

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

**BP Exploration (Alaska) Inc.  
Prudhoe Seawater Treatment Plant**

**STATEMENT OF BASIS  
of the terms and conditions for  
Permit No. AQ0271TVP02 Rev. 1**

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## **INTRODUCTION**

This document sets forth the statement of basis for the terms and conditions of Operating Permit No. AQ0271TVP02 Revision 1.

### **STATIONARY SOURCE IDENTIFICATION**

Section 1 of Operating Permit No. AQ0271TVP02 Rev. 1 contains information on the stationary source as provided in the Title V permit application.

The stationary source is owned by BP Exploration (Alaska) Inc., ConocoPhillips Alaska, Inc., Chevron USA Inc., and ExxonMobil Corporation., and BP Exploration (Alaska) Inc. is the Permittee for the stationary source's operating permit. The SIC code for this stationary source is 1311 and the NAICS code is 211111.

Prudhoe Seawater Treatment Plant (STP) is an existing oil and gas production support facility which consists of two dual-fired Solar Centaur combustion turbines and corresponding black-start engines, three Lummus natural gas-fired heaters, three Lummus dual fuel fired heaters, one 187 hp Cummins liquid fuel-fired emergency firewater pump and one liquid fuel-fired GE 3600 hp emergency electric generator.

Water flood of an oil producing reservoir is used to maintain or improve oil production rates and thereby increases the amount of recoverable oil from the field. The source of water for water flooding at Prudhoe Bay is the STP. At the Prudhoe STP, sea water is pumped from the Beaufort Sea, strained and filtered, chlorinated, de-aerated to remove oxygen, and then pumped to the Seawater Injection Plant in the Eastern Operating Area (SIPE) of the Prudhoe Bay Unit. The Prudhoe STP has the capacity to treat 2.2 million barrels of sea water per day.

The fuel gas used in all gas-fired equipment at the Prudhoe STP is supplied by the Central Gas Facility. The Solar Centaur turbines use diesel fuel only on start-up and in case of emergencies.

There are a number of emergency systems employed at the Prudhoe STP. Two dual fuel-fired turbines provide electrical power should primary electrical service be lost. The emergency power is typically used to drive process safety and life support systems. A diesel driven emergency fire water pump provides back-up fire water supply in the event electrical power is lost to the primary electrically driven fire water pump and the electric jockey pumps.

### **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 Prudhoe Seawater Treatment Plant that are classified and have specific monitoring, recordkeeping, and reporting requirements are listed in Table A of Operating Permit No. AQ0271TVP02 Rev. 1.

Table A of Operating Permit No. AQ0271TVP02 Rev. 1 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 does not create an enforceable limit.

## EMISSIONS

A summary of the potential to emit (PTE)<sup>1</sup> and assessable PTE is shown in Table F below. Emissions are as provided in the Title V permit renewal application dated February 20, 2008, permit no. AQ0271MSS01 and supporting documentation to that permit, and the Title V permit renewal application supplements dated April 15, 2011.

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

Pollutant	NO <sub>x</sub> <sup>1</sup>	CO	PM-2.5 <sup>4</sup> / PM-10	SO <sub>2</sub>	VOC	CO <sub>2e</sub> <sup>2</sup>	HAPs <sup>3</sup>	Total (excluding CO <sub>2e</sub> and HAP) <sup>1,3</sup>
PTE	396	280	34	70	25	535,348	(13.4)	806
Assessable PTE	396	280	34	70	25	--	--	806

- Notes: 1) The NO<sub>x</sub> and total PTE values will decrease to 181 tpy and 591 tpy, respectively, when any of the Lummus heaters is modified as allowed under permit AQ0271MSS01 and Condition 18 of this permit.
- 2) CO<sub>2e</sub> emissions are defined as the sum of the mass emissions of each individual GHG adjusted for its global warming potential.
- 3) HAP emissions are almost all VOCs, therefore, to avoid double counting HAP emissions are not included in the "Total".
- 4) PM-2.5 is included here to reflect the January 4, 2013 state regulations for Fine Particle National Ambient Air Quality Standards. It is assumed that all PM-10 emissions are PM-2.5. PM-2.5 emissions are not counted twice for assessable emissions.

The assessable PTE listed under Condition 57.1 is the sum of the emissions of each individual air pollutant other than CO<sub>2e</sub> for which the stationary source has the potential to emit quantities greater than 10 TPY. The emissions listed in Table F are estimates to be used for informational purposes only. The listing of the emissions does not create an enforceable limit to the stationary source.

Potential criteria pollutant emissions were estimated in the permit renewal application. Both turbines at the stationary source are dual-fired units with an operating limit of 500 hours (each) without respect to fuel type; therefore, PTE values conservatively assume either liquid fuel or gas fuel firing in order to yield the highest emission rate for each pollutant. PTE for all criteria pollutants except SO<sub>2</sub> are estimated based on either AP-42 Tables 3.1-1 and 3.1-2a (4/00) (Distillate Oil-Fired Turbines), or AP-42 Tables 3.1-1 and 3.1-2a (4/00) (Natural Gas-Fired Turbines). Heater PTE values for NO<sub>x</sub> and CO are set by BACT limits stated in the permit, and when triggered, the heater NO<sub>x</sub> PTE will be based on the owner requested limit that will apply to all heaters combined as stated in Condition 19 of the permit. Otherwise, heater PTE values for all criteria pollutants except SO<sub>2</sub> are estimated based on AP-42 Tables 1.4-1 and 1.4-2 (7/98)<sup>2</sup>. Engine PTE values for all criteria pollutants except SO<sub>2</sub> are based on an operating time limit of 200 hours per consecutive 12-month period for the emergency generator and fire water pump engines, and 100 hours per consecutive 12-month period for the black start engines and estimated based on AP-42 Table 3.4-1 (10/96) and AP-42 Table 3.3-1 (10/96). SO<sub>2</sub> PTE values

<sup>1</sup> *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).

<sup>2</sup> EU IDs 6 through 8 are dual-fired heaters without operating limits on either fuel type. Since the liquid fuel-firing capability is designed for emergency situations, and these units are rarely fired on liquid fuel, emission calculations were done assuming that these units fire fuel gas only.

for all emission units are based on sulfur mass balance with a liquid fuel sulfur value of 0.11% by weight or a fuel gas H<sub>2</sub>S value of 85 ppmv.

Greenhouse Gas (GHG) emissions estimates were submitted by the Permittee with the application to amend permit no. AQ0271TVP02, Revision 1. PTE for CO<sub>2</sub>e was estimated based on emission factors found in 40 C.F.R. 98, Subpart C, Tables C-1 and C-2. However, as a result of the June 23, 2014 Supreme Court decision indicating that GHG emissions are no longer to be used to determine Title V permit applicability, GHG emissions and information regarding Title V permit applicability based on GHG emissions are not included in this Statement of Basis beyond the tally provided above in Table F.

