for test plans, notifications and reports do not apply to visible emissions observations by smoke readers, except in connection with required particulate matter testing.

Conditions 45 through 48, Test Deadline Extension, Test Plans, Notifications and Reports

Legal Basis: Condition 45 contains the requirement in 18 AAC 50.345(l), while Conditions 46 through 48 require compliance with the applicable requirements in 18 AAC 50.345(m) through (o). The requirements in 18 AAC 50.345(l) through (o) are included in the SIP approved by the EPA. These requirements constitute standard conditions that must be included in each operating permit, as specified in 18 AAC 50.345(a). Additionally, these requirements apply because the Permittee is required to conduct source tests as set out by this permit or as requested by the Department.

Factual Basis: These standard conditions supplement specific monitoring requirements stated elsewhere in this permit.

Condition 49, Particulate Matter Calculations

Legal Basis: This condition requires the Permittee to reduce particulate matter data in accordance with 18 AAC 50.220(f), which is included in the SIP approved by EPA. It applies when the Permittee tests for compliance with the particulate matter standards in 18 AAC 50.050 or 50.055.

Factual Basis: The condition incorporates a regulatory requirement for particulate matter source tests. This condition supplements specific monitoring requirements stated elsewhere in this permit.

Condition 50, Recordkeeping Requirements

Legal Basis: This condition requires the Permittee to keep records in accordance with 40 C.F.R. 71.6(a)(3)(ii), which the Department adopted by reference under 18 AAC 50.040(j)(4). It also incorporates the general NSPS recordkeeping requirement under 40 C. F. R. 60.7(f), which the Department adopted by reference under 18 AAC 50.040(a)(1).

Factual Basis: The condition restates the regulatory requirements for recordkeeping, and supplements the recordkeeping defined for specific conditions in the permit. The records being kept provide evidence of compliance with this requirement.

40 C.F.R. 60.7(f) requires records retention for at least two years of the measurements required to be maintained by this Part while 40 C.F.R. 71.6(a)(3)(ii) requires at least five years of records retention. The five-year records retention requirement in Condition 50 satisfies both 40 C.F.R. 60.7(f) and 40 C.F.R. 71.6(a)(3)(ii).

Condition 51, Certification

Legal Basis: All operating permits must contain a requirement to certify permit applications, reports, affirmations, or compliance certifications, per 18 AAC 50.345(j). The requirement is a part of the SIP approved by EPA.

Factual Basis: The Department used the language in SPC XVII, adopted by reference under 18 AAC 50.346(b)(10), for the permit condition. The requirement in 18 AAC 50.345(j) is a standard condition that must be included in each operating permit, as specified in 18 AAC 50.345(a). 18 AAC 50.345(j) allows the excess emissions reports to be certified with the operating report. However, the Department reminds the Permittee that excess emissions reports must be submitted according to the applicable deadline given in Condition 54 and must not be withheld from the Department until the deadline for submittal of an operating report. This condition supplements the reporting requirements of this permit. The certification statement through electronic signature and options for submittal provide paperless options for reporting without compelling Permittees to any specific means of submission.

Condition 52, Submittals

Legal Basis: This condition applies because the Permittee is required to send reports to the Department and supplements the standard reporting and notification requirements of this permit.

Factual Basis: The Department used the language in SPC XVII, adopted by reference under 18 AAC 50.346(b)(10), for the permit condition. This condition lists the Department's appropriate address for reports and written notices. This condition states that the Department

requires one certified copy of submitted reports (except as otherwise required by the Department or other conditions of the permit) and provides an allowance for either electronic or hard copy document submittals. The condition also directs the Permittee to refer to the submission instructions on the Department's Standard Permit Conditions webpage for additional information regarding document submittals (e.g., the appropriate Department address).

Condition 53, Information Requests

Legal Basis: All operating permits must include a condition that requires the Permittee to furnish certain information upon request, per 18 AAC 50.345(i). The requirement is part of the SIP approved by EPA.

Factual Basis: The requirement in 18 AAC 50.345(i) is a standard condition that must be included in each operating permit, as specified in 18 AAC 50.345(a). This condition requires the Permittee to submit information requested by the Department.

