

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

**Hilcorp Alaska, LLC
Bruce Platform**

**STATEMENT OF BASIS
for
Permit No. AQ0064TVP04
PUBLIC COMMENT - August 19, 2019**

**Prepared by Scott Faber
ADEC AQ/APP (Anchorage)**

INTRODUCTION

This document sets forth the statement of basis for the terms and conditions of Operating Permit No. AQ0064TVP04.

STATIONARY SOURCE IDENTIFICATION

Section 1 of Operating Permit No. AQ0064TVP04 contains information on the stationary source as provided in the Title V permit application.

The Bruce Platform, is owned and operated by Hilcorp Alaska, LLC and Hilcorp Alaska, LLC is the Permittee for the stationary source's operating permit. The standard industrial classification (SIC) code for this stationary source is 1311 Crude Petroleum and Natural Gas.

The stationary source is an offshore oil drilling facility, producing natural gas and oil with some residual water in the oil. Oil and natural gas are processed through oil/gas separators on the platform. The natural gas is also used for fuel on Bruce Platform or flared.

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 CFR 71.5(c)(3).

The emissions units at the stationary source that have specific monitoring, recordkeeping, and reporting requirements are listed in Table A of the operating permit. Table A contains information on the emissions units regulated by the operating 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 for the stationary source is shown in the table below.

Table C - Emissions Summary, in Tons Per Year (tpy)

Emissions	NO _x	CO	PM ₁₀	SO ₂	VOC	CO _{2e} ¹	HAPs	Total ²
PTE	506.0	1,014.2	76.4	38.3	1,719.7	348,641.5	12.9	3,354.6
Assessable PTE	506	1,014	76	38	1,720	0	0	3,354

Table 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.

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).

The assessable PTE listed under Condition 56.1 is the sum of the PTE of each individual air pollutant, other than greenhouse gases (GHGs), for which the stationary source has the potential to emit of 10 tpy or greater. The emissions listed in Table C are estimates that are for informational use only. The listing of the emissions does not create an enforceable limit for the stationary source.

PTE is as provided in the operating permit application, except as follows:

- PTE for EU IDs 22 and 23 is included and was calculated using AP 42 and mass balance (SO₂).
- Portable pressure washer PTE is not included because those units are nonroad engines.
- Uncontrolled emissions for EU 21 are included because there are no federally enforceable limits in place for that unit.
- SO₂ PTE for EU 20 was calculated using mass balance with H₂S of 12 ppm, as indicated in the most recent facility operating report.

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 CFR Part 71, as adopted by reference in 18 AAC 50.040.

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 Clean Air Act;
- Another stationary source designated by the Federal Administrator by regulation.

The Permittee is required to obtain an operating permit for the stationary source as specified under 18 AAC 50.326(a) and 40 CFR 71.3(a), because the stationary source is a major source. This stationary source is a major source because, as defined in Section 302 of the Clean Air Act, it directly emits, or has the potential to emit, 100 tpy or more of any air pollutant subject to regulation.

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)].

AIR QUALITY PERMITS

Permits to Operate

The most recent permit to operate issued for this stationary source is Permit to Operate No. 9223-AA002. This permit included all construction authorizations issued through November 9, 1994, and was issued before January 18, 1997 (the effective date of the new divided Title I/Title V permitting program). All stationary source-specific requirements established in this permit are included in Operating Permit AQ0064TVP04, as described in Table D.

Title I (Construction and Minor) Permits

Construction Permit No. 064CP01. The Department issued this permit on March 18, 2002.

Minor Permit No. AQ0064MSS01. The Department issued this permit on May 26, 2015 to authorized installation of EU ID 29. This minor permit rescinded Construction Permit 064CP01. All stationary source-specific requirements established in this permit are included in Operating Permit No. AQ0064TVP04 as described in Table E.

Minor Permit No. AQ0064MSS02. The Department issued this permit on May 26, 2015 to allow operation of the Kuukpik drill rig at the stationary source.

- Revision No. 1. The Department issued this revision on July 24, 2015 to add clarification to Condition 12.3. All stationary source-specific requirements established in this permit are included in Operating Permit No. AQ0064TVP04 as described in Table F.

Title V Operating Permits

Operating Permit No. 064TVP01. The Department issued this operating/construction permit on September 2, 2003.

Operating Permit No. AQ0064TVP02. The Department issued this permit on April 3, 2009.

- Revision No. 1. The Department issued this administrative amendment on May 1, 2009 to address Decisions 1 and 3 of the Informal Appeal Decision issued by the Department on April 29, 2009.
- Revision No. 2. The Department issued this significant modification on September 18, 2009 to modify the fuel sulfur monitoring methods.
- Revisions No. 3. The Department issued this administrative amendment on February 6, 2012 for a change of ownership.

Operating Permit No. AQ0064TVP03. The Department issued this permit on June 3, 2014.

- Revision No. 1. The Department issued this significant modification on January 7, 2016 to incorporate the requirements of Minor Permits AQ0064MSS01 and AQ0064MSS02.

The Department received the application for Operating Permit AQ0064TVP04 on July 5, 2018. The Permittee amended the application on March 1, 2019.

COMPLIANCE HISTORY

The Permittee has owned and operated the stationary source since February 2012. Review of the permit files for this stationary source, which includes the past inspection reports and compliance evaluations indicate 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 CFR 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:

- Permits 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. AQ0064TVP04. Table D, Table E, and Table F below lists the requirements carried into Operating Permit No. AQ0064TVP04 to ensure compliance with the preconstruction permit requirements.

Table D - Comparison of Permit to Operate No. 9223-AA002 Conditions to Operating Permit No. AQ0064TVP04 Conditions¹

9223-AA002, Condition No.	Description of Requirement	AQ0064TVP04 Condition No.	How Condition was Revised
4	Operate gas sources with only formation gas or natural gas	None	Formation gas is the only available fuel.
5	Hours of operation limits for EU IDs 17 through 19	None	These emission units were identified as Mud Pumps #1, 2, and 3 in Permit to Operate 9223-AA002. These units have been removed from the stationary source.

