

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

**Public Comment - July 21, 2010
Alaska Power & Telephone Co.
Haines Power Generating Station**

**STATEMENT OF BASIS
of the terms and conditions for
Permit No. AQ0226TVP03**

**Reviewed by James Plosay
ADEC AQ/APP (Juneau)**

**Prepared by MACTEC Federal Programs, Inc.
Public Comment - July 21, 2010**

INTRODUCTION

This document sets forth the statement of basis for the terms and conditions of Operating Permit No. AQ0226TVP03.

STATIONARY SOURCE IDENTIFICATION

Section 1 of Operating Permit No. AQ0226TVP03 contains information on the stationary source as provided in the Title V permit application.

The stationary source is owned and operated by, Alaska Power & Telephone Co. and Alaska Power & Telephone Co. is the Permittee for the stationary source's operating permit. The SIC code for this stationary source is 4911- Electrical Services.

This document sets forth the legal and factual basis for the terms and conditions of renewal Operating Permit No. AQ0226TVP02. The Haines Power Generating Station is a diesel-electric generating stationary source that provides electric power to the community of Haines, Alaska.

As provided in the application, the stationary source contains four diesel-electric generators installed between 1969 and 1996. The fifth diesel-electric generator, EU ID 5, was removed from this permit based on information provided by the Permittee on April 24, 2010. The stationary source is located in Haines, Alaska.

EMISSION UNIT INVENTORY AND DESCRIPTION

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

The emission units at the Haines Power Generating Station that are classified and have specific monitoring, recordkeeping, and reporting requirements are listed in Table A of Operating Permit No. AQ0226TVP03.

Table A of Operating Permit No. AQ0226TVP03 contains information on the emission units regulated by this permit as provided in the application. The table is provided for informational and identification purposes only. Specifically, the emission unit rating/size provided in the table is not intended to create an enforceable limit.

Through this permit, the Haines Power Generating Station avoids classification as prevention of significant deterioration (PSD) major by restricting power generation to limit nitrogen oxides (NO_x) emissions to less than 410 TPY. However, the source is now classified as an existing PSD major facility for the purpose of future PSD applicability determinations. No modifications or emissions increase above the PSD trigger thresholds may be made without either a PSD pre-construction review or revisions to the owner requested limits to make the facility a synthetic minor facility.

EMISSIONS

A summary of the potential to emit (PTE)¹ and assessable PTE as indicated in the application from the Haines Power Generating Station or recalculated by the Department is shown in the table below.

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

Pollutant	NO _x	CO	PM-10	SO ₂	VOC	HAPs	Total
PTE	410	115	14	69	12	0.2	620
Assessable PTE	410	115	14	69	12	0	620

The assessable PTE listed under Condition 21.1 is the sum of the emissions of each individual regulated air pollutant for which the stationary source has the potential to emit quantities greater than 10 TPY. 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 to the stationary source.

For criteria pollutants, emissions are as provided in the application, as follows: SO₂, CO, VOC and PM. For NO_x, the Department calculated emissions based on emission factors in Permit to Operate No. 9511-AA005 which were used to calculate the original PSD limit for NO_x. In order to change these emission factors, the Permittee must apply for a Title I permit revision as stated in Condition 9.7.f.

The applicant provided HAP emissions calculated with AP-42 emission factors. HAP emissions are not included in the totals because all HAPs are VOCs.

BASIS FOR REQUIRING AN OPERATING PERMIT

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

Except for sources exempted or deferred by AS 46.14.120(e) or (f), AS 46.14.130(b) lists three 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 under Section 111 of the Clean Air Act or national emission standards under Section 112 of the Clean Air Act;
- Another stationary source designated by the federal administrator by regulation.

This stationary source requires an operating permit because it is classified under 18 AAC 50.326(a) and 40 C.F.R. 71.3(a) as

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(23), effective 12/3/05.

² *Title V source* means a stationary source classified as needing a permit under AS 14.130(b) [ref. 18 AAC 50.990(111)].

- A major stationary source as defined in Section 302 of the Clean Air Act that directly emits, or has the potential to emit, 100 TPY or more of any air pollutant;

AIR QUALITY PERMITS

Previous Air Quality Permit to Operate

The Department issued Air Quality Control Permit to Operate No. 9011-AA009 to Haines Power Generating Station on October 31, 1990, which limited power to 12,016,000 kW-h/yr and NO_x emissions to 249 TPY based on AP-42 emission factors. Stationary source modifications in 1991 and 1994 increased the generating capacity by 1,019 kW and 1,126 kW respectively, while retaining the 249 TPY NO_x and 12,016,000 kW-h/yr limits. In early 1995, a fire destroyed a 1,135 kW generator originally installed in 1989. The Department issued Air Quality Control Permit to Operate No. 9411-AA012 on April 13, 1995 retaining the 249 TPY NO_x and 12,016,000 kWh/yr limits, and permitting installation of an additional 1,135 kW replacement generator as requested on October 24, 1994.

