

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

**BP Exploration (Alaska) Inc.  
Lisburne Production Center**

**STATEMENT OF BASIS  
of the terms and conditions for  
Permit No. AQ0272TVP02**

**Public Comment Draft - October 22, 2009**

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## INTRODUCTION

This document sets forth the statement of basis for the terms and conditions of Operating Permit No. AQ0272TVP02.

### STATIONARY SOURCE IDENTIFICATION

Section 1 of Operating Permit No. AQ0272TVP02 contains information on the stationary source, as provided in the Title V permit application.

The stationary source (i.e., the Lisburne Production Center) is operated by BP Exploration (Alaska) Inc., and BP Exploration (Alaska) Inc. is the Permittee for the stationary source's operating permit. The SIC code for this stationary source and alternative operating scenario is 1311 -- Crude Oil and Natural Gas Production. The NAICS code of this stationary source is 211111.

The stationary source processes crude oil production fluids received from various crude oil accumulations located on the North Slope of Alaska, including (but not limited to) Lisburne, Point McIntyre, Niakuk, West Beach State, and North Prudhoe Bay State.

*Drill Site Operations.* Production/injection wells are typically grouped together on a gravel pad, with their well chokes and well testing equipment enclosed in modules. For purposes of the Oil and Natural Gas (ONG) MACT, the drill site heaters are each located on separate surface sites which are not aggregated for major source determinations. The drill sites are not affected by the ONG MACT, as there are no glycol dehydration units or storage tanks with flash emissions at these sites.

Production fluids from these wells are often commingled into common carrying lines at these drill sites which then flow to LPC for processing. Some drill sites which produce cooler fluids or operate at lower rates require adding heat to prevent line plugging from wax deposits. This heat is provided by drill site heaters which are indirect heaters that employ a heat transfer media. Additionally, fluids (sea water, produced water, enhanced oil recovery fluids, etc.) can be routed to drill sites for diversion into injection wells. As the need arises, mobile equipment is used at drill sites to either service an existing well or drill a new well.

*Treatment/Processing of Produced Fluids.* Production fluids that enter LPC are treated to remove gas and water. There are three stages of separation to remove gas: the high pressure separator, the treater flash drum and the crude oil surge drum. These vessels operate at progressively lower pressures to minimize gas compression requirements while removing hydrocarbon gases from crude oil. Water is also removed from the high pressure separator and the treater. To improve the crude oil and water separation process, production fluids are heated downstream of the high pressure separator. After the crude oil and water separation process, crude oil from the treater is cooled to meet custody transfer requirements at the Trans Alaska Pipeline System (TAPS) Pump Station Number 1 (PS-1).

*Produced Gas Operations.* Hydrocarbon gas which is removed from the treater and crude oil surge drum is compressed in the stock tank vapor intermediate pressure (STV/IP) gas compressors and combined with gas removed from the high pressure separator. The combined hydrocarbon gas is then processed in the triethylene glycol (TEG) dehydration unit to remove water vapor, thereby preventing the formation of hydrates upon further gas cooling and

compression. Gases that are flashed or stripped in the TEG dehydration unit's regenerator are recovered and recycled back to the STV/IP gas compressor by way of the offgas compressor (they are not vented to the atmosphere). The dehydrated gas is then cooled to condense and remove butane and heavier hydrocarbons that are blended back into the crude oil stream before shipment to PS-1. A small portion of dehydrated/stripped hydrocarbon gas is used for fuel while the majority is further compressed in gas injection compressors for re-injection back into the reservoirs. The vapor recovery system associated with the glycol dehydrator is inherent to the process and is part of the glycol dehydrator's physical and operational design.

*Produced Water Treatment.* Produced water is collected and treated to remove any entrained crude oil. Currently, treated water is pumped into disposal wells located near LPC but future plans call for possible re-injection of this water, when its rates are sufficient, back into the production reservoirs.

*Emergency Systems and Operations.* There are a number of emergency systems employed at LPC. Emergency generators provide emergency electrical power should primary electrical service be lost. The emergency power is typically used to drive process safety and life support systems. Liquid fuel-fired emergency fire water pumps provide back-up fire water supply in the event electrical power is lost to the primary electrically driven fire water pump.

Two of the Solar Mars turbine generators are capable of firing liquid fuel in case of emergencies for power generation.

An emergency flare system safely disposes of hydrocarbon gases vented from process equipment during process upsets (unavoidable emergencies or malfunctions), process equipment startups or shutdowns, or de-pressurization for non-routine repair purposes.

Enclosed modules which house process equipment operated at LPC are equipped with fire suppression systems. In the event of fire, Halon<sup>TM</sup> 1301 fire suppressant is automatically released to inhibit the chemical reaction of combustion and extinguish the flames.