HAP emissions were estimated in the permit renewal application. AP-42 emission factors were used to estimate HAP emissions for the turbines and internal combustion engines, and a combination of AP-42 and field data from GRI-HAPCalc Version 3.0 were used to estimate HAP emissions for the heaters. Total aggregate HAP emissions are estimated to be 13.4 TPY with a maximum single HAP (n-Hexane) emission rate of 8.0 TPY. Based on these findings, STP is not major for HAPs since the calculated HAP emissions are less than the triggers of 10/25 TPY.

### **BASIS FOR REQUIRING AN OPERATING PERMIT**

In accordance with AS 46.14.130(b), an owner or operator of a Title V source<sup>3</sup> 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 stationary 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; and
- 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

- 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 most recent permit-to-operate issued for this stationary source is Permit-to-Operate No. 9473-AA014 issued on November 30, 1994. A “unilateral” amendment was made to this permit and to all State Operating Permits by the Department on July 29, 1996. This permit-to-operate included all construction authorizations issued through November 30, 1994, and was issued before January 18, 1997 (the effective date of the divided Alaska Title I/Title V permitting

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<sup>3</sup> *Title V source* means a stationary source classified as needing a permit under AS 46.14.130(b) [ref. 18 AAC 50.990(111)].

program). All stationary source-specific requirements established in this permit, as revised/replaced in Construction/Operating Permit No. AQ0171TVP01, are included in the operating permit as described in Table G.

### **Title I (Construction and Minor) Permits**

EPA Prevention of Significant Deterioration (PSD) permit number PSD-X81-01, as amended through August 29, 1997 contains specific BACT requirements for the stationary source.

On December 5, 1997, ARCO Alaska, Inc. (ARCO was the operator of the source at that time) submitted a construction permit application to revise or rescind conditions in Permit-to-Operate No 9473-AA014. The application was submitted with the Title V operating permit application. The Permittee proposed that terms and conditions of Permit-to-Operate No. 9473-AA014 be updated to match the BACT limits in EPA PSD permit No. PSD-X80-09, amended August 29, 1997 by the EPA, requested operating time limits for liquid fuel fired units, requested corrections such as to the emission unit ratings, etc. The requested revisions were done under Operating/Construction Permit No. AQ0271TVP01 issued July 22, 2003. The revisions, as documented in the Statement of Basis of permit No. AQ0271TVP01, are carried forward to this renewal Title V Operating Permit No. AQ0271TVP02. A comparison of Permit No. AQ0271TVP02 to Permit No. AQ0271TVP01 is provided in Table H.

The Department issued Minor Permit No. AQ0271MSS01 to this stationary source on February 19, 2010. An administrative amendment to AQ0271MSS01 was issued on March 3, 2010. The stationary source-specific requirements in this Title I permit are included in the new operating permit as described in Table I.

### **Title V Operating Permit Application, Revisions and Renewal History**

The operator submitted an application for the initial Prudhoe Seawater Treatment Plant Title V Operating Permit on December 5, 1997. Three certified amendments to the application were submitted to the Department, one each on January 20 and April 28, 1998, and February 20, 2003.

The Department issued Operating Permit No. AQ0271TVP01 on July 22, 2003.

BP Exploration (Alaska) Inc. (BPXA) submitted a permit renewal application on February 20, 2008 and submitted an amended application via letter dated April 15, 2011.

Revision 1: On December 7, 2012, BPXA submitted an application for Title V administrative amendments and minor modification to correct typographical errors and revise MR&R requirements for EU ID 9 to those outlined in Condition 48. In a letter dated August 2, 2012 EU ID 9 was re-classified as a non-emergency engine to reflect BPXA's decision to classify all small stationary engines rated at less than or equal to 300 hp as non-emergency engines for purposes of determining the requirements that apply to small engines under 40 C.F.R. 63 Subpart ZZZZ.

The Department made the requested changes as a minor modification and issued Revision 1 to the Operating Permit on July 24, 2013.

Revision 2: On December 14, 2015, BPXA submitted an application for Title V modifications to correct general errors, make general updates, and revise the permit to reflect that the fuel supply for heater EU ID 6 was configured at installation such that the unit, when commissioned, would have the capability of firing fuel gas as well as liquid fuel (i.e., dual fuel fired). The Department made changes to permit conditions as noted in Table J and issued Revision 2 to Operating Permit AQ0271TVP02 on <insert date>.

## **COMPLIANCE HISTORY**

The stationary source has operated at its current location since 1983. A 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. The most recent full compliance evaluation (FCE) report for the Prudhoe Seawater Treatment Plant was prepared by the Department on December 19, 2011. BPXA maintains Lummus heater compliance with the Federal BACT limit by strict control of excess air through use of an oxygen trim controller, which regulates the amount of combustion air available to the two burners within a prescribed range necessary for compliance as established in the November 1997 emission source tests. Tests conducting in 1996 demonstrate that these heaters can emit in excess of the 0.08 lb/MMBtu NO<sub>x</sub> BACT limit without strict control of excess air.

## **APPLICABLE REQUIREMENTS CARRIED FORWARD FROM PRE-CONSTRUCTION PERMITS**

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

Alaska’s SIP includes 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 January 18, 1997 or later; and
- Minor permits issued effective October 1, 2004 or later.

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 are 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.

Title V Operating/Construction Permit No. AQ0271TVP01 included all construction permit authorizations issued through July 22, 2003, and was issued after January 18, 1997 (the effective date of the divided Title I/Title V permitting program). Permit No. AQ0271TVP01 revised and rescinded specific terms and conditions of Permit-to-Operate No. 9473-AA014 and carried forward applicable stationary-source specific terms and conditions of the permit-to-operate. Details pertaining to revisions made by Permit No. AQ0271TVP01 to Permit No. 9473-AA014 are included on pages 5 through 10 (including Tables B through G) of the Statement of Basis to Permit No. AQ0271TVP01.

Other pre-construction permits that apply to this stationary source are EPA PSD permit No. PSD-X81-01, amended August 29, 1997, and Minor Permit No. AQ0271MSS01.

Table G, Table H and Table I below list the emission unit and source-specific requirements carried forward from Permit to Operate No. 9473-AA014, Operating/Construction Permit No. AQ0271TVP01, and Minor Permit No. AQ0271MSS01, Rev. 1 into Operating Permit No. AQ0271TVP02. These tables document how/if the condition carried forward was revised compared to the previous permit.

**Table G - Comparison of Previous Permit-to-Operate No. 9473-AA014 Conditions to Operating Permit No. AQ0271TVP02 Conditions<sup>4</sup>**

Permit No. 9473-AA014 Condition No.	Description of Requirement	Permit No. AQ0271TVP02 Condition No.	How Condition was Revised
Item 3, Exhibit D	Hours of operation monitoring -- EU IDs 1 through 10	14	Underlying requirement is unchanged.
Item 3, Exhibit D	Fuel consumption monitoring – EU IDs 1 through 10	15	Underlying requirement is unchanged.