9223-AA002, Condition No.	Description of Requirement	AQ0064TVP04 Condition No.	How Condition was Revised
6 & 6a	Operate EU IDs 20 through 24 (now EU IDs 14 through 16 and two mobile Volvo boat engines) not more than 200 hrs/yr each and EU ID 25 (now EU ID 17) not more than 1,000 hr/yr	22 & 23	Operating hours and sources were amended in the application for AQ0064TVP01. The 1,000 hr/yr limit was increased to 6,500 hr/yr for EU ID 17 (formerly EU ID 25), while EU IDs 8 through 10 (formerly EU IDs 14 through 16) were limited to 5,093 hrs/yr each. The hour limit was removed from the Volvo engines since they are mobile sources. There was no net increase in emissions as a result of these changes. EU IDs 8 through 10 have been removed from the stationary source.
7	Diesel fuel sulfur content limit	24	EU IDs were updated.
8	Flow control for flaring systems equal to phase separator capacity. No liquids to flare.	None	There was no basis for this requirement in Permit to Operate 9223-AA002.
15	Fuel consumption monitoring	None	There was no basis for this requirement in Permit to Operate 9223-AA002.
16	Hours of operation monitoring	18	Only units with limits on hours of operation are included.
17	Log hours of operation of escape capsules (Volvo engines)	None	There are no longer applicable hour limits for these units because they are mobile sources.
18	Supply fuel analysis of each shipment of distillate oil	13 & 14	Updated to standard operating permit condition language.
19	Analyze hydrogen sulfide content in fuel gas	15, 16, & 17	Updated to standard operating permit condition language.
20	Notify the Dept. by fax or phone of any excess emissions. Submit written excess emissions	79	Updated to standard operating permit condition language.
21	Report as excess emissions when H ₂ S exceeds 250 ppm and document cause for elevated levels	None	H ₂ S limit was removed since analysis for 2000 and 2001 were 10 ppm or less.
25 & 26	Keeping operating instructions and copies of permit and regulations in certain locations	None	Rescinded in Permit 064CPT01

Table Note:

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

Table E - Comparison of Minor Permit No. AQ0064MSS01 Conditions to Operating Permit No. AQ0064TVP04 Conditions¹

AQ0064MSS01 Condition No.	Description of Requirement	AQ0064TVP04 Condition No.	How Condition was Revised
8	Ambient air quality requirement	19	Not revised.

Table Note:

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

Table F - Comparison of Minor Permit No. AQ0064MSS02, Rev 1 Conditions to Operating Permit No. AQ0064TVP04 Conditions¹

AQ0064MSS02, Rev 1 Condition No.	Description of Requirement	AQ0064TVP04 Condition No.	How Condition was Revised
8	Limit to avoid classification as a PSD major modification	25	A reference to 40 CFR 1068.30 is added to provide the definition of nonroad engine.
9	Limit to avoid classification under NESHAP Subpart JJJJJ	26	Not revised.
10	Limit to avoid permitting under 18 AAC 50.502(c)(3)	27	Not revised.
11	Ambient air quality requirement	20	Not revised.
12	Ambient air quality requirement	21	Condition 12.2 of Minor Permit AQ0064MSS02, Rev 1 requires exhaust stack verification in only the first operating report. Since drill rig units may be replaced, Operating Permit AQ0064TVP04 requires verification in each operating report. This change is allowed because the monitoring requirement of the operating permit is more stringent than that in the minor permit.

Table Note:

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

NON-APPLICABLE REQUIREMENTS

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

- **40 CFR 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.
- **18 AAC 50.055:** For EU IDs 24 through 28, 18 AAC 50.055 is not applicable because these units are nonroad engines. 18 AAC 50.055 applies to fuel-burning equipment. Under 18 AAC 50.990, fuel-burning equipment does not include mobile internal combustion engines.

STATEMENT OF BASIS FOR THE PERMIT CONDITIONS

The Department adopted regulations from 40 CFR 71, as specified in 18 AAC 50.040(j), in addition to creating state regulations, to establish an operating permit program. The EPA fully approved the Alaska Operating Permit Program on November 30, 2001, as noted in Appendix A to 40 CFR 70. This Statement of Basis, required under 40 CFR 71.11(b), provides the legal and factual basis for each condition of Operating Permit No. AQ0064TVP04. Additionally and as required by 40 CFR 71.6(a)(1)(i), the state and federal regulations for each permit condition are cited in the permit.

Conditions 1 through 5, Visible Emissions Standard and MR&R

Legal Basis: These conditions require compliance with the visible emissions standards in 18 AAC 50.055(a).

- 18 AAC 50.055(a) applies to the operation of fuel-burning equipment and industrial processes. EU IDs 1a, 2 through 7, 14 through 23, and 29 are fuel-burning equipment or industrial processes. As specified under 18 AAC 50.990, “fuel-burning equipment” does not include mobile internal combustion engines.

U.S. EPA approved the addition of these standards to the SIP, as noted in 40 CFR 52.70. The Department included permit conditions for monitoring, recordkeeping, and reporting (MR&R) as required by 40 CFR 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 5 of the permit. These conditions have been adopted into regulation as Standard Operating Permit Condition IX. The Department has modified these conditions, as follows:

- The requirements for the Smoke/No Smoke Plan are removed because the Permittee does not use this option and requested the requirements be removed.
- Made the last sentence in Condition 2 Condition 2.1 to facilitate cross-referencing.
- Added reference to Condition 2.1 in Condition 2.2.a, to clarify an additional exception for the requirement to conduct a First Method 9 observation within six months after the issue date of the renewal permit; i.e., if the Permittee elects to continue visible emissions monitoring schedule from the previous permit.

The Permittee must establish by visual observations, which may be supplemented by other means, such as a defined Stationary Source Operation and Maintenance Program, that the stationary source is in continuous compliance with the state standards for visible emissions.

These conditions detail a stepwise monitoring program to determine compliance with the state visible emissions standards. Equipment types covered by these conditions are 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 through maintenance programs and/or more rigorous tests that will quantify whether a specific emission standard has been exceeded.

