

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

**STATEMENT OF BASIS
for
Permit No. AQ0200TVP03**

**Hilcorp Alaska, LLC
Milne Point Production Facility
Public Comment - August 2, 2019**

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INTRODUCTION

This document sets forth the statement of basis for the terms and conditions of Operating Permit No. AQ0200TVP03.

STATIONARY SOURCE IDENTIFICATION

Section 1 of Operating Permit No. AQ0200TVP03 contains information on the stationary source as provided in the Title V permit application.

The stationary source is owned by Hilcorp Alaska, LLC and BP Exploration (Alaska), Inc. (BPXA). Hilcorp Alaska, LLC is the Permittee for the stationary source's operating permit. For purposes of Title I and Title V permitting, the Department has determined the stationary source consists of the Central Facility Pad (CFP) and E-Pad. The SIC code for this stationary source is 1311 Crude Petroleum and Natural Gas.

The Milne Point Production Facility is an oil and gas exploration and production operation. Fuel gas, crude oil, and water are extracted from the subsurface of well pads. This mixture of fluids is transported by pipeline to the CFP where the gas, crude, and water are separated. Some of the fuel gas is used as a fuel in the combustion equipment at the CFP and well pads; the remainder is compressed and reinjected back into the reservoir. Separated produced water is also re-injected into the reservoir. Well work that involves the use of rotary drill rigs and associated engines, boilers, heaters, camps and camp equipment, pits and tanks is performed periodically at B-Pad and E-Pad. Such well work is of short duration and performed according to dynamic schedules.

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 Milne Point Production Facility that have specific monitoring, recordkeeping, and reporting requirements are listed in Table A of Operating Permit No. AQ0200TVP03. Table A of Operating Permit No. AQ0200TVP03 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 for the Milne Point Production Facility is shown in the table below.

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).

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

Emissions	NO_x	CO	PM₁₀	SO₂	VOC	CO₂e¹	HAPs	Total²
PTE	722.4	357.7	37.7	40.6	121.4	321,745	21.9	1,279.8
Assessable PTE	722	358	38	41	121	0	0	1,280

Table Notes:

- ¹ CO₂e 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 HAPs because all significant HAP emissions are also VOCs.

The assessable PTE listed under Condition 59.1 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 in quantities 10 tpy or greater. The emissions listed in Table G are estimates that are for informational use only. The listing of the emissions does not create an enforceable limit for the stationary source.

Criteria pollutant, HAP, and GHG emissions are as provided in the application.

The stationary source is not a major source of HAP emissions because total HAPs are less than 25 tpy and no single HAP is 10 tpy or greater.

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 Milne Point Production Facility 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. 9673-AA005. This permit to operate included all construction authorizations issued through November 9, 1994, and was issued before January 18, 1997 (the effective date of the divided Title I/Title V permitting program).

The original Air Quality Control Permit to Operate No. 8536-AA008, issued April 26, 1985, completed pre-construction review under Alaska's Prevention of Significant Deterioration Program (PSD) as it existed at that time. Pad-C was disaggregated from the Milne Point Unit Production Facility, as permitted in Air Quality Control Permit to Operate No. 9573-AA001, Amendment 1, dated August 15, 1995 C-Pad was later re-aggregated with the Milne Point Unit Production Facility, as noted under Operating Permit No. AQ0200TVP01 in the Title V permit summary below.

The NOX and CO BACT limits for EU ID CP-1 in Permit to Operate No. 8536-AA008 have never been removed, so they are still applicable and have been carried forward to Operating Permit No. AQ0200TVP03.

On September 3, 1986, ADEC revised the flare particulate surrogate BACT limit from 5% to 20% opacity in Air Quality Control Permit No. 8636-AA014.

Title I (Construction and Minor) Permits

Construction Permit No. 0073-AC023: The Department issued this permit on July 13, 2001. This permit contained an owner requested limit to cap emissions to less than PSD pre-construction review thresholds, and revised conditions of Permit to Operate No. 9673-AA005.