**Table H - Comparison of Previous Operating/Construction Permit No. AQ0271TVP01 Conditions to Operating Permit No. AQ0271TVP02 Conditions<sup>5</sup>**

Permit No. AQ0271TVP01 Condition No.	Description of Requirement	Permit No. AQ0271TVP02 Condition No.	How Condition was Revised
3c & 6 (Table 2)	Heater BACT limits	13 (Table B)	No change to the limits. Added requirement for NOx and CO source testing.
9	Flue gas monitoring for EU IDs 3 through 8	16	No change
11	NSPS Subpart A Excess Emissions and Monitoring Systems Performance Report	31, 32	Revised to make reporting consistent with the custom fuel monitoring schedule dated October 18, 1993 and specific to NSPS Subpart GG monitoring requirements.
15	NSPS Subpart Ka avoidance for EU ID 11	NA	EU ID 11 (tank tag no. T-11-19601) has been abandoned in place and blinded off, so this condition was not carried forward.

<sup>4</sup> This table does not include all standard and general conditions.

<sup>5</sup> This table does not include all standard and general conditions.

Permit No. AQ0271TVP01 Condition No.	Description of Requirement	Permit No. AQ0271TVP02 Condition No.	How Condition was Revised
16	NSPS Subpart GG Fuel Sulfur Monitoring and Reporting	40	Revised to include the EPA-approved NSPS Subpart GG Fuel Sulfur Monitoring Requirements (as of July 8, 2004 revision) with revisions as allowed under EPA-approved October 2, 1997 alternate H <sub>2</sub> S sampling method and the July 13, 1993 custom fuel monitoring schedule (with additional clarifications given in correspondence dated 8/20/93, 10/18/93, and 8/19/96).  In addition, the permit has been revised to include the provision for an annual reporting frequency as stated in the October 18, 1993 EPA letter.
25 (Table 3)	Owner-requested operating time limits (EU IDs 1, 2, 9, 10)	17	No change
NA	NSPS Subpart Db and associated 40 C.F.R. 60.13 requirements	37, 38	Added the applicable requirements of 40 C.F.R. 60 Subpart Db and associated 40 C.F.R. 60 Subpart A requirements, which will apply to EU IDs 3 through 8 if/when modified as allowed by permit no. AQ0271MSS01.
NA	NESHAP Subparts A and ZZZZ	41 through 51	Added the applicable requirements of 40 C.F.R. 63 Subpart ZZZZ and associated 40 C.F.R. 63 Subpart A requirements, which apply to EU IDs 9, 10, 12, and 13.
NA	NESHAP Subpart JJJJJ	52	Added a condition to track the diesel fuel use of dual fuel fired heater EU IDs 7 and 8 to confirm that the exemption for dual fuel fired heaters found in 40 C.F.R. 63 Subpart JJJJJ applies continuously to these units.



**Table I - Comparison of Construction Permit No. AQ0271MSS01, Rev. 1 Conditions to Operating Permit No. AQ0271TVP02 Conditions<sup>6</sup>**

Permit No. AQ0271MSS01 Condition No.	Description of Requirement	Permit No. AQ0271TVP02 Condition No.	How Condition was Revised
NA	Notify the Department when any of EU IDs 3 through 8 is modified in conjunction with the heater revamp project.	18	New condition
Conditions 3 through 13	Owner requested limit to avoid PSD Permitting. Includes the limit and corresponding, monitoring, recordkeeping and reporting requirements.	19 through 27	Conditions were carried forward with only minor wording changes.

**Table J - Comparison of Operating Permit No. AQ0271TVP02 Rev 1 Conditions to Operating Permit No. AQ0271TVP02 Rev 2 Conditions<sup>7</sup>**

Permit No. AQ0271TVP02 Rev 1 Condition No.	Description of Requirement	Permit No. AQ0271TVP02 Rev 2 Condition No.	How Condition was Revised
Table A	Emission Unit Inventory	Table A	Moved EU ID 6 to Dual Fuel-Fired section. Revised the date in Note 2 and added Note 4.
1.1	MR&R for visible emission standard for dual fuel-fired units	1.1	Added EU ID 6.
1.2	MR&R for visible emission standard for gas-fired units	1.2	Removed EU ID 6.
3	Recordkeeping for visible emission standard	3	Added EU ID 6.
4	Reporting for visible emission standard	4	Added EU ID 6.
4.1.b(iii)	Reporting for visible emission standard	4.1.b(iii)	Added EU ID 6.
5.1	MR&R for particulate matter emission standard for dual fuel-fired units	5.1	Added EU ID 6.
5.2	MR&R for particulate matter emission standard for gas-fired units	5.2	Removed EU ID 6.
8	Monitoring for particulate matter emissions standard	8	Added EU ID 6.

<sup>6</sup> This table does not include all standard and general conditions.

<sup>7</sup> This table does not include all standard and general conditions.

<b>Permit No. AQ0271TVP02 Rev 1 Condition No.</b>	<b>Description of Requirement</b>	<b>Permit No. AQ0271TVP02 Rev 2 Condition No.</b>	<b>How Condition was Revised</b>
11.1 & 11.2	MR&R for particulate matter emission standard for dual fuel-fired units	11.1 & 11.2	Added EU ID 6.
13.4	BACT reporting	13.4	Clarified that reporting applies to all limits not just the ton per year limits.
14.2	MR&R for hours of operation	14.2	Added EU ID 6.
14.3	MR&R for hours of operation	14.3	Removed “for the period covered by the report” and changed “operating” to “reporting”.
27	CEM requirements	27	Added reference to Conditions 38.4 and 38.5.
29.5	NSPS general requirements	29.5	Clarified that the condition is for replacement of components.
32.1	NSPS Subpart A Summary Report Form	32.1	Changed “Department or EPA” to “Administrator” to match 40 C.F.R. 60.7.
33	NSPS Subpart A Performance (Source) Tests	33	Changed “unit” to “affected facility”.
37.2 & 37.3	NSPS CEM requirements	37.2 & 37.3	Changed “Secification 7” to “Specification 2”.
Footnote 8	Performance Specification 2	Footnote 8	Changed ““Secification 7” to “Specification 2”. Changed “± 5” to “± 2.5”. Removed “or deviation for 6 out of 7 days (i.e., <5% is allowed once per week.)”
39.1, 39.2, 39.2.b(ii)(A), 39.4.a, Footnote 12	40 C.F.R. 60 Subpart Db requirements	39.1, 39.2, 39.2.b(ii)(A), 39.4.a, Footnote 12	Added EU ID 6.
41, 42, & 51	NESHAP requirements	41, 42, & 51	Removed the date (May 3, 2013) since it has passed.
47.2 & 48.2	40 C.F.R. 63 Subpart ZZZZ requirements	47.2 & 48.2	Added “and replace as necessary”.
51.3	40 C.F.R. 63 Subpart ZZZZ requirements	51.3	Removed the requirement to keep the most recent 2 years of data on site since it is not required under Table 8 to Subpart ZZZZ.
52, 52.1, & 52.3	40 C.F.R. 63 Subpart JJJJJ requirements	52, 52.1, & 52.3	Added EU ID 6.
56	Administration fees	56	Changed “18 AAC 50.400-405” to “18 AAC 50.400-403” since 18 AAC 50.405 has been repealed.