The applicant submitted an amendment application on May 16, 1995 to install a generator larger than the originally proposed replacement generator. A screening analysis was submitted on May 17, 1995 in support of the modification request. The Department allowed the applicant to increase the stationary source emissions based on the fact that as "synthetic minor", the stationary source could emit up to an additional 249 TPY of NO_x while avoiding a PSD review. During that period, permit regulations did not clearly prohibit this type of PSD avoidance permit. Air Quality Control Permit to Operate No. 9511-AA005 was issued May 30, 1995 and established a new stationary source limit of 410 TPY NO_x and a 25.5 GW-hr/yr stationary source-wide power limit.

Alaska Power & Telephone Co. purchased Haines Light & Power on August 1, 1996.

The permit-to-operate 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).

Title I (Construction and Minor) Permits

The Department issued no construction permit for this stationary source after January 18, 1997 (the effective date of the new divided operating and construction-permitting program).

Title V Operating Permit Application, Revisions and Renewal History

The owner or operator submitted the initial Title V operating permit application on December 4, 1997. The owner or operator amended this application on February 27, 1998. The application was administratively complete on March 13, 1998. The Department issued the initial Title V Operating Permit No. 226TVP01 on September 8, 2000. Permit No. 226TVP01 Administrative Revision 1 was issued on December 21, 2000 to correct typographical errors. Permit No. 226TVP01 Administrative Revision 2 was issued on November 22, 2002 to update the condition concerning emission fees in the permit to the standard permit condition for emission fees which was adopted by reference into 18 AAC 50 effective May 3, 2002.

The owner or operator submitted a renewal Title V operating permit application on September 17, 2004. This application was deemed complete on December 3, 2004 and Permit No.

AQ0226TVP02 went to public notice on January 10, 2005. The permit was issued April 18, 2005.

The owner or operator submitted a Title V operating permit renewal application on September 22, 2009. This application was deemed incomplete on November 2, 2009 and the owner or operator amended the application on December 24, 2009, and provided supplemental information on April 24, 2010.

COMPLIANCE HISTORY

The stationary source has operated at its current location since 1969. 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 PRE-CONSTRUCTION PERMITS

Incorporated by reference at 18 AAC 50.326(j), 40 C.F.R. Part 71.6 defines “applicable requirement” to include the terms and conditions of any pre-construction permit issued under rules approved in Alaska’s State Implementation Plan (SIP).

Alaska’s SIP included the following types of pre-construction permits:

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

Pre-construction 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 not limited to, each emission unit- or source-specific requirement established in these permits issued under 18 AAC 50 that are still in effect at the time of this operating permit issuance. Table D below lists the requirements carried over from Permit to Operate No. 9511-AA005 into Operating Permits No. AQ0226TVP01 and AQ0226TVP02 to ensure compliance with the applicable requirements. Table E, also below, lists the requirements carried over from Operating Permit No. AQ0226TVP02 to Operating Permit No. AQ0226TVP03.

Table D - Cross Reference of Permit No. 9511-AA005 Conditions to Permit No. AQ0226TVP02 Conditions

Permit No. 9511-AA005 Condition	Description Of Requirement	Permit No. 226TVP01 Condition	How Condition Was Revised	Permit No. AQ0226TVP02 Condition	How Condition Was Revised
Introductory paragraph and Exhibit A	Authority for permit and source list	Section 2, Section 4, and Table 1	Same information, different format	Table 1, and SOB	Same as Permit No. 226TVP01, except deleted the tank and fugitive emissions from the emission unit table since they are insignificant emission units
1	Comply with ambient air quality standards	15	Now required only for construction permits	N/A	Deleted, now required only for construction permits
2 & Exhibit B	Comply with most stringent emission standards, limits, & specifications	Section 5	Emission limits unchanged and now listed as condition	Section 4	Same as Permit No. 226TVP01, but added new VE limit
3	Operate and maintain equipment to minimize emissions during startup and shutdown	None	Deleted the existing SIP guidance language of 6/15/90 for O & M practices	13	Added the standard condition for good operating practices
4	Owner-requested limit on power generation to avoid PSD review for NO _x	7	Retained existing limit 410 TPY of NO _x for EU IDs 1-5	6	Same as Permit No. 226TVP01
5	Report to ADEC when 90% of the power limit is reached	None	Change in status to standby as hydropower comes on line	N/A	Same as Permit No. 226TVP01
6 & Exhibit C	Perform source tests as requested by the Department	21	Same information, different format	6.6 and 21	Same as Permit No. 226TVP01
7	Source test at maximum speed unless approved by the Department	22	Language revised for clarity	22	Same as Permit No. 226TVP01
8	Submit source test plans	25	Language revised for clarity	27	Same as Permit No. 226TVP01