Construction Permit No. 200CP02: The Department issued this permit on March 11, 2004. The permit authorized installation of a replacement turbine (EU ID 1A), a new flare (EU ID 18A), and temporary generators. The permit also re-authorized B-Pad venting (EU ID 21) equivalent to the original PSD permit.

Minor Permit No. AQ0200MSS01: The Department issued this permit on December 9, 2005. The permit rescinded and replaced Conditions 4, 6, and 8 of Construction Permit No. 200CP02.

Minor Permit No. AQ0200MSS02: The Department issued this permit on January 10, 2006. The permit rescinded and replaced Conditions 39.1 and 39.3 of Construction Permit No. 0073-AC023.

Minor Permit No. AQ0200MSS03: The Permittee withdrew this application.

Minor Permit No. AQ0200MSS04: The Department issued this permit on February 29, 2012. The permit requires the use of direct water injection when firing the turbine (EU IDs 1 and 2) on liquid fuel. The permit also rescinded Construction Permit No. 0073-AC023 and 200CP02, as well as Minor Permit No. AQ0200MSS01 and AQ0200MSS02. The remaining applicable conditions from the rescinded permits were included in Minor Permit No. AQ0200MSS04.

- Revision No. 1: The Department issued this revision on March 16, 2012 to correct typographical errors.
- Revision No. 2: The Department issued this revision on November 8, 2012 to revise terms and conditions of Minor Permit No. AQ0200MSS04, Rev 1.
- Revision No. 3: The Department issued this revision on November 18, 2014 to include Hilcorp Alaska, LLC as an owner and change the Permittee and Operator to Hilcorp Alaska, LLC.

Minor Permit No. AQ0200MSS05: The Department issued this permit on June 15, 2015. The permit revised and rescinded specific conditions of Minor Permit No. AQ0200MSS04, Revision 3 to change the status of EU IDs T-1 through T-3 from temporary to supplemental and correct an operational limit for EU IDs 1 and 2.

Minor Permit No. AQ0200MSS06: The Department issued this permit on May 26, 2015. The permit allowed drill rig emission units to operate at aggregated well pads.

Minor Permit No. AQ0200MSS07: The Department issued this permit on August 24, 2017 for the disaggregation of Pad A, D, and F through K. The permit also revised Minor Permit AQ0200MSS06.

Minor Permit No. AQ0200MSS08: The Department issued this permit on March 12, 2019 for the disaggregation of Pad B and C and the removal of the drill rig requirements. The permit rescinds Minor Permits AQ0200MSS04, Rev 3; AQ0200MSS05; AQ0200MSS06; and AQ0200MSS07 while carrying forward remaining applicable requirements of these permits as noted in Table H.

Title V Operating Permits

Operating Permit No. AQ0200TVP01: The Department issued Operating Permit No. AQ0200TVP01 on April 14, 2003.

- Revision No. 1: The Department issued this significant modification on May 25, 2004 to incorporated all the changes authorized by Construction Permit 200CP02 except the ratings for EU IDs 9 and 10.
- Revision No. 2: The Department issued this administrative amendment on February 8, 2006 to incorporated the provisions of Minor Permit AQ0200MSS02.
- Revision No. 3: The Department issued this administrative amendment on February 15, 2006 to correct permit references in Operating Permit 200TVP01, Rev 2 and to update the permit number from 200TVP01, Rev 2 to AQ0200TVP01, Rev 3.
- Revision No. 4: The Department issued this significant modification on April 15, 2008 to incorporate all stationary source-specific terms and conditions of Construction Permits No. 0073-AC023 and 200CP02, replaced the reporting requirements of Exhibit D of Air

Permit to Operate No. 9673-AA005, and incorporate terms and conditions from Operating Permit 201TVP01 (Milne Point Unit C-Pad) due to aggregation of Pad-C.

Operating Permit No. AQ0200TVP02: The Department issued Operating Permit No. AQ0200TVP02 on March 19, 2013.