Condition 5 was developed to provide a standardized version of flare monitoring that is not dependent upon the type or design of upstream equipment. It has been claimed that gas-fired flares normally burn without visible emissions. However, gas-fired flares have been shown to smoke when associated equipment (e.g. knockout drum, flare scrubber, gas or steam assist, vapor recovery system) malfunctions. Therefore, the condition sets out a protocol to collect actual field data to determine compliance with the 20 percent opacity standard for flares.

Gas-Fired Equipment:

Monitoring – The monitoring of gas-fired emissions units for visible emissions is waived, i.e. no source testing will be required. The Department has found that natural gas-fired equipment inherently has negligible visible emissions. However, the Department can request a source test for particulate matter emissions from any smoking equipment.

Reporting – The Permittee must state in each operating report whether only gaseous fuels were used in the equipment during the period covered by the report.

Liquid Fuel-Fired Equipment:

Monitoring – The emissions units must be observed by the Method 9 Plan as detailed in Condition 2. 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 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 report deviations from permit conditions. The Permittee is also required to include copies of the results of all visible emission observations in the operating report.

Flares:

Monitoring for flares requires Method 9 observations of scheduled flaring events lasting more than one hour. The Permittee must report the results of these observations to the Department.

Dehydration Unit:

The dehydration unit (EU ID 21) typically operates as a closed system with the exception of a rupture disk that allows venting to the atmosphere if over pressure occurs. Additionally, no visible emissions are expected to be emitted from EU ID 21 at anytime. Therefore, MR&R requirements are not specified for EU ID 21.

Drill Rig Boilers:

The same annual monitoring requirement used in the minor general permit for portable oil and gas operations (MG2) is used in the operating permit.

Conditions 6 through 11, Particulate Matter 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.

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

Factual Basis: Condition 6 prohibits emissions in excess of the applicable state particulate matter standard. MR&R requirements are listed in Conditions 7 through 11 of the permit. These conditions have been adopted into regulation as Standard Operating Permit Condition IX. The Department did not include the requirement to record and report the exhaust stack diameters because this one-time requirement has been fulfilled.

Gas-Fired Equipment:

Monitoring – The monitoring of gas-fired emissions units for particulate matter is waived, i.e. no source testing will be required. The Department has found that natural gas-fired equipment inherently has negligible particulate matter emissions. However, the Department can request a source test for particulate matter emissions from any smoking equipment.

Reporting – The Permittee must state in each operating report whether only gaseous fuels were used in the equipment during the period covered by the report.

Liquid Fuel-Fired Equipment:

Monitoring – The Permittee is required to conduct particulate matter source testing or make repairs to reduce visible emissions if threshold values for opacity are exceeded.

Recordkeeping - The Permittee is required to record the results of particulate matter source tests.

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

Flares:

Monitoring of gas-fired flares for particulate matter is waived, i.e. no source testing is required, because of the difficulty and questionable results these tests produce when applied

to flares. Compliance with the state visible emissions standard serves as surrogate compliance demonstration for the state particulate matter emissions standard.

Dehydration Unit:

EU ID 21 typically operates as a closed system with the exception of a rupture disk that allows venting to the atmosphere if over pressure occurs. Additionally, no particulate emissions are expected to be emitted from EU ID 21 at anytime. Therefore, MR&R requirements are not specified for EU ID 21.

Conditions 12 through 17, Sulfur Compound Emissions Standard and MR&R

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

- 18 AAC 50.055(c) applies to the operation of fuel-burning equipment and industrial processes.

These sulfur compound standards apply because they are contained in the federally-approved SIP. The Department included permit conditions for MR&R as required by 40 CFR 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:

For oil fired fuel burning equipment, the MR&R conditions are Standard Operating Permit Conditions XI and XII, adopted into regulation pursuant to AS 46.14.010(e). These conditions have been modified in this permit as follows. The Department corrected Condition 13.2 to replace the text “...method listed in 18 AAC 50.035 or an alternative method approved by the Department” with “...method listed in 18 AAC 50.035(b)-(c) and 40 CFR 60.17 incorporated by reference in 18 AAC 50.040(a)(1)”. The text “...or an alternative method approved by the Department” 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. This text 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 methods.

Gaseous Fuels:

Fuel sulfur testing must be conducted to determine compliance with SO₂ emission standard. The Permittee must obtain a statement from the fuel supplier or conduct an analysis for fuel gas sulfur content at least once per calendar year using either ASTM D4084, D5504, D4810, D4913, D6228 or GPA Standard 2377, or a listed method approved in 18 AAC 50.035(b)-(c) and 40 CFR 60.17 incorporated by reference in 18 AAC 50.040(a)(1).

The Permittee is required to report excess emissions whenever the fuel combusted causes sulfur compound emissions to exceed the standards in this condition. The Permittee is required to include copies of the records of semiannual statements from the fuel supplier or the sulfur content analysis with the stationary source operating report.

Conditions 18 through 27, 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 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 established under 18 AAC 50.225. These requirements include Best Available Control Technology (BACT) limits, 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 pre-construction permit terms and conditions. These requirements are included in the operating permit as described in Table D, Table E, and Table F.

Condition 28, Insignificant Emissions Units

Legal Basis: The Permittee is required to meet the state emission standards in 18 AAC 50.050(a) for all incinerators regardless of size and 18 AAC 50.055 for all industrial processes and fuel-burning equipment regardless of size. As previously noted, 18 AAC 50.050(a) and 50.055 are contained in the federally-approved SIP.

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. However, the Permittee may not cause or allow insignificant emission 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 units at this stationary source do not require specific monitoring, recordkeeping and reporting to ensure compliance under these conditions. The conditions require certification that the units did not exceed state emission standards during the previous year and did not emit any prohibited air pollution. The Department used the language in Standard Operating Permit Condition V for the permit condition.

Conditions 29 through 36, 40 CFR 60 Subpart A Requirements

Legal Basis: The Permittee must comply with applicable New Source Performance Standard (NSPS) provisions³. NSPS requirements are included in the applicable requirement definition under 40 CFR 71.2, which has been adopted by the Department under 18 AAC 50.040(j)(1).