Table D - continued

Permit No. 9511-AA005 Condition	Description Of Requirement	Permit No. 226TVP01 Condition	How Condition Was Revised	Permit No. AQ0226TVP02 Condition	How Condition Was Revised
9	Submit source test results	27	Same information, different format	29	Same as Permit No. 226TVP01
10	Excess emissions reporting	33 and Section 15	Language revised for clarity, new reporting form	34 and Section 14	Language revised for new standard conditions
11	Submit operating report	35	Language revised for clarity	35	Same as Permit No. 226TVP01 but revised somewhat for standard condition
12	Maintain records	32	Language revised for clarity	33	Same as Permit No. 226TVP01
13	Access to the stationary source	44	Language revised for clarity	43	Same as Permit No. 226TVP01
14	Display permit	None	No regulatory basis	N/A	Same as Permit No. 226TVP01
15	User fees	Section 3	Language revised for clarity	Section 3	Same as Permit No. 226TVP01
N/A	N/A	6	Added requirement for EU ID 6 subject to 40 C.F.R. 60	N/A	Deleted requirement, unit is no longer subject per October 2003 revisions to

Table E- Comparison of Previous Operating Permit No. AQ0226TVP02 Conditions to Operating Permit No. AQ0226TVP03 Conditions

Permit-to-Operate AQ0226TVP02	Description of Requirement	Permit No. AQ0226TVP03 Condition Number(s)	How Condition Was Revised
Table 1	Emission Unit Inventory	Table A	Updated to remove EU ID 5
Conditions 1 and 2	Fee Requirements	Conditions 20 and 21	Similar updated provisions.
Conditions 3, 49, through 51	Visible emissions (VE) standard, monitoring recordkeeping and reporting monitoring	Conditions 1 through 4	Similar updated provisions.

Table E - continued

Permit-to-Operate AQ0226TVP02	Description of Requirement	Permit No. AQ0226TVP03 Condition Number(s)	How condition was revised
Conditions 4, 52 through 54	PM standard, monitoring, recordkeeping, and reporting	Conditions 5 through 7	Similar updated provisions.
Condition 5	Sulfur emission standard and monitoring	Condition 8	Similar updated provisions.
Condition 6	NO _x PSD avoidance limit	Condition 9	Periodic source testing of all engines is now required.
Section 6	Insignificant Emission Units	Condition 10	Similar updated provisions.
N/A	NESHAP ZZZZ	Section 4	New provision.
Section 7	Generally Applicable Requirements	Section 5	Similar updated provisions.
Section 8	General Source Testing and Monitoring Requirements	Section 6	Similar updated provisions
Section 9	General Recordkeeping, Reporting, and Compliance Certification Requirements	Section 7	Similar updated provisions. Modified Condition 14 GAPCP of TVP02 as all units will be RICE NESHAPs affected facilities after May 3, 2013 and the requirement is contained in Condition 12.5.
Condition 21	Permit Changes and Renewal	Section 8	Similar updated provisions.
Section 10	Standard Conditions Not Otherwise Included In The Permit	Section 9	Title change to Compliance Requirements, otherwise, similar updated provisions.
Section 12	Visible Emission Forms	Section 11	Similar updated provisions.
Section 14	Material Balance Calculation	Section 12	Similar updated provisions.
Section 13	ADEC Notification Form	Section 13	Similar updated provisions.

NON-APPLICABLE REQUIREMENTS

Each permit is required to contain a discussion of all applicable requirements as set forth in 40 C.F.R. 71.6(a) adopted in 18 AAC 50.040(j). This section discusses standard conditions that have been removed from the permit or are not included for specific reasons.

- NSPS Subpart IIII: Although the Permittee operates CI ICE (EU IDs 1 through 4), at the stationary source, they are not currently applicable to the provisions of this Subpart as they have not been modified or reconstructed since the Subpart applicability date.

STATEMENT OF BASIS FOR THE PERMIT CONDITIONS

The state and federal regulations for each condition are cited in Operating Permit No. AQ0226TVP03. The Statement of Basis provides the legal and factual basis for each term and condition as set forth in 40 C.F.R. 71.6(a)(1)(i).