### **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 stationary source that have specific monitoring, recordkeeping, and reporting requirements are listed in Table A of Operating Permit No. AQ0272TVP02.

Table A of Operating Permit No. AQ0272TVP02 also contains specific information on each of the emission units that are regulated by this permit and provided in the application. The table is provided for informational and identification purposes only. Specifically, the emission unit rating/size provided in the table is not intended to create an enforceable limit.

**EMISSIONS**

A summary of the potential to emit (PTE)<sup>1</sup> and assessable PTE is shown in Table E below.

**Table E – Emissions Summary, in Tons Per Year (TPY)**

<b>Pollutant</b>	<b>NOx</b>	<b>CO</b>	<b>PM-10</b>	<b>SO<sub>2</sub></b>	<b>VOC</b>	<b>HAPs</b>	<b>Total</b>
PTE	2,745	876	87	293	75	18.4	4,076
Assessable PTE	2,745	876	87	293	75	0	4,076

The assessable PTE listed under Condition 45.1 is the sum of the emissions of each individual regulated air pollutant for which the stationary source has the potential to emit quantities greater than 10 tons per year (TPY). The emissions listed in the table are estimates to be used for informational purposes only. The listing of the emissions does not create an enforceable limit to the stationary source.

For criteria pollutants, emissions are as provided in the Title V permit renewal application dated April 18, 2008 and application supplement dated July 11, 2008 and September 19, 2008. The PTE was estimated based on AP-42 emission factors current as of the date of the permit renewal application submittal, source test results, vendor supplied emission factors, and any allowed emission rates and/or operational limits applicable to emission units at the stationary source. Potential emissions of SO<sub>2</sub> are estimated based on mass balance and an assumed fuel gas H<sub>2</sub>S content of 168 ppmv at the production center and 600 ppmv at the drill sites, and a liquid fuel sulfur content of 0.15 percent by weight (permit limits).

The HAP emissions shown in Table E are the total HAP PTE for all regulated emission units at all Lisburne Production Center locations. However, per 40 C.F.R. 71.2, emission from oil or gas exploration or production wells with their associated equipment are not aggregated when determining the total potential to emit HAPs. Therefore, emissions from units located at any drill site are not aggregated when determining the HAPS major status of the stationary source.

As provided in the Title V permit renewal application and application supplements, HAP emissions from combustion units were calculated using field data from GRI-HAPCalc version 3.01, AP-42 emission factors, and Ventura County Air Pollution Control District emission factors; and HAP emissions from tanks were estimated using TANKS v4.09d. HAP estimates were not included in the total in the table above because most HAPs are VOCs. The stationary source is not a major source of HAPs. The highest individual HAP is less than 10 TPY and cumulative HAPs are less than 25 TPY from the production pad and from the aggregated stationary source.

<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(23), effective 12/3/05.

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

In accordance with AS 46.14.130(b), an owner or operator of a Title V source<sup>2</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 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 for hazardous air pollutants 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:

- Belonging to a single major industrial grouping as defined in Section 302 of the Act, that directly emits or has the potential to emit 100 TPY or more of any air pollutant; and
- Containing a source, including an area source, subject to a standard or other requirement under Section 111 of the Act (New Source Performance Standards, NSPS), and not exempted or deferred under AS 46.14.120(e) or (f).

## **CURRENT 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-AA025 Amendment 2. This permit-to-operate was issued on January 13, 1997. All stationary source-specific requirements established in this previous permit are included in the Title V operating permit as described in Table F.

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

Construction Permit No. 0073-AC061 was issued to the Permittee on February 21, 2001. This permit revised terms and conditions of 9473-AA025 Amendment 2. All stationary source-specific requirements established in this previous permit are included in the Title V operating permit as described in Table G.

Minor Permit No. AQ0272MSS01 was issued to the Permittee on January 16, 2007. This permit addressed the temporary pipeline replacement project which lasted through May 31, 2007. The permit expired on July 31, 2007 and therefore, Minor Permit No. AQ0272MSS01 terms and conditions were not carried forward into this renewal permit.

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

The Permittee submitted an application for a Title V operating permit in November 1997 and supplements to the application in January 1998, April 1998, June 1999, and December 2002. On

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

September 19, 2003, the Department issued Title V Operating Permit No. AQ0272TVP01.