The Permittee must comply with 40 CFR 60 Subpart A if the stationary source is subject to the requirements of another subpart under 40 CFR 60.

Conditions 29.1 through 29.3 - The Permittee is subject to these requirements in the event of a new NSPS affected facility⁴ or in the event of a modification or reconstruction of an existing facility⁵ into an affected facility.

Condition 29.4 - The requirements to notify the Administrator of any proposed replacement of components of an existing facility (40 CFR 60.15) apply in the event that the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility.

Condition 30 - The requirements in 40 CFR 60.7(b) to maintain start-up, shutdown, or malfunction records are applicable to most NSPS affected facilities.

Conditions 31 and 32 - NSPS excess emission reporting requirements and summary report form in 40 CFR 60.7(c) & (d) are applicable if the Permittee elects to periodically determine fuel sulfur content under NSPS Subpart GG. The Department has included a copy of the federal EEMSP summary report form as Attachment 1 to the operating permit.

Recordkeeping requirements in 40 CFR 60.7(f) are applicable to all NSPS affected facilities. (Satisfied by Condition 75)

Condition 33 - The Permittee is still subject to these requirements in the event of a new NSPS affected facility, in the event of a modification or reconstruction of an existing facility into an affected facility, or at such other times as may be required by EPA.

Condition 34 - Good air pollution control practices in 40 CFR 60.11 are applicable to most NSPS affected facilities.

Condition 35 - states that any credible evidence may be used to demonstrate compliance or to establish violations of relevant NSPS standards.

³ EPA has not delegated to the Department the authority to administer the NSPS program as of the issue date of this permit

⁴ *Affected facility* means, with reference to a stationary source, any apparatus to which a standard applies, as defined in 40 CFR 60.2.

⁵ *Existing facility* means, with reference to a stationary source, any apparatus of the type for which a standard is promulgated in this part, and the construction or modification of which was commenced before the date of proposal of that standard; or any apparatus which could be altered in such a way as to be of that type, as defined in 40 CFR 60.2.

Condition 36 - Concealment of emissions prohibitions in 40 CFR 60.12 are applicable to most NSPS affected facilities.

In accordance with 40 CFR 60.18(a)(1), the flare is not subject to 40 CFR 60.18 because the stationary source is not covered by any subparts that refer to 40 CFR 60.18.

Factual Basis: Subpart A contains general requirements applicable to all affected facilities (emissions units) subject to NSPS. In general, the intent of NSPS is to provide technology-based emission control standards for new, modified and reconstructed affected facilities.

Condition 37, 40 CFR 60 Subpart GG Requirements

Legal Basis: The Department incorporated the requirements of NSPS Subpart GG by reference, as listed in 18 AAC 50.040(a)(2). Subpart GG applies to stationary gas turbines with a heat input at peak load (maximum load at 60 percent relative humidity, 59 °F, and 14.7 psi) equal to or greater than 10.7 gigajoules per hour (10 MMBtu/hr), based on the lower heating value of the fuel fired and constructed, modified, or reconstructed after October 3, 1977. Therefore Subpart GG requirements applies to EU ID 1a.

Factual Basis: These conditions incorporate NSPS Subpart GG NO_x emission and sulfur compound limits.

NO_x Standard: For a turbine subject to 40 CFR 60.332, the NO_x standard is determined by the following equation:

$$\text{STD}_{\text{NO}_x} = 0.015 \left(\frac{14.4}{Y} \right) + F$$

Where:

- STD_{NO_x} = allowable NO_x emissions (percent by volume at 15 percent oxygen on a dry basis)
- Y = manufacturer's maximum rated heat input (kJ/W-hr), or actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the affected stationary source. The value of Y shall not exceed 14.4 kJ/W-hr; and
- F = NO_x emissions allowance for fuel bound nitrogen, percent by volume, assumed to be zero for distillate fuel oil and gaseous fuels.

Based on the manufacturer's heat rating at the rated peak load, and assuming fuel bound nitrogen of zero, the NO_x standard is 150 ppmv for EU ID 1a.

The Department included periodic monitoring for the NSPS NO_x limit as required under 40 CFR 71.6(a)(3), because NSPS Subpart GG does not contain MR&R sufficient for an operating permit. The Permittee must source test the turbine on no less than a 5-year cycle. If the most recent performance test on the turbine showed NO_x emissions at less than or equal to 90 percent of the emission limit, then testing is required within 5 years of the last performance test. If the most recent performance test showed operations at greater than 90

percent of the emissions limit, then source testing is required every year until two consecutive tests show emissions at less than or equal to 90 percent of the limit.

SO₂ Standard: The Permittee is required to comply with one of the following requirements:

- Do not cause or allow SO₂ emission in excess of 0.015 percent by volume, at 15 percent O₂ and on a dry basis (150 ppmv), or
- Do not cause or allow the sulfur content for the fuel burned in the turbine to exceed 0.8 percent by weight.

MR&R for the sulfur standard is as required in NSPS Subpart GG.

Condition 38, 40 CFR 60 Subpart III Requirements

Legal Basis: NSPS Subpart III applies to stationary compression ignition internal combustion engines (CI ICE) that commence construction, modification, or reconstruction after July 11, 2005 where the stationary CI ICE are manufactured after April 1, 2006 for non-fire pump engines and after July 1, 2006 for certified fire pump engines. EU ID 19 is subject to Subpart III because it is a 2006 model year engine and it is not a fire pump engine.

Factual Basis: These conditions incorporate the Subpart III emissions standards applicable to EU ID 19. These conditions also include MR&R requirements specified in the subpart. The Permittee is required to operate and maintain the stationary CI ICE according to the manufacturer's written instructions. Pre-2007 model year stationary CI ICE must comply with the emission standards in Table 1 to Subpart III.