- Revision No. 1 (inadvertently labeled as Revision 2): The Department issued this administrative amendment on November 8, 2014 to include Hilcorp Alaska, LLC as an owner and change the Permittee and Operator to Hilcorp Alaska, LLC.
- Revision No. 3: The Department issued this administrative amendment on August 6, 2015 to incorporate conditions from Minor Permit No. AQ0200MSS06.
- Revision No. 4: The Department issued this significant modification on September 9, 2015 to revise relative accuracy testing requirements for EU IDs 1 and 2, and the Department also added the conditions of Minor Permit No. AQ0200MSS05.

The Department received the application for Operating Permit No. AQ0200TVP03 on June 19, 2017. The Permittee amended the application on October 6, 2017.

COMPLIANCE HISTORY

The stationary source has operated at its current location since 1985. Permit files for this stationary source, which include past inspection reports and compliance evaluations, show the following compliance issues during the permit term for Operating Permit No. AQ0200TVP02:

- BPXA submitted excess emission reports on February 24, 2012, and April 17, 2012 for possible exceedances of the visible emission limit from EU ID 18. BPXA stated that assist gas to the horizontal flare was lost due to gas plant shutdown.
- On March 19, 2012, BPXA submitted an excess emission report for potential exceedance of the limits in Table 5 for EU ID 2. EU IDs 1 and 2 were automatically switched to diesel fuel due to a complete gas plant shutdown. Fuel gas was not restored to EU ID 2, causing the unit to be run without Direct Water Injection (DWI) for longer than the two hour permit limit. An investigation by BPXA determined that low lube oil pressure was the cause of the shutdown.
- BPXA failed to submit the required information for an off-permit change for EU ID 1 after an overhaul in August 2013.
- During the Department's review of the October 1 through December 31, 2015 operating report, the Department found non-compliance with Conditions 56.1.c of Operating Permit No. AQ0200TVP02, Rev. 4 which restricts load to the maximum at which compliance was demonstrated for fuel gas or fuel oil during any source test required under Conditions 65.1a(ii) and 65.1a(iii) while using direct water injection. Hilcorp Alaska, LLC submitted a permit deviation on April 7, 2016.

- During the full compliance evaluation (FCE) for the period October 1, 2015 through June 30, 2017, the Department determined the Permittee was out of compliance with Conditions 1.5, 2.1b, 31.1a, 31.1e, 31.1f, 31.2, 37.1, 56.1c, 94(c)(i) and 105 of Permit No. AQ0200TVP02, Rev 4. The Department sent a compliance letter to the Permittee.

The Department has marked all of the above compliance issues as resolved and closed, and no further action is required by the Permittee.

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:

- 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 permits issued under 18 AAC 50 that remain in effect at the time of operating permit issuance. Table H below lists the requirements carried into Operating Permit No. AQ0200TVP03 to ensure compliance with preconstruction permit requirements.

Table H - Comparison of Minor Permit No. AQ0200MSS08 Conditions to Operating Permit No. AQ0200TVP03 Conditions¹

AQ0200MSS08 Condition No.	Description of Requirement	AQ0200TVP03 Condition No.	How Condition was Revised
2	Generator replacement	17	Not revised.
6.1	Liquid fuel sulfur limit	18	Not revised.