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

Legal Basis: These conditions ensure compliance with the applicable requirements in 18 AAC 50.050(a) and 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 4 are fuel-burning equipment.

U.S. EPA incorporated these standards as revised in 2002 into the SIP effective September 13, 2007.

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). Condition 2 prohibits the Permittee from causing or allowing visible emissions in excess of the applicable standard in 18 AAC 50.050(a). The Permittee shall not cause or allow the equipment to violate these standards.

The Permittee must monitor, record, and report emissions in accordance with Conditions 2 through 4 of the permit. Conditions 2 through 4 MR&R conditions are standard conditions adopted into regulation pursuant to AS 46.14.010(e). These conditions have been modified in this permit as follows. The Department added a provision that clarifies the option to continue an established monitoring frequency for renewal permits.

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

Liquid Fuel-Fired Burning Equipment:

Monitoring – The visible emissions may be observed by either Method-9 or the Smoke/No Smoke plans as detailed in Condition 2. Corrective actions such as maintenance procedures and either more frequent or less frequent testing may be required depending on the results of the observations.

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

Reporting – The Permittee is required to report: 1) emissions in excess of the federal and the state visible emissions standard and 2) deviations from permit conditions. The Permittee is required to include copies of the results of all visible emission observations with the stationary source operating report.

Conditions 5 - 7, Particulate Matter (PM) Standard

Legal Basis: These conditions ensure compliance with the applicable requirement in 18 AAC 50.055(b). These requirements apply to operation of all and fuel burning equipment in Alaska.

- EU IDs 1 through 4 are fuel-burning equipment.

These PM standards also apply because they are contained in the federally approved SIP effective September 13, 2007.

Factual Basis: Condition 5 prohibits emissions in excess of the state PM (also called grain loading) standard applicable to fuel-burning equipment and industrial processes. The Permittee shall not cause or allow fuel-burning equipment to violate this standard.

MR&R requirements are listed in Conditions 6 and 7.

The Permittee must establish by actual visual observations which can be supplemented by other means, such as a defined Operation and Maintenance Program that the emission unit is in continuous compliance with the State's emission standards for particulate matter.

Liquid Fuel-Fired Burning Equipment:

For liquid fuel units the MR&R conditions are Standard Permit Condition IX adopted into regulation pursuant to AS 46.14.010(e). The Department determined that these standard conditions adequately meet the requirements of 40 C.F.R. 71.6(a)(3). No emission unit or stationary source operational or compliance factors indicate that unit-specific or stationary-source specific conditions would better meet these requirements. Therefore, the Department concluded that the standard conditions meet the requirements of 40 C.F.R. 71.6(a)(3).

Condition 8, Sulfur Compound Emissions

Legal Basis: This condition requires the Permittee to comply with the sulfur compound emission standard for all fuel-burning equipment in the State of Alaska.

- EU IDs 1 through 4 are fuel-burning equipment.

These sulfur compound standards also apply because they are contained in the federally approved SIP effective September 13, 2007.

Factual Basis: The condition re-iterates a sulfur emission standard applicable to fuel burning equipment. The Permittee may not cause or allow their equipment to violate this standard. Sulfur dioxide comes from the sulfur in the liquid, hydrocarbon fuel (e.g. diesel or No. 2 fuel oil). Fuel containing no more than 0.75 percent sulfur by weight will always comply with the emission standard. The Department has imposed the standard condition adopted on October 1, 2004.

For semi-annual operating reports, only a description of the fuel grades or sulfur content is needed, as well as excess emissions.

Liquid Fuels:

For oil fired fuel burning equipment, the MR&R conditions are Standard 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 8.1.c 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 C.F.R. 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.

The Department also added text for ultra low sulfur diesel grades used on or after May 3, 2013 for compliance and record keeping under 40 C.F.R. 63 as a gap filling element.

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

Condition 8.1 requires the Permittee to retain receipts that specify fuel grade and amount or analyze for the fuel gas sulfur content 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 C.F.R. 60.17 incorporated by reference in 18 AAC 50.040(a)(1).

The Permittee is required to report as State 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 statement from the fuel supplier or the sulfur content analysis with the stationary source operating report.

Condition 9 , NO_x PSD Avoidance Limit

Legal Basis: These conditions are carried over from air quality Permit-to-Operate No. 9511-AA005. The Permittee requested a power limit in the original Title V permit application to no more than 25.50 GW-hr. This has been carried forward into Operating Permit AQ0226TVP03.