Condition 39, 40 CFR 61 Subpart A & M Requirements

Legal Basis: The requirements of 40 CFR 61 are applicable requirements for Title V permitting purposes, as stated in item 4 of the “applicable requirement” definition under 40 CFR 71.2. The condition requires the Permittee to comply with asbestos demolition or renovation requirements in 40 CFR 61, Subpart M, as adopted by reference under 18 AAC 50.040(b)(2)(F). The asbestos demolition and renovation requirements apply if the Permittee engages in asbestos demolition or renovation.

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 40 and 41, 40 CFR 63 Subpart A Requirements

Legal Basis: The Permittee must comply with applicable National Emission Standards for Hazardous Air Pollutants (NESHAP). NESHAP requirements are included in the “applicable requirement” definition under 40 CFR 71.2, which has been adopted by the Department under 18 AAC 50.040(j)(1).

The Permittee must comply with 40 CFR 63 Subpart A if the stationary source is subject to the requirements of another subpart under 40 CFR 63.

Factual Basis: Subpart A contains general requirements applicable to all facilities and emissions units subject to NESHAP requirements.

Condition 42, 40 CFR 63 Subpart HH 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 HH applies to triethylene glycol (TEG) dehydration units located at oil and natural gas production facilities that are area sources. EU ID 21 is a TEG dehydration unit located at an area source oil and natural gas production facility.

Factual Basis: These conditions incorporate the NESHAP Subpart HH requirements applicable to EU ID 21. The stationary source is not located within a UA plus offset and UC boundary (as defined in 40 CFR 63.761). The Permittee is exempt from the requirements of 40 CFR 63.764(d)(2)(i) through (iii) if the actual annual average flowrate of natural gas to the glycol dehydration unit is less than 85 thousand standard cubic meters per day (3 MMscfd) or the actual average emissions of benzene from the glycol dehydration unit process vent to the atmosphere is less than 0.90 megagrams per year (1 tpy). The Permittee is required to keep records of the annual average flowrate and/or actual average benzene emissions.

Condition 43, 40 CFR 63 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) located at major and area sources of HAP emissions. Bruce Platform is an area source that contains RICE units.

Factual Basis: These conditions incorporate the NESHAP Subpart ZZZZ requirements applicable to EU IDs 3 through 7 and 14 through 19. For EU ID 19, the Permittee is required to comply with the requirements of 40 C.F.R. 60 Subpart IIII. For EU IDs 3 through 7 and 14 through 18, the Permittee is required to perform inspections and maintenance at intervals specified by the subpart and operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The area source is located in an area of Alaska that is not accessible by the Federal Aid Highway System (FAHS). Therefore, under 40 C.F.R. 63.6603(b), EU IDs 17 and 18 do not have to comply with the numerical CO limits specified in Table 2d. Also, EU IDs 14 through 18 are exempt from the fuel requirements of 40 C.F.R. 63.6604 under 40 C.F.R. 63.6604(d). Additionally, EU IDs 3 through 7 and 14 through 18 are exempt from the notification requirements of 40 C.F.R. 63.6645(a) under 40 C.F.R. 63.6645(a)(5) since none of the emission units are subject to numerical emission standards.

The Permittee must comply with the recordkeeping requirements of 40 CFR 63.6655(e) and 40 CFR 63.6660. The Permittee is also required to report deviations from NESHAP Subparts A and ZZZZ requirements.

Conditions 44 through 46, 40 CFR 82 Subpart F, G, & H Requirements

Legal Basis: The requirements of 40 CFR 82 are applicable requirements for Title V permitting purposes, as stated in item 12 of the “applicable requirement” definition under 40 CFR 71.2. Condition 44 requires compliance with the applicable requirements in 40 CFR 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 CFR 82, Subpart F.

Conditions 45 and 46 also require compliance with the applicable requirement adopted under 18 AAC 50.040(d). Condition 45 prohibitions apply to all stationary sources that use substitutes for ozone-depleting compounds. Condition 46 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.

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 this federal regulation. These conditions also incorporate applicable 40 CFR 82 requirements.

Conditions 47 through 49, NESHAPs General Requirements

Legal Basis: These conditions require the Permittee to determine NESHAP rule applicability and require recordkeeping for those determinations and notifications as applicable.

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 Administrator if the stationary source becomes an affected source subject to a standard promulgated by EPA under 40 CFR part 63 and to keep records of applicability determinations and make those records available to the Department. Notifications of construction are also required as applicable.

Conditions 50 and 51, NSPS and NESHAP Reports and Waivers

Legal Basis: The Permittee is required to provide the Federal Administrator and Department a copy of each emissions unit report for units subject to NSPS or NESHAP federal regulations under 18 AAC 50.326(j)(4). 40 CFR 70 Appendix A 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 CFR 60, 40 CFR 61, and 40 CFR 63.

Conditions 52 through 54, Standard Terms and Conditions

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

Factual Basis: These are standard conditions that are included in all operating permits.

Condition 55, Administration Fees

Legal Basis: This condition requires compliance with the applicable fee requirements in 18 AAC 50.400 through 403. Paying administration fees is required as part of obtaining and holding a permit with the Department or as a fee for a Department action. As stated in 18 AAC 50.326(j)(1), the provisions of 18 AAC 50.400 through 50.430 are applicable and 40 CFR 71.9 is not applicable.

Factual Basis: The regulations in 18 AAC 50.400 through 403 specify the amount, payment period, and the frequency of fees applicable to a permit action.

Conditions 56 and 57, Emission Fees

Legal Basis: These conditions require compliance with the applicable fee requirements in 18 AAC 50.410 through 50.420. 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 CFR 71.9 is not applicable.

Factual Basis: The Department used the language in Standard Permit Condition I, adopted by reference under 18 AAC 50.346(b), for the permit.

These conditions require 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 at 10 tons per year or greater (AS 46.14.250(h)(1)).

The conditions allow the Permittee to calculate 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 based on actual emissions must be 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.

Condition 58, 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 CFR 60, 61, or 63, those subject to continuous emission or parametric monitoring requirements, and insignificant emissions units.