AQ0200MSS08 Condition No.	Description of Requirement	AQ0200TVP03 Condition No.	How Condition was Revised
6.2	Liquid fuel use limit	19	Did not include the language “calculations approved by the Department” from Conditions 6.2a(i) & (ii) in Minor Permit AQ0200MSS08 because it would potentially allow revision to monitoring methods without public comment. The Department instead included the specific methods for monitoring fuel use.
7	Gas fuel sulfur limit	20	Not revised.
8	Operating hour limits	21	Records are required to be kept on or before the 15th of each month.
9	Operating scenarios	22	Not revised.
10	Flare operation limit	23	Not revised.
11	NO ₂ increment requirement	24	Not revised.
12, 14, 14.1, 18, 19, & 22	BACT and PSD avoidance limits for the turbines	26	Not revised.
12.1 & 12.2	MR&R for turbine CO BACT	26.1	Not revised.
13, 13.1, 14, & 14.2	BACT for the heaters	25	Not revised.
-	-	25.1	MR&R from Operating Permit AQ0200TVP02 carried into the renewal.
13.2	Maintenance requirements	25.2	Not revised.
14.1a through 14.1d & 14.1i	Water injection requirements for the turbines	26.3.a through 26.3.e	Added liquid fuel reference to Operating Permit Condition 26.3.e since Operating Permit Condition 26.3.b addresses use of gas fuel when not using water injection.
14.1e through 14.1h	MR&R for turbine NO _x BACT	26.4.b through 26.4.e	Added a reference to the limit in Operating Permit Condition 26.3.e to the excess emissions/permit deviation report requirement.
15	BACT for the tanks	27	Not revised.
16	Flare operation limit	28	Added operating report and excess emissions/permit deviation report requirements.
17	Supplemental turbine operation	29	Not revised.
18.1 through 18.5	MR&R for the NO _x PSD avoidance limit for the turbines	26.5.a through 26.5.e	Not revised.

AQ0200MSS08 Condition No.	Description of Requirement	AQ0200TVP03 Condition No.	How Condition was Revised
19.1 through 19.4	MR&R for the CO PSD avoidance limit for the turbines	26.2.a through 26.2.d	Not revised.
20	Heater CO emission limit when firing liquid fuel and maintenance requirements	30	Not revised.
21	SO ₂ PSD avoidance requirements	31	Not revised.
22.1 through 22.5	MR&R for the PM PSD avoidance limit for the turbines	26.10	Not revised.
23	Turbine monitoring requirements	26.6	Not revised.
24	Turbine monitoring requirements	26.7	Not revised.
25	Turbine monitoring requirements	26.8	Conditions for wet and dry combustion liners previously requested by the Permittee are included.
26	Turbine CEMS	26.9	Not revised.

Table Note:

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

Table I - Comparison of Operating Permit No. AQ0200TVP01, Rev 4 Conditions to Operating Permit No. AQ0200TVP03 Conditions¹

AQ0200TVP01, Rev 4 Condition No.	Description of Requirement	AQ0200TVP03 Condition No.	How Condition was Revised
26	HAP major source avoidance	32	Included after the condition was inadvertently omitted from Operating Permit AQ0200TVP02. Revised the condition language to provide clarification.

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 63 Subpart JJJJJ—National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources:** The Permittee has several heaters (EU IDs 3 through 8). The heaters are not subject to the requirements of Subpart JJJJJ because they don't meet the definition of boiler in 40 CFR 63.11237, and/or are exempt under 40 CFR 63.11195(e) because they are gas-fired.
- **40 CFR 64 Compliance Assurance Monitoring (CAM):** For EU IDs 1 and 2, CAM requirements are not applicable for the following pollutants:
 - **SO₂:** To avoid permit requirements for SO₂ and to comply with NSPS Subpart GG, the sulfur content of the fuel is limited. The “control device” definition in 40 CFR 64.1 states, “For purposes of this part, a control device does not include passive control measures that act to prevent pollutants from forming, such as the use of seals, lids, or roofs to prevent the release of pollutants, use of low-polluting fuel or feedstocks, or the use of combustion or other process design features or characteristics.” Therefore, the applicability criteria in 40 CFR 64.2(a)(2) is not met.
 - **PM-10:** The potential pre-control device emissions of PM-10 is less than 100 tpy. Therefore, the applicability criteria in 40 CFR 64.2(a)(3) is not met.
 - **CO:** There is no control device used to achieve compliance with any CO emission limitations or standards. Therefore, the applicability criteria in 40 CFR 64.2(a)(2) is not met.

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. AQ0200TVP03. 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 and 12, 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 1 through 8, 11 through 15, 18, 18A, 23, 25, and T-1 through T-3 listed in Table A are fuel-burning equipment or industrial processes.