Permit No. AQ0271TVP02 Rev 1 Condition No.	Description of Requirement	Permit No. AQ0271TVP02 Rev 2 Condition No.	How Condition was Revised
59	Good air pollution control practice	59	Changed EU IDs “3 through 10, 12 and 13” to “3 through 8” since Condition 59.4 was removed.
59.4	Good air pollution control practice	NA	Removed the condition since the emission units are now subject to the requirements of 40 C.F.R. 63 Subpart ZZZZ.
67	NESHAPs applicability determinations	67	Require notification in accordance with 40 C.F.R. 63.9(b)(1).
68.1	Open burning requirements	68.1	Changed “that the Permittee complies with the limitations in this condition and” to “compliance with” to simplify the condition without changing the requirement of the condition.
81	Submittals	81	Removed the requirement for an original and one copy in accordance with current Department policy. Allow electronic reporting.
85	Annual compliance certification	85	Removed the requirement for an original and one copy in accordance with current Department policy.
86.1	NSPS and NESHAP reports	86.1	Removed the requirement for copies of NSPS and NESHAP reports if EPA’s CDX-CEDRI is used.
Table E	Permit shields for 40 C.F.R. 63 Subpart JJJJJ	Table E	Removed EU ID 6 from the shield for gas-fired boilers, and added EU ID 6 to the shield for dual fuel-fired boilers.
Table E	Permit shields for 40 C.F.R. 63 Subpart ZZZZ	Table E	Removed the shield for 40 C.F.R. 63.6605(a) and 63.6640(a).

### 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 requirements that are not included in the permit for specific reasons.

- **40 C.F.R. 64 Compliance Assurance Monitoring (CAM):** The requirements of 40 C.F.R. 64 apply to a pollutant-specific emission unit at a major stationary source if that emission unit satisfies all of the criteria in §64.2(a). Activities at this stationary source do not use a control device to achieve compliance with any emission limitation or standard, and are therefore not subject to CAM as STP does not satisfy the criteria of 40 CFR 64.2(a)(2).
- **40 C.F.R. 68 RMP:** The stationary source is not subject to the general duty clause under Clean Air Act Section 112(r)(1) and 40 CFR 68.10 because STP does not have more than a threshold quantity of regulated substances in a process as determined under 40 C.F.R. 68.10(a) and 68.115(b)(2)(iii). STP is not a natural gas processing plant or a petroleum refining process unit, and is not in the path of the crude oil refining process.

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## STATEMENT OF BASIS FOR THE PERMIT CONDITIONS

The State and Federal regulations for each condition are cited in Operating Permit No. AQ0271TVP02. This 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 through 4 and 11: Visible Emissions Standard and MR&R

**Legal Basis:** These conditions ensure compliance with the applicable requirement in 18 AAC 50.055(a) and to the EPA BACT opacity limit established for EU IDs 3 through 8 in permit No. PSD-X81-01.

- 18 AAC 50.055(a) applies to the operation of fuel-burning equipment and industrial processes. EU IDs 1 through 10 are fuel-burning equipment.
- Note that EU IDs 12 and 13 are fuel-burning equipment as well, but are insignificant units except for being subject to NESHAP Subpart ZZZZ. Insignificant units are covered by Condition 28.

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) and in excess of the BACT limit carried forward from EPA permit no. PSD-X81-01.

Monitoring, recordkeeping, and reporting (MR&R) requirements are listed in Conditions 2 through 4 and 11 of the permit.

These MR&R conditions have been adopted into regulation as Standard Permit Condition IX (SPC IX). These conditions have been modified as follows: The Department added a footnote in Condition 2.1 which states “Emergency operations are exempt from the visible emissions observations deadlines associated with emission unit “operation” under this condition”. In addition, the Permittee has opted not to use the Smoke/No Smoke plan, and requested that this option not be included in the permit, so the Department did not include this provision in the condition. The Department also modified Condition 4 to cross reference the BACT visible emission limit and to require permit deviation reporting for Method 9 readings greater than the BACT limit established for EU IDs 3 through 8.

Beyond as noted above, the Department has determined that the standard permit 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.

The Permittee must establish by actual visual observations, which can 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's emission standards for visible emissions and particulate matter.

These conditions detail a stepwise process for monitoring compliance with the State's visible emissions and particulate matter standards for liquid and gas fired emission units. 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 emission units either through maintenance programs and/or more rigorous tests that will quantify whether a specific emission standard has been exceeded.

#### **Gas-Fired Fuel Burning Equipment:**

Monitoring – The monitoring of gas-fired emission 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. Therefore, certification that an emission unit burns only natural gas ensures that the State visible emissions standard is met.

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 Burning Equipment:**

Monitoring – For EU IDs 9 and 10 the visible emissions shall be observed by the Method-9 plan as detailed in Conditions **2** through **4** if they operate more than 400 hours in any consecutive 12-month period. Corrective actions such as maintenance procedures and either more frequent or less frequent testing may be required depending on the results of the observations. If monitoring is not triggered, the Permittee is required to annually certify compliance with the visible emissions standard based on reasonable inquiry.

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 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 operating report.

#### **Dual Fuel-Fired Units:**

For EU IDs 1, 2, 6, 7, and 8, as long as they operate only on gas, monitoring consists of an annual certification that only gaseous fuels were used in the equipment. When any of these emission units operates on a backup liquid fuel for more than 400 hours in a calendar year, monitoring as detailed in Condition 11 is required for that emission unit in accordance with Department Policy and Procedure No. AWQ 04.02.103, Topic # 2, 6/21/12. 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 visible emissions standard. The 400-hour trigger for additional monitoring applies to each individual unit and not as a combined total for all units.

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**Conditions 5 through 11, Particulate Matter (PM) Standard and MR&R**

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

- 18 AAC 50.055(b)(1) applies to the operation of fuel burning equipment. EU IDs 1 through 10 are fuel-burning equipment.
- Note that EU IDs 12 and 13 are fuel-burning equipment as well, but are insignificant units except for being subject to NESHAP Subpart ZZZZ. Insignificant units are covered by Condition 28.

The PM standard also applies because it is 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 nor industrial processes to violate this standard.

MR&R requirements are listed in Conditions 5 through 11 of the permit.

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.

**Gas-Fired Fuel Burning Equipment:**

For gas fired emission units, MR&R conditions are Standard Condition VIII 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.

Monitoring – The monitoring of gas-fired emission 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 PM emissions. However, the Department can request a source test for PM 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 PM source testing if threshold values for opacity are exceeded.

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

Reporting - The Permittee is required to report: 1) incidents when emissions in excess of the opacity threshold values have been observed, and 2) results of PM source tests. The Permittee is required to include copies of the results of all visible emission observations with the operating report. ADEC made one change to the standard permit condition and corrected a typographical omission from the standard permit condition reporting term for opacity in excess of the PM testing threshold.

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**Dual Fuel-Fired Units:**

For EU IDs 1, 2, 6, 7, and 8, as long as they operate only on gas, monitoring consists of certification statement in the operating report to indicate whether only gaseous fuels were used in the equipment during the period covered by the report. When any of these emission units operates on a backup liquid fuel for more than 400 hours in a calendar year, monitoring as detailed in Condition 11 is required for that emission unit in accordance with Department Policy and Procedure No. AWQ 04.02.103, Topic # 2, 6/21/12. When any of these emission units operates on a backup liquid fuel for 400 hours or less in a calendar year, monitoring for that source 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.