On October 14, 2003, BP Exploration (Alaska) Inc. submitted an administrative revision request to update the emission unit inventory Table A. Two units that were previously dual-fired (EU IDs 7 and 8) had been converted to gas-fired only. This removal of dual fuel capability resulted in changes to Conditions 3 (visible emissions), 4 (particulate Matter emissions), 5 (sulfur dioxide emissions), removal of old Condition 8 (liquid fuel usage limits), Condition 14 (liquid fuel sulfur limit), removal of old Conditions 17.4 (source testing for NO<sub>x</sub>) and 18.2 (source testing for CO), and Section 8 (VE & PM MR&R). Additionally, BP Exploration (Alaska) Inc. replaced the diesel drive on an emergency generator at LPC Drill Site #5. Replacement of a 1,377 hp engine with a 402 hp engine qualifies as an administrative revision because it meets all criteria of that regulation. Permit No. AQ0272 TVP01 Revision 1 was issued on May 4, 2004.

On December 19, 2005, BP Exploration (Alaska) Inc. submitted a minor modification application to remove EU ID 38 (LPC Burn Pit Flare) where referenced as a control device for affected facilities at the Lisburne Production Center subject to Federal New Source Performance Standards. This reference occurs throughout portions of this permit. BP Exploration (Alaska) Inc.'s request is based upon EPA's October 19, 2005 determination that stated that the subject flare is not subject to NSPS Subpart A, §60.18 as a control device, as originally referenced in several conditions of the permit. Permit No. AQ0272 TVP01 Revision 2 was issued on February 23, 2006.

The Permittee submitted an application for a renewal to the Title V operating permit on April 18, 2008, and application supplements on July 11, 2008 and September 19, 2008.

### **COMPLIANCE HISTORY**

The stationary source has operated at its current location since 1986. Review of the permit files, including a full compliance evaluation conducted on September 27, 2007, indicated violations on several procedural and operational permitting requirements. Specifically, the evaluation discovered non-compliance with Conditions 3 (visible emissions), 8 (hourly operating limit on EU ID 21), 9 (hourly operating limit on EU IDs 22 and 23), 10 (hourly operating limit on EU IDs 24 – 32), 58 (asbestos NESHAP), 82 (excess emission and permit deviation reporting), 84 (operating reports), 85 (annual compliance certification), and 86 (compliance with terms and conditions) of the Permit No. AQ0272TVP01, Revision 2. The most significant violations were associated with exceedances to emergency generator operating limits found in Conditions 8-10. These conditions are tied to Construction Permit No. 0073-AC061 (Conditions 8 and 9) and Air Quality Permit to Operate No. 9473-AA025, Amendment 2 (Condition 10).

### **STATIONARY SOURCE-SPECIFIC REQUIREMENTS CARRIED FORWARD**

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

Alaska's State Implementation Plan included the following types of pre-construction permits:

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

- Minor permits issued after October 1, 2004.

Pre-construction permit terms and conditions include both source-specific conditions and conditions derived from regulatory applicable requirements such as standard conditions, generally applicable conditions and conditions that quote or paraphrase requirements in regulation. These requirements include, but are not limited to, each source-specific requirement established in these permits issued under 18 AAC 50 that are still in effect at the time of this operating permit issuance.

Table F and Table G list the requirements carried over from Permit No. 9473-AA025 Amendment 2 and Permit No. 0073-AC061 into Operating Permit No. AQ0272TVP02.

**Table F – Comparison of Permit No. 9473-AA025 Amendment 2 Conditions to Operating Permit No. AQ0272TVP02 Conditions<sup>3</sup>**

Permit No. 9473-AA025 Amendment 2 Condition Number	Description of Requirement	Permit No. AQ0272TVP02 Condition Number	How Condition was Revised
4, 4a, Exhibit B	Limit on hours of operation limit for emergency equipment per year	12, 14, 15	No change, except oil-fired hourly operational limits for EU IDs 7 and 8 have been dropped because they are no longer dual fired.
5	Operation of gas fired heaters	12	Reporting requirement added. When operating >100% capacity, report as a permit deviation.
6 & 8	Testing of fuel gas to determine H <sub>2</sub> S concentration	9 & 10	Condition requirements combined since they called for the same monitoring.
7	Testing when fuel gas H <sub>2</sub> S exceeds 168 ppm	10.2	No change.
9 & Exhibit C	Fuel oil sulfur content testing	9 & 10	Condition 9 and requirements of Exhibit C combined into one condition. Added conditions for use of other diesel fuels.
10 & Exhibit D Item 4	Calculate and report monthly SO <sub>2</sub> emissions	None	The Department no longer requires this information. The reason for original permit condition is no longer valid. Originally included in permits to measure the increase of SO <sub>2</sub> emissions from the increase in sulfur content in fuel aging reservoirs. ADEC has agreed that an increase in sulfur content from aging reservoirs would not constitute a PSD increase. Condition has been removed.
11 & Exhibit C	Operation of a fuel gas meter for all gas turbines	17	The term “continuous monitoring device” was changed to “fuel meter” to avoid confusion with the NSPS term “continuous monitoring system”.
Exhibit B	CO limit (lb/MMscf) at less than 100% rated	None	Removed as requested in December 5, 1997 construction permit application

<sup>3</sup> This table does not include all standard and general conditions.