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 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 did not include the Smoke/No Smoke Plan, because the Permittee has opted not to use this plan.

Except for gas fuel-burning equipment, 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 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.

For EU IDs 14 and 15 no visible emissions monitoring is required when these emissions units are insignificant based on potential emissions due to permit Condition 21 that limits hours of operation. As long as the emissions units do not exceed 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.

Recordkeeping - The Permittee is required to record the results of all observations.

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.

Dual Fuel-Fired Units:

As long as dual fuel-burning emissions units operate only on gas, monitoring consists of a statement in each operating report indicating only gaseous fuels were used in the equipment during the reporting period. When any of these emissions units operates on a backup liquid fuel for more than 400 hours in a calendar year, monitoring in accordance with Department Policy and Procedure No. 04.02.103, Topic # 2 is required. When any of these units operates on a backup liquid fuel for less than 400 hours in a calendar year, monitoring for that unit consists of an annual certification of compliance with the opacity standard. The 400-hour trigger for additional monitoring applies to each individual unit and not as a combined total for all units.

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.

Tank, Process, and Dehydration Unit Vents:

The Department is not requiring any visible emissions monitoring, recordkeeping or reporting for the vents (EU IDs 23 and 25) because the vents release colorless hydrocarbon vapors.

Conditions 6 through 12, 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. EU IDs 1 through 8, 11 through 15, 18, 18A, 23, 25, and T-1 through T-3 listed in Table A are fuel-burning equipment or 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 12 of the permit. These conditions have been adopted into regulation as Standard Operating Permit Condition IX. The Department modified these conditions by deleting the requirement to record and report the exhaust stack diameters because these one-time requirements have already 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.

Dual Fuel-Fired Units:

As long as dual fuel-fired emissions units operate only on gas, monitoring consists of a statement in the operating report indicating whether only gaseous fuels were used in the equipment during the period covered by the report. When any of these emissions units operates on a backup liquid fuel for more than 400 hours in a calendar year, monitoring for that emissions unit in accordance with Department Policy and Procedure No. 04.02.103, Topic # 2 is required. When any of these emissions units operates on a backup liquid fuel for 400 hours or less in a calendar year, monitoring for that unit consists of an annual certification of compliance with the particulate matter standard. The 400-hour trigger for additional monitoring applies to each individual unit and not as a combined total for all units.

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.

Tank, Process, and Dehydration Unit Vents:

The Department is not requiring any particulate matter emissions monitoring, recordkeeping or reporting for the vents (EU IDs 23 and 25) because the vents release colorless hydrocarbon vapors.

Conditions 13 through 16, 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. EU IDs 1 through 8, 11 through 15, 18, 18A, 23, 25, and T-1 through T-3 listed in Table A are fuel-burning equipment or 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 14.2 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:

The Permittee must sample the fuel in accordance with the monitoring requirements for the SO₂ limit for ambient air quality protection.

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 sulfur content analysis with the stationary source operating report.

Tank, Process, and Dehydration Unit Vents:

The Department is not requiring any SO₂ emissions monitoring, recordkeeping, or reporting for the vents (EU IDs 23 and 25) because the vents release sulfur compound emissions other than SO₂, and emissions are to be expressed as SO₂ when determining compliance with the state standard.

Conditions 17 through 32, 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: Tables I through M above show the preconstruction permit requirements included in Operating Permit AQ0200TVP03. For the heater BACT limits, the Department retained the requirement from Operating Permit AQ0200TVP02 that required source testing at least once every five years. For the BACT limits for EU IDs 1 and 2, the Department included the MR&R requirements from the Title I permit which include parameter