Factual Basis: The applicant requested a power limit of 25.5 GW-hrs to restrict NO_x emissions to less than 410 TPY to avoid a PSD review for NO_x. Monitoring requires all pertinent parameters to be recorded monthly, and compliance is determined by a twelve month rolling total. This ensures compliance with the annual emission limit in a manner that is practicably enforceable per EPA guidance. Condition 9.7 clearly specifies the emission factors on which the limit is based and requires source testing within 1 year of permit issuance in order to verify the emission factors which are original to Permit to Operate No. 9511-AA005. If the worst-case emission factors generated from a source test are higher than those in Condition 9.7, the Permittee must calculate a new limit and apply for a minor permit revision. Based on the results of the source tests conducted under this permit, the Department may reconsider the necessity of periodic source testing in subsequent renewal permits.

Conditions 10, Insignificant Emission Units

Legal Basis: The Permittee is required to meet state emission standards set out in 18 AAC 50.055 for all fuel-burning equipment regardless of size.

Factual Basis: This condition re-iterates the emission standards and require compliance for insignificant emission units. The Permittee may not cause or allow their equipment to violate these standards. Insignificant emission units are not listed in the permit unless specific monitoring, recordkeeping and reporting are necessary to ensure compliance.

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.

Condition 10.4.a requires certification that the units did not exceed state emission standards during the previous year and did not emit any prohibited air pollution.

Condition 11, NESHAPs Subpart A

Legal Basis: The Department has incorporated by reference the NESHAP requirements effective July 16, 2007, for specific industrial activities, as listed in 18 AAC 50.040(c).

Most sources subject to a NESHAPs requirement are subject to Subpart A. EU IDs 1 – 4 are subject to NESHAPs Subpart ZZZZ and are therefore subject to the provisions of Subpart A listed in Table 8 of Subpart ZZZZ.

Factual Basis: These conditions incorporate applicable 40 C.F.R. 63 requirements. The Permittee may not cause or allow violations of these prohibitions.

Conditions 12 - 16, NESHAPS Subpart ZZZZ

Legal Basis: NESHAPS Subpart ZZZZ applies to stationary compression ignition reciprocating internal combustion engines (CI RICE) at major and area sources of hazardous air pollutants. EU IDs 1, 2, 3, and 4 are subject to Subpart ZZZZ under 40 C.F.R. 60.6580 because the four diesel engines are all stationary CI RICE which commenced construction or reconstruction before June 12, 2006, are rated at more than 500 brake HP with a displacement per cylinder of less than 30 liters, and the engines are not “emergency” or “limited use” as defined in the subpart.

Factual Basis: These conditions incorporate the Subpart ZZZZ operations and emissions standards applicable to EU IDs 1, 2, 3, and 4. The Permittee may not cause or allow the Emission Units to violate these standards. These conditions also provide MR&R specifically called out for within the Subpart. The Permittee is required to monitor and maintain records related to notification; start up; shut down; malfunction and repair; and performance testing. The Permittee is required to conduct performance testing within 180 days of relevance to the effective date of May 3, 2013 and every 8,760 hours or 3 years thereafter, whichever comes first. Reporting of excess emissions, and hours of operation is required.

The Permittee is required to use only diesel fuel that complies with the requirements for non road diesel fuel in 40 CFR 80.510(b). Although the compliance date for 40 CFR 80.510(b) is June 1, 2010, this requirement is not applicable to EU IDs 1 – 4 until May 3, 2013, the compliance date of Subpart ZZZZ as set out in Condition 12. The Department has expanded

monitoring and record keeping for fuel quality in Condition 8 to gap fill federal record keeping requirements.

Conditions 17 - 19, Standard Terms and Conditions

Legal Basis: These are standard conditions required under 18 AAC 50.345(a) and (e)-(g) for all operating permits. This provision is incorporated in the federally approved Alaska operating permit program of November 30, 2001, as updated effective November 9, 2008.

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

Condition 20, Administration Fees

Legal Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.400-405 as derived from AS 46.14.130. This condition requires the Permittee, owner, or operator to pay administration fees as set out in regulation. Paying administration fees is required as part of obtaining and holding a permit with the Department or as a fee for a Department action.

Factual Basis: The owner or operator of a stationary source who is required to apply for a permit under AS 46.14.130 shall pay to the Department all assessed permit administration fees. The regulations in 18 AAC 50.400-405 specify the amount, payment period, and the frequency of fees applicable to a permit action.

Conditions 21 - 22, Emission Fees

Legal Basis: These conditions ensure compliance with the applicable requirement in 18 AAC 50.410-420. The regulations require all permits to include due dates for the payment of fees and any method the Permittee may use to re-compute assessable emissions.