Condition 54 and Section 13, Excess Emission and Permit Deviation Reports and Notification Form

Legal Basis: This condition requires the Permittee to comply with the requirements in 18 AAC 50.235(a)(2) and 18 AAC 50.240(c). Also, the Permittee is required to notify the Department when emissions or operations deviate from the requirements of the permit.

Factual Basis: This condition satisfies two state regulations related to excess emissions: the technology-based emission standard regulation and the excess emission regulation. Although there are some differences between the regulations, the condition satisfies the requirements of each regulation.

Except as noted in the last paragraph, the Department used the language in SPCs III and IV, adopted by reference under 18 AAC 50.346(b)(2), for the permit condition. The Department used the Notification Form in SPC IV adopted by reference under 18 AAC 50.346(b)(3), for the notification requirements (see Section 13).

The Department has modified Condition 54.3 and the Notification Form in Section 13 to reflect the electronic submittal requirements in 18 AAC 50.270 using the Department's online form to submit notification of excess emissions and permit deviations beginning September 7, 2023. The electronic notification form is found at the Division of Air Quality's Air Online Services (AOS) system webpage <http://dec.alaska.gov/applications/air/airtoolsweb> using the Permittee Portal option. Submittal through other methods may be allowed only upon written Department approval. Beyond as noted, the Department has determined that the standard conditions adequately meet the requirements of 40 C.F.R. 71.6(a)(3).

Condition 55, Operating Reports

Legal Basis: The condition specifies reporting requirements as required by 40 C.F.R. 71.6(a)(3)(iii)(A) which the Department has adopted by reference under 18 AAC 50.040(j)(4).

Factual Basis: The Department used the language in SPC VII, adopted by reference under 18 AAC 50.346(b)(6), for the permit condition. The condition restates the requirements for reports listed in regulation. The condition supplements the specific reporting requirements identified elsewhere in the permit.

The condition specifies that for the transition periods between an expiring permit and a renewal permit, the Permittee shall ensure that there is date-to-date continuity between the expired permit and the renewal permit such that the Permittee reports against the permit terms and conditions of the permit that was in effect during those partial date periods of the transition. No format is specified. The Permittee may provide one report accounting for each permit term or condition and the effective permit at that time. Alternatively, the Permittee may choose to provide two reports: one accounting for reporting elements of permit terms and conditions from the end date of the previous operating report until the date of expiration of the old permit, and a second operating report accounting for reporting elements of terms and conditions in effect from the effective date of the renewal permit until the end of the reporting period.

Condition 56, Annual Compliance Certification

Legal Basis: This condition requires compliance with the requirements in 40 C.F.R. 71.6(c)(5), which the Department adopted by reference under 18 AAC 50.040(j).

Factual Basis: This condition specifies the periodic compliance certification requirements, and specifies a due date for the annual compliance certification.

Condition 56.2 provides clarification of transition periods between an expiring permit and a renewal permit to ensure that the Permittee certifies compliance with the permit terms and conditions of the permit that was in effect during those partial date periods involved in the transition. No format is specified. The Permittee may provide one report certifying compliance with each permit term or condition for each of the effective permits during the certification period, or may choose to provide two reports: one certifying compliance with permit terms and conditions from January 1 until the date of expiration of the old permit, and a second report certifying compliance with terms and conditions in effect from the effective date of the renewal permit until December 31.

The Permittee is required to submit to the Department an annual compliance certification report. The Permittee may submit the required report electronically at their discretion.

Condition 57, Emission Inventory Reporting

Legal Basis: This condition requires the Permittee to submit emissions data to the state so the state is able to satisfy the federal requirement to submit emission inventory data from point sources to the EPA as required under 40 C.F.R. 51.15 and 51.321. The federal emission inventory requirement applies to sources defined as point sources in 40 C.F.R. 51.50. Under 18 AAC 50.275, the state also requires reporting of emissions triennially for stationary sources with an air quality permit, regardless of permit classification. This includes sources that do not meet the federal emission thresholds in Table 1 to Appendix A of 40 C.F.R. 51 Subpart A. The state must report emissions data as described in 40 C.F.R. 51.15 and the data elements in Tables 2a and 2b to Appendix A of 40 C.F.R. 51 Subpart A to EPA.

Factual Basis: Except as noted in the last paragraph, the Department used the language in SPC XV, as adopted by reference under 18 AAC 50.346(b)(8), for the permit condition.