monitoring and source testing every two years to maintain/increase the accuracy of the parameter monitoring. The previous owner of the stationary source conducted CO and NOx relative accuracy (RA) testing in 2013 following a maintenance overhaul performed by General Electric (GE). The source testing was conducted to determine the relative accuracy of the best-fit correlations used for calculating NOx and CO emissions from EU IDs 1 and 2. Results of the CO RA verification were outside the allowable thresholds in the operating permit. Consequently, the previous owner adopted the required annual RA testing schedule. In a May 8, 2015 letter, Hilcorp indicates the previous owner further investigated and determined that the unexpected change in CO emissions in 2013 was due to an unintended liner substitution during overhaul. GE reported that a G73 dry combustion liner was installed in place of the normally-used G79 wet combustion liner for dual-fuel water injected turbines. Prior to testing in October 2014, the correct G79 wet combustion liner was installed in EU ID 1, and RA testing results were compared to the original best fit (wet liner) correlations submitted with the 2004 QA/QC plan. With the wet combustion liner, the 2014 RA results were found to be in compliance with the operating permit thresholds. Hilcorp normally operates EU IDs 1 and 2 with wet combustion liners. Therefore, to eliminate the need for increased annual testing due to the inadvertent liner replacement, Hilcorp requested a permit modification to Operating Permit AQ0200TVP02 to revise Condition 65.3 to require more frequent RA testing when RA verifications with the normally-used wet liner exceed the specified thresholds. Additionally, to prevent any future problems resulting from operation of EU IDs 1 and 2 with dry combustion liners, a requirement to obtain a permit modification prior to operation with a dry liner was also added to the operating permit.

The Department established a limit for HAP major source avoidance in Operating Permit AQ0200TVP01, Rev 4. This limit was inadvertently omitted from Operating Permit AQ0200TVP02. The limit is included in Operating Permit AQ0200TVP03, as requested by Hilcorp.

Condition 33, 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. The Department also added 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 Operating Permit Condition V for the permit condition. 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.

Conditions 34 through 41, NSPS 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).

Most affected facilities subject to NSPS requirements are subject to Subpart A. At this stationary source, emission units are subject to the requirements of NSPS Subpart GG. Therefore, NSPS Subpart A is applicable.

Conditions 34.1 through 34.3 - The Permittee has already complied with the initial notification requirements in 40 CFR 60.7(a) for EU IDs 1 and 2. However, the Permittee is still 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 34.4 - 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 35 - The requirements in 40 CFR 60.7(b) to maintain start-up, shutdown, or malfunction records are applicable to most NSPS affected facilities subject to Subpart A.

Conditions 36 and 37 - NSPS excess emission reporting requirements and summary report form in 40 CFR 60.7(c) & (d) are applicable to EU IDs 1 and 2. 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 78).

Condition 38 - The Permittee has already complied with the initial performance test requirements in 40 CFR 60.8 for EU IDs 1 and 2. However, 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 39 - Good air pollution control practices in 40 CFR 60.11 are applicable to most NSPS affected facilities subject to Subpart A.

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

Condition 41 - Concealment of emissions prohibitions in 40 CFR 60.12 are applicable to EU IDs 1 and 2.

The flares are not subject to 40 CFR 60.18 because they do not control emissions from any NSPS regulated emissions units.

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 42, NSPS Subpart Dc Requirements

Legal Basis: The Department incorporated the requirements of NSPS Subpart Dc by reference, as listed in 18 AAC 50.040(a)(2). Subpart Dc applies to steam generating units for which construction, modification, or reconstruction commenced after June 9, 1989 and have maximum design heat input capacities of 29 MW (100 MMBtu/hr) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr). EU IDs 3 and 4 are subject to the requirements of Subpart Dc.

Factual Basis: EU IDs 3 and 4 burn only natural gas and are not subject to the SO₂ standard in 40 C.F.R. 60.42c or the PM standard in 40 C.F.R. 60.43c. In accordance with 40 C.F.R. 60.48c(g)(1), the Permittee must record the amounts of each fuel combusted during each operating day in EU IDs 3 and 4; or monitor according to an EPA approved custom fuel-monitoring schedule. The Permittee has already complied with the initial notification requirement.

Condition 43, NSPS 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 apply to EU IDs 1 and 2.