Factual Basis: These emission fee conditions are Standard Permit Condition I under 18 AAC 50.346(b) adopted pursuant to AS 46.14.010(e). Except for the modification noted in the last paragraph of this "Factual Basis", the Department determined that these standard conditions adequately meet the requirements of AS 46.14.250. No emission unit or stationary source operational or compliance factors indicate that unit-specific or stationary-source specific conditions would better meet these requirements. Therefore, the Department concluded that the standard conditions meet the requirements of AS 46.14.250.

These standard 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 default assessable emissions are generally potential emissions of each air pollutant in excess of 10 tons per year authorized by the permit (AS 46.14.250(h)(1)(A)).

The conditions allow the Permittee to calculate actual annual assessable emissions based on previous actual annual emissions. According to AS 46.14.250(h)(1)(B), assessable emissions are based on each air pollutant. Therefore, fees based on actual emissions shall be paid on any pollutant emitted whether or not the permit contains any limitation of that pollutant.

This standard condition specifies that, unless otherwise approved by the Department, calculations of assessable emission based on actual emissions use the most recent previous calendar year's emissions. Since each current year's assessable emission 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.

The Department modified the standard condition to correct Condition 22.2 such that it referenced “submitted” (i.e., postmarked) rather than “received” in accordance with the timeframe of Condition 22.1.

Condition 23, Good Air Pollution Control Practice

Legal Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.346(b)(5) and applies to all emission units **except** those subject to federal emission standards, those subject to continuous emission or parametric monitoring, and for insignificant emission units.

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

The Department adopted this condition under 18 AAC 50.346(b) as Standard Permit Condition VI pursuant to AS 46.14.010(e). This condition has been modified in the permit as follows: the Department added the text “*EU IDs 1 – 4 are subject to this condition only until the applicable compliance date as set forth in Condition 12*” because on the compliance date in Condition 12, EU IDs 1 – 4 which are subject to NESHAPs Subpart ZZZZ will no longer be subject to this condition (as units subject to federal emission standards) and will instead be required to comply with Condition 12.5. Records kept in accordance with Condition 23.2 should be kept for 5 years in accordance with Condition 41 even if a unit is no longer subject to this condition.

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

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 maintenance has been deferred.

Condition 24, Dilution

Legal Basis: This condition prohibits the Permittee from using dilution as an emission control strategy as set out in 18 AAC 50.045(a). This state regulation applies to the Permittee because the Permittee is subject to emission standards in 18 AAC 50.

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

Condition 25, Reasonable Precautions to Prevent Fugitive Dust

Legal Basis: This condition requires the Permittee to use reasonable precautions when handling, storing or transporting bulk materials or engaging in an industrial activity in accordance with the applicable requirement in 18 AAC 50.045(d). Bulk material handling requirements apply to the Permittee because the Permittee will engage in bulk material handling, transporting, or storing; or will engage in industrial activity at the stationary source.

Factual Basis: The condition requires the Permittee to comply with 18 AAC 50.045(d), and take reasonable action to prevent particulate matter (PM) from being emitted into the ambient air.

Condition 26, Stack Injection

Legal Basis: This condition ensures 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 the stationary source because the stationary source contains a stack or unit 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 27, Air Pollution Prohibited

Legal Basis: This condition ensures compliance with the applicable requirement in 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. Air Pollution Prohibited requirements apply to the stationary source because the stationary source will have emissions.

Factual Basis: While the other permit conditions and emissions limitation 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.

ADEC adopted this standard condition into 18 AAC 50.346(a) pursuant to AS 46.14.010(e). The Department determined that this condition adequately meet the requirements of 40 C.F.R. 71.6(a)(3). No emission unit or stationary source operational or compliance factors

indicate that unit-specific or stationary-source specific conditions would better meet these requirements. Therefore, the Department concluded that the standard condition meets the requirements of 40 C.F.R. 71.6(a)(3).

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 to submit copies of these records upon request of the Department.

Condition 28, Technology-Based Emission Standard

Legal Basis: The Permittee is required to take reasonable steps to minimize emissions if certain activity causes an exceedance of any technology-based emission standard in this permit. This condition ensures compliance with the applicable requirement in 18 AAC 50.235. Technology Based Emission Standard requirements apply to the stationary source because the stationary source contains equipment subject to a technology-based emission standard, such as BACT, MACT, LAER, NSPS or other “technologically feasible” determinations.

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 46. Excess emission reporting under Condition 45 requires information on the steps taken to minimize emissions. Monitoring of compliance for this condition consists of the report required under Condition 45.