**Condition 12, Sulfur Compound Emissions and MR&R**

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

- EU IDs 1 through 10 are fuel-burning equipment and industrial processes.
- Note that EU IDs 12 and 13 are fuel-burning equipment as well, but are insignificant units except for being subject to NESHAP Subpart ZZZZ. Insignificant units are covered by Condition 28.

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

**Factual Basis:** The condition requires the Permittee to comply with the sulfur compound emission standard applicable to fuel-burning equipment. The Permittee may not cause or allow the affected equipment to violate this standard.

Sulfur dioxide comes from the sulfur in the fuel (e.g. coal, natural gas, fuel oils). Fuel sulfur testing will verify compliance with the SO<sub>2</sub> emission standard.

**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).

The Department has determined that the standard permit 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 permit conditions meet the requirements of 40 C.F.R. 71.6(a)(3).

**Gaseous Fuels:**

Fuel gas sulfur is measured as hydrogen sulfide (H<sub>2</sub>S) concentration in ppm by volume (ppmv). Fuel gas containing no more than 4000 ppmv H<sub>2</sub>S will always comply with this emission standard. This is true for all fuel gases, even with no excess air. Fuel gas with an H<sub>2</sub>S concentration of even 10 percent of 4000 ppmv is currently not available on the North Slope of Alaska and is not projected to be available during the life of this permit.

Condition 12.1.a (via Condition 40.1.a) requires the Permittee to conduct a monthly analysis of the fuel gas H<sub>2</sub>S concentration. 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 sulfur content analysis with the stationary source's operating report.

### **Conditions 13 through 16, BACT and Conditions 17 through 27, Owner Requested Limits**

**Legal Basis:** The Permittee is required to comply with all effective stationary source-specific requirements that were carried forward from previous EPA PSD permits, SIP approved permits to operate issued before January 18, 1997, SIP approved construction permit(s), SIP approved minor permits, operating/construction permits issued between January 18, 1997 and September 30, 2004, or owner requested limits established under 18 AAC 50.225. These requirements include Best Available Control Technology limits, limits to ensure compliance with the attainment or maintenance of ambient air quality standards or maximum allowable ambient concentrations, and owner requested limits. State pre-construction requirements apply because they were originally developed through case-by-case action under a Federally approved SIP or approved Operating Permit program. EPA approved the latest SIP effective September 13, 2007.

**Factual Basis:** The BACT limits and associated compliance tracking (Conditions 13 through 16) apply because they were developed during PSD reviews of this stationary source by EPA. These conditions require the Permittee to comply with the emission limits derived from BACT analysis and to perform appropriate monitoring, recordkeeping, and reporting to demonstrate compliance with the limits. The Permittee may not cause or allow their equipment to violate these limits.

The Department requires emission testing to ascertain NO<sub>x</sub> and CO emissions due to a limited compliance margin coupled with the length of time since the last reported NO<sub>x</sub> and CO emissions tests.

Condition 17 includes operating time limits for EU IDs 1, 2, 9 and 10. These limits were requested in conjunction with the construction permit application submitted December 5, 1997 with the Title V permit application. The purpose of this request was to establish enforceable limits thereby also establishing potential emissions at less than full time operation. These limits were requested during a period when the Department had not adopted the Federal PSD program wherein a 500 hour operating time is assumed for emergency generators per the September 6, 1995 "John Seitz" memorandum. The 500-hour operating time limit for EU IDs 1 and 2 applies to liquid fuel and fuel gas operation combined.

Conditions 19 through 27 apply because they are owner requested limits and are in place to ensure PSD avoidance. These limits were requested with the permit application for the heater revamp project that resulted in issuance of permit no. AQ0271MSS01.

Under Condition 18 the Permittee must notify the Department within 15 days of start-up of the first modified Lummus heater emission unit because initial start-up triggers Conditions 19 through 27, which are carried forward from permit no. AQ0271MSS01.



### **Condition 28, Insignificant Emission Units**

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

**Factual Basis:** The condition re-iterates the emission standards and requires 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 28.4.a requires certification that the units did not exceed state emission standards during the previous year and did not emit any prohibited air pollution.

### **Conditions 29 – 37, NSPS Subpart A Requirements**

**Legal Basis:** The Permittee must comply with those New Source Performance Standard (NSPS) provisions incorporated by reference for specific industrial activities, as listed in 18 AAC 50.040<sup>8</sup>.

Most affected facilities (with the exception of some storage tanks) subject to an NSPS are subject to Subpart A. At this stationary source, EU IDs 1 and 2 are subject to NSPS Subpart GG and therefore subject to Subpart A.

Conditions 29.1 through 29.3 - The Permittee has already complied with the notification requirements in 40 C.F.R. 60.7(a)(1) and (3) for EU IDs 1 and 2. However, the Permittee is still subject to these requirements in the event of a new NSPS affected facility<sup>9</sup> or in the event of a modification or reconstruction of an existing facility<sup>10</sup> into an affected facility.

Condition 29.4 - The requirement to notify the EPA and the Department of the date of a continuous monitoring system performance demonstration, no less than 30 days before demonstration commences (40 C.F.R. 60.7(a)(5)) is applicable to EU IDs 3 through 8 if a CMS is installed as an NSPS requirement.

Condition 29.5- The requirement to notify the EPA and the Department of any proposed replacement of components of an existing facility (40 C.F.R. 60.15) applies in the event that the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility.

Condition 30 - Start-up, shutdown, or malfunction record maintenance requirements in 40 C.F.R. 60.7(b) are applicable to all NSPS affected facilities subject to Subpart A.

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<sup>8</sup> EPA has not delegated to the Department the authority to administer the NSPS program as of the issue date of this permit

<sup>9</sup> *Affected facility* means, with reference to a stationary source, any apparatus to which a standard applies, as defined in 40 C.F.R. 60.2.

<sup>10</sup> *Existing facility* means, with reference to a stationary source, any apparatus of the type for which a New Source Performance Standard (NSPS) is promulgated, 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 C.F.R. 60.2.

Conditions 31 and 32 – The reporting requirements in 40 C.F.R. 60.7(c) & (d) are applicable to EU IDs 1 and 2. Condition 31 requires the Permittee to submit excess emissions and monitoring systems performance (EEMSP) reports as required under 40 C.F.R. 60.7(c) and (d) and §60.334(j) for turbines subject to Subpart GG. The Department has included in Attachment A of the Statement of Basis a copy of the Federal EEMSP summary report form which the Permittee may use to meet the reporting requirements. The Permittee obtained EPA approval for annual instead of semi-annual fuel gas sulfur reporting in a letter from Jim McCormick (EPA Region X) to ARCO Alaska, Inc. dated October 18, 1993. Therefore, for these units, the Permittee is required to submit annual, not semi-annual EEMSP reports that address fuel gas H<sub>2</sub>S monitoring for Subpart GG-affected turbines.

Recordkeeping requirements in 40 C.F.R. 60.7(f) are applicable to all NSPS affected facilities. (Satisfied by Condition 79)

Condition 33 - The Permittee has already complied with the initial performance test requirements in 40 C.F.R. 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 34 - Good air pollution control practices in 40 C.F.R. 60.11 are applicable to all NSPS affected facilities subject to Subpart A (EU IDs 1 and 2).