The previous Permittee for the stationary source removed EU IDs T-1 through T-3 on October 28, 2014. Initial construction dates for EU IDs T-1 through T-3 are not provided in the application for Operating Permit AQ0200TVP03. Therefore, applicability determinations for NSPS Subpart GG and KKKK are not possible as of the issue date for Operating Permit AQ0200TVP03. If any 5.2 MW Solar Taurus turbines are installed as EU IDs T-1 through T-3, the Permittee must determine the applicability of NSPS Subpart GG and KKKK based on the initial construction date of the turbines and apply for a permit modification under 40 CFR 71.7(e) if necessary.

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:

$$STD_{NO_x} = 0.015 \left(\frac{14.4}{Y} \right) + F$$

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 215 ppmv for EU IDs 1 and 2.

The Department included periodic monitoring for the NSPS NO_x limit as required under 40 C.F.R. 71.6(a)(3), because NSPS Subpart GG does not contain MR&R sufficient for an operating permit. The Permittee must conduct relative accuracy tests on EU IDs 1 and 2 every two years, so the Department is also requiring testing for the NSPS NO_x limit every two years.

The MR&R conditions do not state how turbine load must be measured. For some turbines, it may be possible to directly measure load as either mechanical or electrical output. For others, it may be necessary to calculate load indirectly based on measurements of other parameters. The Department is not requiring a specific method through permit conditions, but will evaluate the adequacy of the method proposed by the Permittee in the source test plan. Other test requirements and methods are as specified in NSPS Subpart GG.

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 44, Asbestos NESHAP

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 and 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.

Condition 45, NESHAP 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).

Most facilities subject to NESHAP requirements are subject to Subpart A. At this stationary source, emission units are subject to the requirements of NESHAP Subpart ZZZZ. Therefore, NESHAP Subpart A requirements are applicable.

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

Condition 46, NESHAPs Subpart ZZZZ Requirements

Legal Basis: The Department incorporated the NESHAP requirements for specific industrial activities by reference, 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, excluding stationary RICE units being tested at a stationary RICE test cell/stand. Milne Point Production Facility is an area source of HAP emissions that contains RICE subject to NESHAP Subpart ZZZZ.

Factual Basis: For EU IDs 14 and 15, the Permittee is complying with the requirements for existing, non-emergency, compression ignition (CI) RICE with ratings less than 300 horsepower. EU IDs 11 through 13 are CI emergency engines. These engines are not subject to emission or operational limitations, but are subject to work and management practice standards as specified in Table 2d to Subpart ZZZZ.

For the emergency engines, the Permittee is required to install a non-resettable hour meter in each unit to demonstrate compliance with the operational hour limitations for emergency RICE. If any of the emergency engines no longer meets the criteria for an emergency engine, as defined in 40 CFR 63.6675, the emissions unit must meet all applicable requirements for non-emergency engines. The U.S. Court of Appeals for the District of

Columbia Circuit vacated 40 CFR 63.6640(f)(2)(ii) and (iii) on May 4, 2016. Therefore, 40 CFR 63.6640(f)(2)(ii) and (iii) have ceased to have any legal effect and have not been included in the operating permit.

In accordance with 40 CFR 63.6645(a)(5), initial notification is not required for existing stationary emergency RICE and engines that are not subject to any numerical emission standards.

Conditions 47 through 49, Protection of Stratospheric Ozone, 40 CFR 82

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 47 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 48 and 49 also require compliance with the applicable requirement adopted under 18 AAC 50.040(d). Condition 48 prohibitions apply to all stationary sources that use substitutes for ozone-depleting compounds. Condition 49 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 50 through 52, 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 53 and 54, 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 55 through 57, 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 apply to all permits.

Condition 58, 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 59 and 60, 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 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 61, 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 62, 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 63, 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 64, 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 65, 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 66, 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 82. Excess emission reporting under Condition 82 requires information on the steps taken to minimize emissions. Monitoring of compliance for this condition consists of the report required under Condition 82.