Factual Basis: The condition requires the Permittee to comply with good air pollution control practices. The Department adopted this condition under 18 AAC 50.346(b) as Standard Operating Permit Condition VI pursuant to AS 46.14.010(e). Records kept for units previously subject to this requirement need to be maintained for 5 years 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 59, Dilution

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

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

Condition 60, 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. This requirement applies because the Permittee has an emission unit or activity listed under Table 7 of 18 AAC 50.346(c). 18 AAC 50.045 is included in the SIP approved by EPA. The listed emission units and activities in Table 7 are: coal-fired boilers; coal handling facilities; construction of gravel pads or roads that are part of a permitted stationary source or other construction that has the potential to generate fugitive dust that reaches ambient air; commercial/industrial/municipal solid waste, air curtain, and medical waste incinerators; sewage sludge incinerators not using wet methods to handle that ash; mines; urea manufacturing; soil remediation units; or dirt roads under the

control of the operator with frequent vehicle traffic; and other emission units the Department finds are likely to generate fugitive dust.

Factual Basis: The Department used the language in Standard Permit Condition 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 61, Stack Injection

Legal Basis: 18 AAC 50.055 is included in the SIP approved by EPA. It is therefore an applicable requirement per 40 CFR 71.2.

This condition requires compliance with the applicable requirement in 18 AAC 50.055(g). It 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). 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 ensured by inspections, because the unit or stack would need to be modified to accommodate stack injection.

Condition 62, Air Pollution Prohibited

Legal Basis: 18 AAC 50.110 is included in the SIP approved by EPA. It is therefore an applicable requirement per 40 CFR 71.2.

This condition requires compliance with 18 AAC 50.110. 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 CFR 71.6(a)(3) and 71.6(c)(1).

Factual Basis: The Department used the language in Standard Permit Condition 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 63, Technology-Based Emission Standard

Legal Basis: The Permittee is required to take reasonable steps to minimize emissions if certain 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 79. Excess emission reporting under Condition 79 requires information on the steps taken to minimize emissions.

Condition 64, Open Burning

Legal Basis: 18 AAC 50.065 is included in the SIP approved by EPA. The condition requires the Permittee to comply with the regulatory requirements in 18 AAC 50.065 when conducting open burning at the stationary source. 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-application/>. The condition 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.

Condition 65, 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).

Conditions 66 through 68, Operating Conditions, Reference Test Methods, Excess Air Requirements

Legal Basis: Conditions 66 and 68 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 67 specifies source test methods, as required by 40 CFR 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 66 through 68.

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

Condition 69, 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 70 through 73, Test Deadline Extension, Test Plans, Notifications and Reports

Legal Basis: These conditions require compliance with the applicable requirements in 18 AAC 50.345(m) through (o), which are included in the SIP approved by EPA. Condition 70 contains the requirement in 18 AAC 50.345(l). The requirements in 18 AAC 50.345(l) through (o) constitute standard conditions that must be included in each operating permit, as specified in 18 AAC 345(a). 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 74, 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 75, Recordkeeping Requirements

Legal Basis: This condition requires the Permittee to keep records in accordance with 40 CFR 71.6(a)(3)(ii), which the Department adopted by reference under 18 AAC 50.040(j)(4).

Factual Basis: The condition restates the regulatory requirements for recordkeeping, and supplements the recordkeeping defined for specific conditions in the permit.

Condition 76, Certification

Legal Basis: All operating permits must contain a requirement to certify any permit application, report, affirmation, or compliance certification, per 18 AAC 50.345(j) and 18 AAC 50.205. Both requirements are part of the SIP approved by EPA.

Factual Basis: 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). This condition requires the Permittee to certify any permit application, report, affirmation, or compliance certification submitted to the Department. To ease the certification burden on the Permittee, the condition allows the excess emission reports to be certified with the operating report, even though it must still be submitted more frequently than the stationary source operating report. This condition supplements the reporting requirements of this permit.

Condition 77, Submittals

Legal Basis: This condition requires the Permittee to comply with the standardized reporting requirements in 18 AAC 50.326(j) and applies because the Permittee is required to send reports to the Department.

Factual Basis: This condition lists the Department's appropriate address for reports and written notices. The Permittee is required to submit reports, compliance certifications, and other submittals required by this permit, either electronically or by hard copy. This condition supplements the standard reporting and notification requirements of this permit.

Condition 78, 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 345(a). This condition requires the Permittee to submit information requested by the Department.

Condition 79, Excess Emission and Permit Deviation Reports

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). The condition specifies reporting requirements as required by 40 CFR 71.6(a)(3)(iii) and 71.6(c)(1). 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.

The Department used the language in Standard Permit Condition III for the permit condition. The Department used the notification form in Standard Permit Condition IV for the notification requirements.

Condition 80, Operating Reports

Legal Basis: This condition requires compliance with the applicable requirement in 18 AAC 50.346(b)(6). The condition specifies reporting requirements as required by 40 CFR 71.6(a)(3)(iii)(A) and 71.6(c)(1).

Factual Basis: The Department used the language in Standard Operating Permit Condition VII for the permit condition. The condition restates the requirements for reports listed in regulation. The condition supplements the specific reporting requirements 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 81, Annual Compliance Certification

Legal Basis: This condition requires compliance with the requirements in 40 CFR 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 81.2 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 82, 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 as required under 40 CFR 51.321. The emission inventory requirement applies to sources defined as point sources in 40 CFR 51.20. The state must report all data elements in Table 2A of Appendix A to Subpart A of 40 CFR 51 to EPA.

Factual Basis: The emission inventory data is due to EPA 12 months after the end of the reporting year (40 CFR 51.30(a)(1) and (b)(1)). A due date of April 30 pressures the Department to have sufficient time to enter the data into EPA's electronic reporting system. Therefore, Permittees should consider submitting the emission inventory through Air Online Services, Permittee Portal.

The air emissions reporting requirements under 40 CFR Part 51, Subpart A apply to states; however, states rely on information provided by point sources to meet the reporting requirements of 40 CFR 51, Subpart A. In the past, the Department has made information requests to point sources, to which the point source is obligated to reply under 18 AAC 50.200. The information requests occur on a routine basis as established by Part 51 Subpart A and consume significant staff resources. To increase governmental efficiency and reduce costs associated with information requests that occur on a routine basis, it has been determined that a standard permit condition best fulfills the need to gather the information needed to satisfy the requirements of Subpart A of 40 CFR 51.