The emission inventory data is due to EPA 12 months after the end of the reporting year (40 C.F.R. 51.30(a)(1) and (b)(1)). Permittees have until April 30th to compile and submit the data to the Department. To expedite the Department's process of transferring data into EPA's electronic reporting system, the Department encourages Permittees to submit the emission inventory through the Department's electronic emission inventory submission system in the

Permittee Portal on the Department's Air Online Services webpage <http://dec.alaska.gov/Applications/Air/airtoolsweb/>. A myAlaska account and profile are needed to gain access to the Permittee Portal. Other options are to submit the emission inventory via mail, email, or fax.

Detailed instructions on completing and submitting the emission inventory and the report form are available at the Point Source Emission Inventory page <http://dec.alaska.gov/Applications/Air/airtoolsweb/PointSourceEmissionInventory> by clicking the Emission Inventory Instructions button. The emission inventory instructions and report form may also be obtained by contacting the Department.

To ensure that the Department's electronic system reports complete information to the National Emissions Inventory, stationary sources with air quality permits are required to submit with each report emissions data described in 40 C.F.R. 51.15 and the data elements in Tables 2a and 2b to Appendix A of 40 C.F.R. 51 Subpart A, as applicable. Title V stationary sources with potential annual emissions greater than or equal to any of the emission thresholds shown in Condition 57.1 for Type A (large) sources, as listed in Table 1 to Appendix A of 40 C.F.R. 51 Subpart A, are required to report emission inventory data every year for the previous calendar year (also known as the inventory year). For triennial inventory years, Type A sources only need to submit one report, not both an annual report and a separate triennial report.

Stationary sources, excluding owner requested limits (ORLs) issued under 18 AAC 50.225 and preapproved emission limits (PAELs) issued under 18 AAC 50.230, that do not meet any of the emission thresholds in Condition 57.1 for Type A (large) sources are required to report emission inventory data every third year (i.e., triennially) for the previous inventory year under Condition 57.2. As of the issue date of this permit, the Trans-Alaska Pipeline System (TAPS) Pump Station 9 (PS-9) is required to report emission inventory data every year under Condition 57.1.

The Department has modified the triennial reporting requirements under Condition 57.2 by including stationary sources' PTEs that are below the thresholds for annual reporting in Condition 57.1, instead of pollutant-specific thresholds for attainment and non-attainment areas. Thus, all stationary sources regardless of permit classification (excluding ORLs and PAELs) are covered under this condition, to capture the new requirements found in 18 AAC 50.275, effective September 7, 2022. Beyond as noted, the Department has determined that the standard conditions adequately meet the requirements of 40 C.F.R. 71.6(a)(3).

Condition 58, Consistency of Reporting Methodologies

Legal Basis: Condition 58 is from 18 AAC 50.275(a) and requires all stationary sources, regardless of permit classification (with the exception of owner requested limits (ORLs) issued under 18 AAC 50.225 and preapproved emission limits (PAELs) issued under 18 AAC 50.230), to report actual emissions to the state so that the state can meet its obligation under 40 C.F.R. 51. Condition 58.1 is from 18 AAC 50.275(b) and requires consistency on the stationary sources' actual emissions reports submitted for NEI and the state's assessable emissions.

Factual Basis: The regulation was added to 18 AAC 50 on September 7, 2022 so as to include all stationary sources required to report actual emissions for the purpose of federal emissions inventory and to avoid inconsistencies in actual emissions reports submitted. When

reporting actual emissions under Condition 57 or assessable emissions under Condition 31.2, consistent emission factors and calculation methods shall be used for all reporting requirements for the stationary source.

Condition 59, NSPS and NESHAP Reports

Legal Basis: The Permittee is required to provide the Department a copy of each report submitted to EPA as required for emissions units subject to NSPS or NESHAP federal regulations under 18 AAC 50.326(j)(4). Appendix A to 40 C.F.R. 70 documents that EPA fully approved the Alaska operating permit program effective November 30, 2001.

Factual Basis: The condition supplements the specific reporting requirements in 40 C.F.R. 60, 40 C.F.R. 61, and 40 C.F.R. 63. The reports themselves provide monitoring for compliance with this condition.

Condition 60, Permit Applications and Submittals

Legal Basis: 40 C.F.R. 71.10(d)(1), adopted by reference by the Department under 18 AAC 50.040(j)(7), requires submission of a copy of each permit application to EPA.