Condition 67, 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 68, Requested Source Tests

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

Factual Basis: This is a standard condition to be included in all operating permits, as specified in 18 AAC 50.345(a).

Conditions 69 through 71, Operating Conditions, Reference Test Methods, Excess Air Requirements

Legal Basis: Conditions 69 and 71 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 70 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 69 through 71.

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

Condition 72, 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, except in connection with required particulate matter testing.

Conditions 73 through 76, 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 73 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 77, 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 78, 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 79, 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 80, 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 81, 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 82, 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 83, 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 84, 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 84.2 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 85, 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 Pb from 5 tpy to 0.5 tpy actual emissions.

Condition 86, 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 87 through 89, 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 90, 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 91 through 96, 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 97 and 98, 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 F of Operating Permit No. AQ0200TVP03 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 J - Permit Shields Denied

Shield Requested for:	Reason for Shield Request:	Reason for Denial
EU IDs 3, 4, CP-2: 40 C.F.R. 60 Subpart Dc: §60.48 c(a)(1), (initial notification only)	Shield only applies to emission units as currently installed as of the date of permit issuance and is not valid if modified, reconstructed or replaced.	Does not explain why the requirement is not applicable to the source. Additionally, the requirement also applies if reconstruction occurs.
EU IDs 1, 2, CP-4: 40 C.F.R. 60 Subpart A: §60.8(a)	Shield only applies to emission units as currently installed as of the date of permit issuance and is not valid if modified, reconstructed or replaced.	Requirement also applies if testing is required by the Administrator, which may occur at anytime.
EU IDs 1, 2, CP-4: 40 C.F.R. 60 Subpart GG: §§60.335(b), (c)(1), (c)(3) (Initial Performance Test Only)	Obsolete requirements – completed as required.	Requirements apply whenever testing is conducted and testing may be required by the Administrator at anytime. 40 CFR 60.335(c)(3) does not exist.
EU IDs 1, 2, CP-4: 40 C.F.R. 60 Subpart GG: §60.334 (e) and (f)	Applies to affected turbines that commence construction after July 8, 2004. Emission units commenced construction prior to this date.	These provide options rather than requirements, so a shield is not necessary.
EU IDs 11, 12, 13, 27, CP-3: 40 C.F.R. 63 Subpart ZZZZ, §63.6612	Stationary source is not a major source of HAPS.	Requirements also apply to engines at area sources.
EU IDs 11, 12, 13, 27, CP-3: 40 C.F.R. 63 Subpart ZZZZ, §63.6604	Diesel engines are non-emergency engines less than 300 hp or emergency engines greater than 300 hp.	Requirements apply to existing emergency engines with a site rating of more than 100 brake horsepower and a displacement of less than 30 liters per cylinder

Shield Requested for:	Reason for Shield Request:	Reason for Denial
EU IDs 11, 12, 13, 27: 40 C.F.R. 63 Subpart ZZZZ, §63.6650	The facility is an area source with non-emergency engines that are all less than 300 hp, emergency engines greater than 300 hp, and a remote spark ignition engine so no emission or operational limits apply.	40 CFR 63.6650(f) is an applicable requirement.
40 C.F.R. 68 – Risk Management Programs	Naturally occurring hydrocarbon mixtures: (crude oil, condensate, natural gas and produced water) prior to entry into a petroleum refining process unit (NAICS code 32411) or a natural gas processing plant (NAICS code 211112) are exempt from the threshold determination. (see final Rule exempting from threshold determination regulated flammable substances in naturally occurring hydrocarbons mixtures prior to initial processing, 63 FR 640 [January 6, 1998]). Less than 10,000 lb of other mixtures containing regulated flammable substances that meet the criteria for an NFPA rating of 4 for flammability are stored at the stationary source. Therefore, CFP, BPad, and E-Pad, a crude petroleum and natural gas production stationary source, (NAICS code 211111) does not process or store regulated flammable or toxic substances in excess of threshold quantities	Several thresholds are less than 10,000 lbs and no explanation is provided for toxic substances.