To ensure that the Department's electronic system reports complete information to the National Emissions Inventory, Title V stationary sources classified as Type A in Table 1 of Appendix A to Subpart A of 40 CFR 51 are required to submit with each annual report all the data elements required for the Type B source triennial reports (see also Table 2A of Appendix A to Subpart A of 40 CFR Part 51). All Type A sources are also classified as Type B sources. However, the Department has streamlined the reporting requirements so Type A sources only need to submit a single type of report every year instead of both an annual report and a separate triennial report every third year.

The Department used the language in Standard Operating Permit Condition XV for the permit condition, but corrected the emissions threshold amount for lead (Pb) from 5 tpy to 0.5 tpy actual emissions.

Condition 83, Permit Applications and Submittals

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

Factual Basis: With one minor exception, the Department used the language in Standard Operating Permit Condition XIV for the permit. The condition directs the applicant to send copies of all application materials required to be submitted to the Department directly to the EPA, in electronic format, if practicable. This condition shifts the burden of compliance from the Department to ensure that copies of application materials are submitted to EPA by transferring that responsibility to the Permittee. The Department revised the standard condition language to provide the current address provided by EPA.

Conditions 84 through 86, Permit Changes and Revisions Requirements

Legal Basis: 40 CFR 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 CFR 71.6(a)(12) and (13) specify changes that may be made without a permit revision, and 40 CFR 71.6(a)(8) 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 CFR 71.6(a)(13)(iii).

Condition 87, 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 CFR 71.5(a) through (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 CFR 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 CFR 71.5(a)(2), a complete renewal application is one that provides all information required pursuant to 40 CFR 71.5(c) and remits payment of fees owed under the fee schedule established pursuant to 18 AAC 50.400. 40 CFR 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 CFR 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 88 through 93, 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 CFR 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 94 and 95, Permit Shield

Legal Basis: These conditions require compliance with the requirements in 40 CFR 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 B of Operating Permit No. AQ0064TVP04 shows the permit shield that the Department granted to the Permittee. The following table shows the requests that were denied and the reasons that they were denied. The Department based the determinations on the permit application, past operating permit, likelihood for the source to become subject during the life of the permit, Title I permits and inspection reports.

Table G - Permit Shields Denied

Shield Requested for:	Reason for Shield Request:	Reason for Denial
40 CFR 60 Subparts B, C, Ca, Cb, Da, Db, Dc, E, Ea, Eb, F, G, H, I, J, K, Ka, Kb, L, M, N, Na, O, P, Q, R, S, T, U, V, W, X, Y, and Z	No existing emission unit is an “affected facility” at the issue date of this permit.	The reason provided for the shield requests does not clearly explain why each requirement does not apply. Additionally, a shield is not necessary for requirements that are clearly not applicable.
40 CFR 60, Subparts AA, AAa, BB, CC, DD, EE, FF, HH, KK, LL, MM, NN, PP, QQ, RR, SS, TT, UU, VV, WW, XX, AAA, BBB, DDD, FFF, GGG, HHH, III, JJJ, KKK, LLL, NNN, OOO, PPP, QQQ, RRR, SSS, TTT, UUU, VVV, WWW, AAAA, BBBB, CCCC, DDDD, EEEE, FFFF, HHHH, and JJJJ	No existing emission unit is an “affected facility” at the issue date of this permit.	The reason provided for the shield requests does not clearly explain why each requirement does not apply. Additionally, a shield is not necessary for requirements that are clearly not applicable.
40 CFR 60 Subpart GG	Construction, modification, or reconstruction of each stationary gas turbine commenced prior to the applicability date of October 3, 1977. A permit shield from NSPS Subpart GG only applies to currently installed units until modified, reconstructed, or replaced.	EU ID 1a is subject to Subpart GG and no initial construction date is provided for EU ID 29.

Shield Requested for:	Reason for Shield Request:	Reason for Denial
40 CFR 60 Subpart KKKK	Construction, modification, or reconstruction of each stationary combustion turbine commenced prior to the applicability date of February 18, 2005. A permit shield from NSPS Subpart KKKK only applies to currently installed units until modified, reconstructed, or replaced.	No initial construction date is provided for EU ID 29.
40 CFR 61, Subparts B, C, D, E, F, H, I, J, K, L, N, O, P, Q, R, T, V, W, Y, BB, and FF	No existing emission unit is an “affected facility” at the issue date of this permit.	The reason provided for the shield requests does not clearly explain why each requirement does not apply. Additionally, a shield is not necessary for requirements that are clearly not applicable.
40 CFR 63, Subparts B, F, G, H, I, L, M, N, O, Q, R, S, T, U, W, X, Y, AA, BB, CC, DD, EE, GG, II, JJ, KK, LL, MM, OO, PP, QQ, SS, TT, UU, VV, WW, XX, YY, CCC, DDD, EEE, GGG, III, JJJ, LLL, MMM, NNN, OOO, PPP, QQQ, RRR, TTT, UUU, VVV, XXX, AAAA, CCCC, DDDD, EEEE, FFFF, GGGG, HHHH, IIII, JJJJ, KKKK, MMMM, NNNN, OOOO, PPPP, QQQQ, RRRR, SSSS, TTTT, UUUU, VVVV, WWWW, XXXX, AAAAA, BBBB, CCCCC, DDDDD, EEEEE, FFFFF, GGGGG, HHHHH, IIII, JJJJ, KKKKK, LLLLL, MMMMM, NNNNN, PPPPP, QQQQQ, RRRRR, SSSSS, TTTTT, WWWW, YYYYY, ZZZZ, BBBB, CCCCC, DDDDD, EEEEE, FFFFF, GGGGG, HHHHH, LLLLL, MMMMM, NNNNN, OOOOO, PPPPP, QQQQQ, RRRRR, SSSSS, and TTTTT	No existing emission unit is an “affected facility” at the issue date of this permit.	The reason provided for the shield requests does not clearly explain why each requirement does not apply. Additionally, a shield is not necessary for requirements that are clearly not applicable.
40 CFR 60.4211(b)(2)-(b)(5)	40 CFR 60.4211(b)(2)-(b)(5) does not apply because EU ID 19 is a certified engine and compliance is based on 40 CFR 60.4211(b)(1).	40 CFR 60.4211(b)(1) through (5) are options for demonstrating compliance and more than one method may be needed.