Factual Basis: The Department used the language in SPC XIV, adopted by reference under 18 AAC 50.346(b)(7), for the permit condition. The condition directs the applicant to send a copy of each application for modification or renewal of this permit to the EPA. The information may be submitted in electronic format, if practicable. Condition 60.2 lists the methods, in EPA's preferred order, to which the applicant may submit the application documents, as specified in the EPA's February 12, 2024 memorandum guidance for Submitting Air Permits to EPA Region 10. This condition shifts the burden of compliance with 40 C.F.R. 71.10(d)(1) from the Department to the Permittee as allowed under 40 C.F.R. 71.10(d)(1).

Conditions 61 through 63, Permit Changes and Revisions Requirements

Legal Basis: The Permittee is obligated to notify the Department of certain off-permit source changes and operational changes under 18 AAC 50.326(j)(4). 40 C.F.R. 71.6(a)(8), (12), and (13), incorporated by reference under 18 AAC 50.040(j), require that these provisions be included in operating permits.

Factual Basis: 40 C.F.R. 71.6(a)(12) and (13), as reflected in Conditions 62 and 63, respectively, specify changes that may be made without a permit revision, and 40 C.F.R. 71.6(a)(8) (Condition 61) states permit revisions are not required for some emissions trading and similar programs.

The Permittee did not request trading of emission increases and decreases as described in 40 C.F.R. 71.6(a)(13)(iii); therefore, language addressing these provisions has not been included in this permit as part of Condition 61.

Condition 64, Permit Renewal

Legal Basis: The Permittee must submit a timely and complete operating permit renewal application if the Permittee intends to continue source operations in accordance with the operating permit program. The obligations for a timely and complete operating permit application are in 40 C.F.R. 71.5(a) – (c), adopted by reference in 18 AAC 50.040(j)(3), and 18 AAC 50.326(c).

Factual Basis: In accordance with AS 46.14.230(a), this operating permit is issued for a fixed term of five years after the date of issuance, unless a shorter term is requested by the permit applicant. The Permittee is required to submit an application for permit renewal by the specific dates applicable to the stationary source as listed in this condition. As stated in 40 C.F.R. 71.5(a)(1)(iii), submission for a permit renewal application is considered timely if it is submitted at least six months but no more than eighteen months prior to expiration of the operating permit. According to 40 C.F.R. 71.5(a)(2), a complete renewal application is one that provides all information required pursuant to 40 C.F.R. 71.5(c) and remits payment of fees owed under the fee schedule established pursuant to 18 AAC 50.400. 40 C.F.R. 71.7(b) states that if a source submits a timely and complete application for permit issuance (including renewal), the source's failure to have a permit is not a violation until the permitting authority takes final action on the permit application.

Therefore, as long as an application has been submitted within the timeframe specified under 40 C.F.R. 71.5(a)(1)(iii) and is complete before the expiration date of the existing permit, then the expiration of the existing permit is extended and the Permittee has the right to operate under that permit until the effective date of the new permit. However, this protection shall cease to apply if, subsequent to the completeness determination, the applicant fails to submit by the deadline specified in writing by the Department any additional information needed to process the application.

Conditions 65 through 70, General Compliance Requirements and Schedule

Legal Basis: These conditions require compliance with the applicable requirements in 18 AAC 50.345(b) through (d) and (h) and 40 C.F.R. 71.6(c)(3). As stated in 18 AAC 50.345(a), the requirements in 18 AAC 50.345(b) through (d) and (h) are standard conditions that must be included in all operating permits issued by the Department.

Factual Basis: These are standard conditions for compliance required for all operating permits.

Conditions 71 and 72, Permit Shield

Legal Basis: These conditions require compliance with the requirements in 40 C.F.R. 71.6(f), which the Department has adopted by reference under 18 AAC 50.040(j)(4). These requirements apply because the Permittee has requested that the Department shield the stationary source from specific non-applicable requirements listed under this condition.

Factual Basis: Table C of Operating Permit No. AQ0079TVP05 shows the permit shield that the Department granted to the Permittee. The Department based the determinations on the permit application, past operating permit, Title I permits, and inspection reports. Should any of the shielded requirements become applicable during the permit term, the Permittee is required to take necessary steps to comply with all applicable requirements in a timely manner.