Condition 29, Asbestos NESHAP

Legal Basis: The condition requires the Permittee to comply with asbestos demolition or renovation requirements in 40 C.F.R. 61, Subpart M. This condition ensures compliance with the applicable requirement in 18 AAC 50.040(b)(1) and (2)(F). The asbestos demolition and renovation requirements apply if the Permittee engages in asbestos demolition or renovation.

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 30, Refrigerant Recycling and Disposal

Legal Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.040(d) and applies 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 set forth in 40 C.F.R. 82, Subpart F that will apply if the Permittee uses certain refrigerants.

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.

Condition 31, Open Burning

Legal Basis: The condition requires the Permittee to comply with the regulatory requirements when conducting open burning at the stationary source. This condition ensures compliance with the applicable requirement in 18 AAC 50.065. The open burning state regulation in 18 AAC 50.065 applies to the Permittee if the Permittee conducts open burning at the stationary source.

Factual Basis: No specific monitoring is required for this condition. Condition 31.1 requires the Permittee to keep "sufficient records" to demonstrate compliance with the standards for conducting open burning, but does not specify what these records should contain.

More extensive monitoring and recordkeeping is not warranted because the Permittee does not conduct open burning as a routine part of their business. Also, most of the requirements are prohibitions, which are not easily monitored. Compliance is demonstrated through annual certification required under Condition 47.

Condition 32, Requested Source Tests

Legal Basis: The Permittee is required to conduct source tests as requested by the Department. The Department adopted this condition under 18 AAC 50.345(k) as part of its operating permit program approved by EPA November 30, 2001.

Factual Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.220(a) and applies because this is a standard condition to be included in all operating permits. Monitoring consists of conducting the requested source test.

Conditions 33 - 35, Operating Conditions, Reference Test Methods, Excess Air Requirements

Legal Basis: These conditions ensure compliance with the applicable requirement in 18 AAC 50.220(b) and apply because the Permittee is required to conduct source tests by this permit. The Permittee is required to conduct source tests as set out in Conditions 33 through 35.

Factual Basis: These conditions supplement the specific monitoring requirements stated elsewhere in this permit. Compliance monitoring with Conditions 33 through 35 consist of the test reports required by Condition 40.

Condition 36, Test Exemption

Legal Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.345(a) and applies when the unit exhaust is observed for visible emissions.

Factual Basis: As provided in 18 AAC 50.345(a), amended November 9, 2008, 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 37 - 40, Test Deadline Extension, Test Plans, Notifications and Reports

Legal Basis: These conditions ensure compliance with the applicable requirement in 18 AAC 50.345(l)-(o) and apply because the Permittee is required to conduct source test by this permit.

Factual Basis: Standard conditions 18 AAC 50.345(l) - (o) are incorporated through these conditions. These standard conditions supplement specific monitoring requirements stated elsewhere in this permit. The source test itself monitors compliance with this condition.

Condition 41, Recordkeeping Requirements

Legal Basis: Applies because the Permittee is required by the permit to keep records.

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

Condition 42, Certification

Legal Basis: This condition requires the Permittee to comply with the certification requirement in 18 AAC 50.205 and applies to all Permittees under EPA's approved operating permit program of November 30, 2001.

Factual Basis: This standard condition is required in all operating permits under 18 AAC 50.345(j). 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 stationary source 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 43, Submittals

Legal Basis: This condition requires the Permittee to comply with standardized reporting requirement 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 an original and one copy of reports, compliance certifications, and other submittals required by this permit. Receipt of the submittal at the correct Department office is sufficient monitoring for this condition. This condition supplements the standard reporting and notification requirements of this permit. The Permittee may submit reports electronically at their discretion as stated in Condition 43 provided the report is properly certified under Condition 42. This change more adequately meets the requirements of 18 AAC 50 and agency needs, as the Department can more efficiently distribute the electronic copy to staff in other locations.

Condition 44, Information Requests

Legal Basis: This condition requires the Permittee to submit requested information to the Department. This is a standard condition from 18 AAC 50.345(i) of the state approved operating permit program effective November 30, 2001.

Factual Basis: This condition requires the Permittee to submit information requested by the Department. Monitoring consists of receipt of the requested information.