Shield Requested for:	Reason for Shield Request:	Reason for Denial
40 CFR 60.4214(a)	Does not apply because EU ID 19 is a non-emergency certified engine, and it is not equipped with a particulate filter.	EU ID 19 cannot be certified to all emission standards in Table 1 to Subpart III.
40 CFR 82.270(a), Subpart H – Halon Emissions Reduction	Stationary source does not manufacture halon.	A shield is not necessary for requirements that are clearly not applicable.
40 CFR 82.174(a), Subpart G – Significant New Alternatives Policy Program: Prohibitions	Stationary source does not manufacture substitute chemicals or products for ozone-depleting compounds	A shield is not necessary for requirements that are clearly not applicable.
40 CFR 82.164, Reclaimer Certification	Stationary source does not sell reclaimed refrigerant.	A shield is not necessary for requirements that are clearly not applicable.
40 CFR 82.160, Approved Equipment Testing Organizations	Stationary source does not contract equipment testing organizations to certify recovery and recycling equipment.	A shield is not necessary for requirements that are clearly not applicable.
40 CFR 82.158, Subpart F – Recycling and Emissions Reduction	Stationary source does not manufacture or import recovery and recycling equipment.	This section addresses more than just manufacturing and importing.
40 CFR 82.100, Subpart E – The labeling of Products Using Ozone Depleting Substances	Stationary source is not a manufacturer or distributor of Class I and II products or substances.	A shield is not required for sections that do not contain requirements that require compliance.
40 CFR 82.80, Subpart D – Federal Procurement	Subpart applies only to Federal Departments, agencies, and instrumentalities.	A shield is not necessary for requirements that are clearly not applicable.
40 CFR 82.60, Subpart C – Ban on Nonessential Products Containing Class I Substances and Ban on Nonessential Products Containing or Manufactured with Class II Substances	Stationary source is not a manufacturer or distributor of Class I and II products or substances.	A shield is not required for sections that do not contain requirements that require compliance.
40 CFR 82.30, Subpart B – Servicing of Motor Vehicle Air Conditioners	Stationary source does not service motor vehicle air conditioners.	A shield is not necessary for requirements that are clearly not applicable.
40 CFR 82.1, Subpart A – Production and Consumption Controls	Stationary source does not produce, transform destroy, import or export Class I or Group I or II substances or products.	A shield is not necessary for requirements that are clearly not applicable.
40 CFR 82, Subpart F, Appendix C – Method for Testing Recovery Devices for Use with Small Appliances	Stationary source is not a third party entity that certifies recovery equipment.	A shield is not necessary for requirements that are clearly not applicable.

Shield Requested for:	Reason for Shield Request:	Reason for Denial
18 AAC 50.055 for EU IDs 24 through 28	Engines are nonroad engines and are not subject to the Alaska SIP emission standards.	Nonroad engines are not exempt from all SIP emission standards. Some SIP standards, such as emission limits for ambient air quality, may apply to nonroad engines. The reason provided does not explain why the specific SIP standard listed does not apply.
18 AAC 50.055(a)(2), Fuel-Burning equipment standards, opacity emission limit of 30 percent, 3-minute average	No affected emission units within the permitted stationary source.	Regulation was repealed 8/20/2016.
18 AAC 50.055(a)(4) and (5), Fuel-burning equipment standards, opacity emission limit of 20 percent, 6-minute average	No affected emission units within the permitted stationary source	A shield is not necessary for requirements that are clearly not applicable.
18 AAC 50.055 (a)(6), Fuelburning equipment standards, opacity emission limit of 10 percent, 6-minute average	No affected emission units within the permitted stationary source.	A shield is not necessary for requirements that are clearly not applicable.
18 AAC 50.055 (a)(7), Fuelburning equipment standards, opacity emission limit of 10 percent, 6-minute average	No affected emission units within the permitted stationary source.	Regulation was repealed 8/20/2016.
18 AAC 50.055(a)(8), Fuel-burning equipment standards, opacity emission limit of 20 percent, 6-minute average	No affected emission units within the permitted stationary source	Regulation was repealed 8/20/2016.
18 AAC 50.055(b)(2) and (3), Fuelburning equipment standards, PM emission limit of 0.1 grains	No affected emission units within the permitted stationary source.	A shield is not necessary for requirements that are clearly not applicable.
18 AAC 50.055(b)(4), Fuel-burning equipment standards, PM emission limit of 0.15 grains	No affected emission units within the permitted stationary source.	Regulation was repealed 8/20/2016.
18 AAC 50.055(b)(5), Fuelburning equipment standards, PM emission limit of 0.04 grains	No affected emission units within the permitted stationary source.	A shield is not necessary for requirements that are clearly not applicable.
18 AAC 50.055(b)(6), Fuelburning equipment standards, PM emission limit of 0.04 grains	No affected emission units within the permitted stationary source.	Regulation was repealed 8/20/2016.
18 AAC 50.060, Pulp Mills	Not an affected emission unit, operation, or industry.	A shield is not necessary for requirements that are clearly not applicable.

Shield Requested for:	Reason for Shield Request:	Reason for Denial
18 AAC 50.075, Wood fired heating device emission standards	No affected emission units within the permitted stationary source.	A shield is not necessary for requirements that are clearly not applicable.
18 AAC 50.085, Volatile liquid storage tank emission standards	Regulations only apply to tanks within the Port of Anchorage.	A shield is not necessary for requirements that are clearly not applicable.
18 AAC 50.090, Volatile liquid loading racks and delivery emission standards	Regulations only apply to facilities within the Port of Anchorage.	A shield is not necessary for requirements that are clearly not applicable.