Condition 35 - states that any credible evidence may be used to demonstrate compliance or establishing violations of relevant NSPS standards for EU IDs 1 and 2.

Condition 36 - Concealment of emissions prohibitions in 40 C.F. R. 60.12 are applicable to EU IDs 1 and 2.

Condition 37 – Monitoring requirements for continuous monitoring systems found in 40 C.F.R. 60.13 are applicable to EU IDs 3 through 8 if/when they are modified or reconstructed thereby becoming affected by NSPS Subpart Db.

**Factual Basis:** General provisions of 40 C.F.R. 60, Subpart A apply to owners or operators who are subject to a relevant subpart under Part 60, except when otherwise specified in an applicable subpart or relevant standard. The intent of Subpart A is to eliminate the repetition of requirements applicable to all owners or operators affected by NSPS.

### **Conditions 38 - 39, NSPS Subpart Db Requirements**

**Legal Basis:** Upon modification or reconstruction, EU IDs 3 through 8 (the Lummus heaters) will become subject to NSPS Subpart Db. These conditions prohibit the Permittee from exceeding the emission standards set out in NSPS Subpart Db once the rule applies to a heater.

**Factual Basis:** NSPS Subpart Db applies to a gas-fired steam generating unit rated at greater than 100 MMBtu/hr that has been modified after June 19, 1984 and is not subject to a federally enforceable requirement to limit operation of the unit to a combined annual capacity factor of 10 percent or less and a fuel nitrogen content of 0.30 weight percent or less.

These conditions incorporate NSPS Subpart Db, which will apply to each of the six Lummus heaters at the GPB Seawater Treatment Plant as a result of the heater re-vamp project upon completion of the modification or reconstruction. The project will result in a physical change to the STP heaters, which are currently defined as “existing facilities” under 40 CFR 60.2. The physical change will result in an increase in actual emission rates from each of the Lummus heaters for various pollutants, including NO<sub>x</sub> and PM, which have applicable standards under NSPS Subpart Db. With the modification (per 40 CFR 60.14), these heaters will become “affected facilities” as defined under 40 CFR 60.2 and will be subject to the specific applicable requirements of NSPS Subpart Db. The heater re-vamp project is not considered routine maintenance, repair, or replacement of the Lummus heaters.

#### **Condition 40, NSPS Subpart GG Requirements**

**Legal Basis:** This condition prohibits the Permittee from exceeding emission standards set out in Subpart GG. NSPS 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. EU IDs 1 and 2 are subject to NSPS Subpart GG.

**Factual Basis:** This condition incorporates NSPS Subpart GG sulfur compound limits. The Permittee may not allow equipment to violate these standards.

*SO<sub>2</sub> Standard:* The Permittee is required to comply with one of the following sulfur requirements for EU IDs 1 and 2:

- (1) do not cause or allow SO<sub>2</sub> emission in excess of 0.015 percent by volume, at 15 percent O<sub>2</sub> and on a dry basis (150 ppmv), or
- (2) do not cause or allow the sulfur content for the fuel burned in EU IDs 1 and 2 to exceed 0.8 percent by weight.

The Permittee has elected to comply with the SO<sub>2</sub> standard by not exceeding the 0.8 percent by weight sulfur content in the fuel burned by the affected emission units.

*Exemptions:* Gas turbines exempted from NSPS Subpart GG NO<sub>x</sub> emission standards are as provided in 40 C.F.R. 60.332(e) – (l).

#### **Conditions 40.1 through 40.3, SO<sub>2</sub> Monitoring, Recordkeeping, and Reporting**

**Legal Basis:** These conditions require the Permittee to comply with NSPS Subpart GG SO<sub>2</sub> fuel sulfur content monitoring, recordkeeping, and reporting.

**Factual Basis:** Monitoring, recordkeeping, and reporting requirements for these conditions are described in NSPS Subpart GG and have been referenced here. No additional monitoring outside of the Subpart GG requirements is necessary to ensure compliance with the NSPS SO<sub>2</sub> standard.

*Monitoring:* Condition 40.1 incorporates NSPS Subpart GG fuel sulfur monitoring requirements and the fuel gas monitoring requirements of the EPA approved alternative monitoring plan and schedule granted to BPXA in accordance with 40 C.F.R. 60.334(i)(3). EPA approved the alternative fuel gas monitoring plan and schedule in correspondence dated July 13, 1993, August, 20, 1993, October 18, 1993, August 19, 1996, and October 2,

1997. The approved alternative plans and schedules apply to EU IDs 1 and 2 since they commenced construction, reconstruction, or modification after October 3, 1977, but before July 8, 2004, per 40 C.F.R. 60.334(h)(4).

**Recordkeeping:** The Permittee is required to maintain records of all sulfur monitoring data required by NSPS Subpart GG for five years as set out in 18 AAC 50.350(h)(5). This requirement is stated in Condition 79.

**Reporting:** NSPS Subpart GG fuel sulfur reporting requirements are incorporated in the permit in Condition 40.3.

For the purpose of the EEMSP reports and summary report required under 40 C.F.R. 60.7(c), report daily periods during which the sulfur content of the fuel being fired in the turbine exceeds 0.8 percent as excess emissions. As stated in Conditions 31, 32, and 83, reports are to be submitted to the Department and EPA, and summarized in the operating report required under Condition 84. However, per Condition 40.1.a(i), and pursuant to 40 C.F.R. 60.334(h)(3) and §60.334(i), the Permittee may elect not to monitor or report the total sulfur content of a gaseous fuel combusted by affected emission units if the fuel is demonstrated to meet the definition of natural gas under 40 C.F.R. 60.331(u), regardless of whether an existing custom schedule approved by the Administrator requires such monitoring and reporting.

NSPS Subpart GG fuel sulfur reporting requirements as established under the approved custom fuel monitoring schedule for fuel gas sulfur reporting are incorporated in the permit. According to the Alternate Monitoring Schedule (approved on July 13, 1993 and subsequently clarified in EPA letter dated October 18, 1993), the Permittee is required to submit results of fuel gas H<sub>2</sub>S monitoring to EPA at least annually.

Liquid fuel sulfur monitoring must be reported at the frequency required under NSPS Subpart GG 40 C.F.R. 60.334(j)(5), or at a different frequency if allowed under an approved Custom Fuel Monitoring Schedule.

#### **Condition 41, NESHAP Subpart A Requirements**

**Legal Basis:** The Department has incorporated by reference the NESHAP (40 C.F.R. 63) requirements for specific industrial activities as listed in 18 AAC 50.040(c). Most sources subject to a NESHAPs requirement are subject to 40 CFR 63 Subpart A. This stationary source has stationary reciprocating internal combustion engines (RICE) subject to 40 C.F.R. 63 NESHAPs Subpart ZZZZ. RICE units are, therefore, subject to the general provisions of Subpart A as specified in the provisions for applicability of Subpart A found in Table 8 of Subpart ZZZZ.