Condition 45, Excess Emission and Permit Deviation Reports

Legal Basis: This condition requires the Permittee to comply with the applicable requirement in 18 AAC 50.235(a)(2) and 18 AAC 50.240. 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 adopted this condition as Standard Permit Condition III under 18 AAC 50.346(c) pursuant to AS 46.14.010(e). The Department made a correction to the Standard Operating Permit Condition III to allow identical reporting methodology for both Excess Emissions and Permit Deviations reports which use identical forms and should have identical submissions methods. Beyond as noted above, the Department has previously determined that the standard conditions adequately meet the requirements of 40 C.F.R. 71.6(a)(3). No additional emission unit or stationary source operational or compliance factors indicate the unit-specific or stationary-source-specific conditions would better meet the requirements. Therefore, the Department concludes that the standard conditions as modified meets the requirements of 40 C.F.R. 71.6(a)(3).

Section 13, Notification Form

The Department modified the notification form contained in Standard Permit Condition IV in a revised rulemaking dated August 20, 2008 to more adequately meet the requirements of Chapter 50, Air Quality Control. The rulemaking for these changes took effect November 9, 2008. The modification consisted of correcting typos and moving “Failure to Monitor/Report” and “Recordkeeping Failure” to Section 2 - permit deviations.

Condition 46, Operating Reports

Legal Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.346(b)(6) and applies to all permits.

Factual Basis: The condition restates the requirements for reports listed in regulation. The condition supplements the specific reporting requirements elsewhere in the permit. The reports themselves provide monitoring for compliance with this condition.

The Department used the Standard Permit Condition VII as adopted into regulation on August 20, 2008 pursuant to AS 46.14.010(e). The Department has made a correction to the Standard Permit Condition VII by changing the number of copies of documents to be submitted from “an original and two copies” to “an original and one copy”. The Department

also removed the requirements for optional electronic reporting as those requirements are already stated in Condition 43. Beyond as noted above, the Department has previously determined that the standard conditions adequately meet the requirements of 40 C.F.R. 71.6(a)(3). No additional emission unit or stationary source operational or compliance factors indicate the unit-specific or stationary-source-specific conditions would better meet the requirements. Therefore, the Department concludes that the standard conditions as modified meets the requirements of 40 C.F.R. 71.6(a)(3).

Condition 47, Annual Compliance Certification

Legal Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.040(j)(4) and applies to all Permittees.

Factual Basis: This condition specifies the periodic compliance certification requirements, and specifies a due date for the annual compliance certification. Each annual certification provides monitoring records for compliance with this condition.

Condition 47.2 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 original and one copy of an annual compliance certification report. The Permittee may submit one of the required copies electronically at their discretion as stated in Condition 43.

Condition 48, NSPS and NESHAP Reports

Legal Basis: The Permittee is required to provide the federal Administrator and Department a copy of each emission unit report for units subject to NSPS or NESHAP federal regulations under 18 AAC 50.326(j)(4). 40 C.F.R. 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 C.F.R. 60, 40 C.F.R. 61, and 40 C.F.R. 63. The reports themselves provide monitoring for compliance with this condition.

Condition 49, Permit Applications and Submittals

Legal Basis: The Permittee may need to submit permit applications and related correspondence.

Factual Basis: Standard Permit Condition XIV 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.

Conditions 50 - 52, Permit Changes and Revisions Requirements

Legal Basis: The Permittee is obligated to notify the Department of certain off-permit source changes and operational changes under 18 AAC 50.326(j)(4). 40 C.F.R. 71.6(a)(10), (12), and (13) incorporated by reference under 18 AAC 50.040(j) require these provisions within this permit. 40 C.F.R. 70 Appendix A documents that EPA fully approved the Alaska operating permit program effective November 30, 2001.

Factual Basis: These are conditions required in 40 C.F.R. 71.6 for all operating permits to allow changes within a permitted stationary source without requiring a permit revision.

The Permittee did not request trading of emission increases and decreases as described in 71.6(a)(13)(iii).

Condition 53, 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 accord with the operating permit program under 18 AAC 50.326(j)(3). The obligations for a timely and complete operating permit application are set out in 40 C.F.R. 71.5 incorporated by reference in 18 AAC 50.040(j)(3). 40 C.F.R. 70 Appendix A documents that EPA fully approved the Alaska operating permit program effective November 30, 2001.

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

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

Conditions 54 - 57, General Compliance Requirements

Legal Basis: These conditions ensure compliance with the applicable requirement in 18 AAC 50.326(j)(3). The Permittee is required to comply with these standard conditions set out in 18 AAC 50.345 included in all operating permits. 40 C.F.R. 70 Appendix A documents that EPA fully approved the Alaska operating permit program effective November 30, 2001.

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

Conditions 58, Permit Shield

Legal Basis: These conditions ensure compliance with the applicable requirement in 18 AAC 50.326(j).

Factual Basis: The Permittee did not request any shields.