**Factual Basis:** Subpart A contains the general requirements applicable to all affected facilities (sources) subject to NESHAPs. In general, the intent of NESHAPs is to regulate specific categories of stationary sources that emit or have the potential to emit one or more hazardous air pollutants. Since the only currently applicable category subpart is 40 C.F.R. 63, Subpart ZZZZ, Condition 41 requires compliance with the applicable provisions of NESHAP Subpart ZZZZ, Table 8, which incorporates the portions of 40 C.F.R. 63 Subpart A that could apply to engines affected by Subpart ZZZZ. The Permittee shall comply with the applicable requirements of 40 C.F.R. 63 Subpart A in accordance with the provisions for applicability of Subpart A in Subpart ZZZZ Table 8.

### **Conditions 42 through 51, RICE NESHAP Subpart ZZZZ Requirements**

**Legal Basis:** The Department has incorporated by reference the NESHAPs requirements for specific industrial activities, as listed in 18 AAC 50.040(c). NESHAP Subpart ZZZZ applies to any existing, new, or reconstructed stationary reciprocating internal combustion engines (RICE) located at a major or area source of HAP emissions, excluding stationary RICE units being tested at a stationary RICE test cell/stand. This stationary source is an area source of HAP emissions accessible by the Federal Aid Highway System (FAHS) subject to the provisions of NESHAP Subpart ZZZZ under 40 C.F.R. 63.6590(a)(1)(iii) for existing RICE (EU IDs 9, 10, 12, and 13) whose construction commenced before June 12, 2006.

**Factual Basis:**

For EU IDs 9, 10, 12, and 13, Conditions 42 through 51 include all applicable standards and MR&R requirements set out for: existing stationary emergency, non-emergency  $\leq 300$  hp, and black start RICE located at an area source of HAP emissions. The Permittee has designated EU ID 9 as a non-emergency RICE for purposes of NESHAP Subpart ZZZZ. The Permittee is required to operate and maintain the stationary RICE according to the manufacturer's written instructions or procedures developed by the Permittee in a manner consistent with good air pollution control practice for minimizing emissions. The Permittee is required to install a non-resettable hour meter in the emergency unit (EU ID 10) for accurate recording and monitoring to demonstrate compliance with the work practice standards and operational hour limitations set out for emergency RICE. For stationary emergency RICE, the unit is allowed 100 hours for maintenance check and readiness testing unless federal, state, or local standards require beyond 100 hours per year for the same purpose.

The Permittee is allowed to operate the emergency RICE in non-emergency situations for up to 50 hours per year, as allowed under 40 C.F.R. 63.6640(f). The 50 hours allowed for non-emergency situations are counted towards the 100 hours per year provided for maintenance and testing. There is no time limit on the use of emergency stationary RICE in emergency situations. Each affected stationary RICE must comply with the applicable standards in Subpart ZZZZ and associated MR&R.

For non-emergency black start RICE (EU IDs 12 and 13), the management practice requirements are identical to those of emergency RICE (EU ID 10) and there are no operating time restrictions because, by definition, black start engines seldom operate. To qualify as a black start engine under Subpart ZZZZ, the engine's only purpose must be to start up a combustion turbine.

The Permittee is not required to submit an initial notification for an existing stationary emergency RICE or other existing stationary RICE not subject to any Subpart ZZZZ numerical emission standards.

### **Condition 52, NESHAP Subpart JJJJJJ Exemption Requirements**

**Legal Basis:** NESHAP Subpart JJJJJJ applies to all oil-fired boilers in accordance with the provisions for applicability in §63.11194.

**Factual Basis:** *Oil subcategory* includes any boiler that burns any liquid fuel and is not in either the biomass or coal subcategories. Dual fuel-fired boilers that burn liquid fuel during periods of gas curtailment, gas supply emergencies, or for periodic testing not to exceed 48 hours during any calendar year are not included in this definition. EU IDs 6, 7, and 8 are dual-fired emission units that are classified as gas-burning boilers under the definition of the rule. This condition provides monitoring to ensure compliance with the exemption for dual-fuel fired units that burn liquid fuel as specified above.

### **Conditions 53 through 55, 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 56, Administration Fees**

**Legal Basis:** This condition ensures compliance with the applicable requirement in 18 AAC 50.400-403 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 50.400-403 specify the amount, payment period, and the frequency of fees applicable to a permit action.

### **Conditions 57 through 58, 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). 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 permit 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 assessable emissions are potential or projected emissions of each air pollutant authorized by the permit (AS 46.14.250(h)(1)).

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.

### **Condition 59, 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, i.e., except EU IDs 9, 10, 12, and 13.

**Factual Basis:**

The Department adopted this condition under 18 AAC 50.346(b) as Standard Permit Condition VI pursuant to AS 46.14.010(e). Records kept in accordance with Condition 59.2 for units previously subject to Condition 59 need to be maintained for 5 years in accordance with Condition 79 even if a unit is no longer subject to this condition.

Beyond as noted above, the Department has determined that this standard permit 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.

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 60, 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 61, 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. Since the stationary source is not presently a significant source of fugitive PM emissions, there is no need for enhanced monitoring or recordkeeping.

### **Condition 62, 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 63, 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 permit 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 a summary of



the investigation and corrective actions undertaken for these complaints. The Permittee is also required to submit copies of these records upon request of the Department.

#### **Condition 64, 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 83. Excess emission reporting under Condition 83 requires information on the steps taken to minimize emissions. Monitoring of compliance for this condition consists of the report required under Condition 83.

#### **Condition 65, 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 66, Protection of Stratospheric Ozone, 40 C.F.R. 82**

**Legal Basis:** Condition 66.1 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 and engages in the recycling or disposal of certain refrigerants. The prohibitions in Conditions 66.2 and 66.3 apply to all stationary sources that use halon for extinguishing fires and inert gas to reduce explosion risk. The condition prohibits the Permittee from causing or allowing violations of these prohibitions. The Prudhoe Seawater Treatment Plant uses halon and is, therefore, subject to the Federal regulations contained in 40 C.F.R. 82.

**Factual Basis:** The regulations found in 40 C.F.R. 82, Subpart F, regarding Refrigerant Recycling and Disposal 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.

This condition also incorporates the applicable Halon Prohibitions from 40 C.F.R. 82 Subparts G and H. The Permittee may not cause or allow violations of these prohibitions.

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### **Condition 67, NESHAPs Applicability Determinations**

**Legal Basis:** This condition requires the Permittee to determine applicability of NESHAP requirements.

**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 facility and to comply with applicable standards by the compliance date in the applicable NESHAP.

### **Condition 68, Open Burning**

**Legal Basis:** The condition requires the Permittee to comply with the applicable requirements in 18 AAC 50.065 when conducting open burning at the stationary source.

**Factual Basis:** No specific monitoring is required for this condition. Condition 68.1 requires the Permittee to keep records to demonstrate compliance with the standards for conducting open burning, but does not specify what these records should contain.

Specific 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 85.

### **Condition 69, 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 effective November 30, 2001, as updated effective November 9, 2008.

**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 70 through 72, 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 by the permit to conduct source tests. The Permittee is required to conduct source tests in the manner set out in Conditions 70 through 72.

**Factual Basis:** These conditions supplement the specific monitoring requirements stated elsewhere in this permit. Compliance monitoring with Conditions 70 through 72 consist of the test reports required by Condition 77.

### **Condition 73, Test Exemption**

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

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

#### **Conditions 74 through 77, 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 78, Particulate Matter (PM) Calculations**

**Legal Basis:** This condition requires the Permittee to reduce particulate matter data in accordance with 18 AAC 50.220(f). It applies when the Permittee tests for compliance with the PM standards in 18 AAC 50.050 or 50.055.

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

#### **Condition 79, 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 80, 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 effective November 30, 2001, as updated effective November 9, 2008.

**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 81, 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 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.

### **Condition 82, 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) under the Federally-approved State operating permit program effective November 30, 2001, as updated effective November 9, 2008.

**Factual Basis:** This condition incorporates a standard permit condition in regulation, which requires the Permittee to submit information requested by the Department. Monitoring consists of receipt of the requested information.

### **Condition 83, 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 has determined that the standard permit 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 that unit-specific or stationary-source-specific conditions would better meet the requirements. Therefore, the Department concludes that the standard permit condition meets the requirements of 40 C.F.R. 71.6(a)(3).

#### *Section 13, Notification Form*

The notification form contained in Standard Permit Condition IV meets the requirements of Chapter 50, Air Quality Control.

### **Condition 84, 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 Standard Permit Condition VII as revised on September 27, 2010. For reporting, MR&R conditions are Standard Permit Condition VII adopted into regulation pursuant to AS 46.14.010(e). The Department has made a modification to Standard Permit Condition VII as incorporated into this permit by allowing quarterly reporting as requested by the Permittee instead of the standard semi-annual operating reports and a change on the

due date for submittal from 30 days to 45 days following the last day of the reporting period. These changes satisfy the requirement for a “stationary source specific” change to the Standard Permit Condition as set out in note 3 of Condition VII. The Department has determined that the condition included in this permit meets the requirements of 40 C.F.R. 71.6(a)(3).

For renewal permits, 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 85, 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 85.2 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 report electronically at their discretion as stated in Condition 81.

### **Condition 86, NSPS and NESHAP Reports**

**Legal Basis:** The Permittee is required to provide to the Department a copy of each report submitted to EPA for units subject to NSPS or NESHAP Federal regulations under 18 AAC 50.326(j)(4). For those notices and reports submitted through EPA’s on-line reporting system CDX-CEDRI, the Permittee is not required to submit a duplicate copy to the Department, as Department staff receive electronic notice and have access to EPA’s on-line reporting system for compliance reviews. 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 87, Emission Inventory Reporting**

**Legal Basis:** This condition requires the Permittee to submit emissions data to the State to satisfy the Federal requirement to submit emission inventory data from point sources as required under 40 C.F.R 51.321 (6/10/02). The requirement applies to sources defined as point sources in 40 C.F.R 51.50. The State must report all data elements in Table 2A of Appendix A to Subpart A of 40 C.F.R 51 to EPA (73 FR 76556).

**Factual Basis:** The Department has incorporated Standard Permit Conditions XV and XVI as adopted by regulation on September 27, 2010. The Department adopted these conditions under 18 AAC 50.346(b) pursuant to AS 46.14.010(e). The emission inventory data is due to EPA 12 months after the end of the reporting year (40 C.F.R 51.30(a)(1) and (b)(1), 12/17/08). A due date of March 31 corresponds with sources reporting actual emissions for assessable emissions purposes and provides the Department sufficient time to enter the data into EPA's electronic reporting system.

The air emissions reporting requirements under 40 C.F.R Part 51 Subpart A apply to States; however, States rely on information provided by point sources to meet the reporting requirements of Part 51 Subpart A.

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 C.F.R 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 C.F.R 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 revised the form in Section 14 to shorten the length and provide clear borders to the data entry fields, as well as a citation reference to the applicable regulation.

### **Condition 89, 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 as allowed under 40 C.F.R. 71.10(d)(1).

### **Conditions 90 - 92, Permit Changes and Revisions Requirements**

**Legal Basis:** The Permittee is obligated to notify the Department of certain off-permit source changes and operational changes under 18 AAC 50.326(j)(4). 40 C.F.R. 71.6(a)(8), (12), and (13) incorporated by reference under 18 AAC 50.040(j) require 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 93, 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 40 C.F.R. 71.5(a)(2), a complete renewal application is one that provides all information required pursuant to 40 C.F.R. 71.5(c) and 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 94 through 98, General Compliance Requirements and Schedule**

**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 general conditions for compliance are required for all operating permits.

### **Conditions 99 through 100, Permit Shield**

**Legal Basis:** These conditions ensure compliance with the applicable requirement in 18 AAC 50.326(j) and apply because the Permittee has requested that the Department shield the

source from the applicable requirements listed under these conditions under the Federally approved State operating permit program effective November 30, 2001, as updated effective November 9, 2008.

**Factual Basis:** Table E of Operating Permit No. AQ0271TVP02 shows the permit shield that the Department granted to the Permittee. Should any of the shielded requirements become applicable, the Permittee is required to take necessary steps to comply with all applicable requirements in a timely manner.



**ATTACHMENT A**

**FIGURE 1--SUMMARY REPORT--GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE**

[Note: This form is referenced in 40 C.F.R. 60.7, Subpart A-General Provisions]

Pollutant (*Circle One*):    SO<sub>2</sub>    NO<sub>x</sub>    TRS    H<sub>2</sub>S    CO    Opacity

Reporting period dates: From \_\_\_\_\_ to \_\_\_\_\_

Company: \_\_\_\_\_

Emission Limitation: \_\_\_\_\_

Address: \_\_\_\_\_

Monitor Manufacturer: \_\_\_\_\_

Model No.: \_\_\_\_\_

Date of Latest CMS Certification or Audit: \_\_\_\_\_

Process Unit(s) Description: \_\_\_\_\_

Total emission unit operating time in reporting period <sup>1</sup>: \_\_\_\_\_

<b>Emission Data Summary <sup>1</sup></b>	<b>CMS Performance Summary <sup>1</sup></b>
1. Duration of excess emissions in reporting period due to: a. Startup/shutdown ..... b. Control equipment problems ..... c. Process problems ..... d. Other known causes ..... e. Unknown causes ..... 2. Total duration of excess emissions ..... 3. Total duration of excess emissions x (100) / [Total emission unit operating time] ..... % <sup>2</sup>	1. CMS downtime in reporting period due to: a. Monitor equipment malfunctions ..... b. Non-Monitor equipment malfunctions ..... c. Quality assurance calibration ..... d. Other known causes ..... e. Unknown causes ..... 2. Total CMS Downtime ..... 3. [Total CMS Downtime] x (100) / [Total emission unit operating time] ..... % <sup>2</sup>

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

<sup>2</sup> For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in 40 C.F.R. 60.7(c) and (d) shall be submitted.

*Note: On a separate page, describe any changes since last quarter in CMS, process or controls.*

I certify that the information contained in this report is true, accurate, and complete.

Name: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Title: \_\_\_\_\_