Permit No. 9473-AA025 Amendment 2 Condition Number	Description of Requirement	Permit No. AQ0272TVP02 Condition Number	How Condition was Revised
	capacity for EU IDs 1 – 9.		for permit hygiene. The limit of 600 lb/MMscf at less than 100% rated capacity was not included in the original BACT determination.
Exhibit B	CO ton per year limit for EU IDs 1 – 9.	23	Limit split between two turbine groups: 366 TPY for EU IDs 4 – 9 (combined) as established by Permit No. 0073-AC061; 234 TPY allotted to the remaining turbines, EU IDs 1 – 3 (combined).
Exhibit B	CO limits for EU IDs 10 – 20	23	No change - 0.018 lb/MMBtu and 24 TPY (combined).
Exhibit B	NOx limits for EU IDs 1 – 9	23	Limits for EU IDs 4 – 9 superseded by Permit No. 0073-AC061.
Exhibit B	NOx limits for EU IDs 10 & 11	23	ADEC BACT limit of 7 tons per year (combined) in place of the 17 tons per year limit stated in permit number 9473-AA025. ADEC BACT short-term limit unchanged (0.16 lb/MMBtu).
Exhibit B	NOx limits for EU IDs 12 – 20	23	No change – BACT limits of 102 TPY (combined) and 0.08 lb/MMBtu.
Exhibit B	Opacity limit for turbines	23	No change (10% opacity), except limit is now averaged over 6 consecutive minutes.
Exhibit B	Opacity limit for heaters, engines and flares	1 & 23	The 10% opacity limit for EU IDs 10 – 14 in Permit No. 9473-AA025 was not a BACT limit. This was corrected as requested in the December 5, 1997 construction permit application for permit hygiene. The state standard for heaters of 20% opacity remains. No change for engines (20% opacity SIP limit), except limit is now averaged over 6 consecutive minutes. No change for flares except limit is averaged over 6 consecutive minutes; 20% opacity is flare BACT limit.
Exhibit B	SO <sub>2</sub> limits for turbines (EU IDs 1 – 9)	23	No change – 168 ppmv H <sub>2</sub> S in the fuel gas and 157 TPY (combined).
Exhibit B	SO <sub>2</sub> limits for heaters (EU IDs 10 – 14)	23	No change – 168 ppmv H <sub>2</sub> S in the fuel gas and 22 TPY (combined).
Exhibit B	SO <sub>2</sub> limits for drillsite heaters (EU IDs 15 – 20)	23	Limit of 73 TPY (combined) has replaced the limit of 78 TPY. Limit of 600 ppmv H <sub>2</sub> S in the fuel gas is unchanged.
Exhibit B	Fuel gas H <sub>2</sub> S limit for flares	23	No change – 168 ppmv.
Exhibit B	Liquid fuel sulfur limit	23	Fuel sulfur limit for engines of 0.2% S annual average, and 0.25% S maximum in any shipment - No change. The permit has a more stringent limit of

Permit No. 9473-AA025 Amendment 2 Condition Number	Description of Requirement	Permit No. AQ0272TVP02 Condition Number	How Condition was Revised
			0.15% sulfur in Condition 5 of Permit No. 0073-AC061.
Exhibit D, Item 3	Report operating time and fuel consumption for each month	17 & 19	No change, except hours of operation monitoring is no longer required for flares.
Exhibit D, Items 4 and 5	Report fuel gas H <sub>2</sub> S content and liquid fuel sulfur content.	9	Requirements from Exhibit D incorporated. Extended for drill site fuel testing.

**Table G - Comparison of Construction Permit No. 0073-AC061 Conditions to Operating Permit No. AQ0272TVP02 Conditions<sup>4</sup>**

Permit No. 0073-AC061 Condition Number	Description of Requirement	Permit No. AQ0272TVP02 Condition Number	How Condition was Revised
5	Sulfur Dioxide Requirement	10, 11, 13, 14	No changes, except fuel oil limit not carried forward for EU IDs 6 – 9 because they are no longer dual fuel-fired and removed the definition of “emergency”.
6	Stack Orientation Requirements	16	No change, except requirement not carried forward to EU IDs 12, 13, and 14, because these seldom used stand-by units must have rain caps to prevent precipitation from plugging the stacks. Exclusion of these units from the requirements was approved by ADEC in conversations conducted March 2001.
7	Owner requested limit – NOx requirements	20	Same requirements except – requirements that have been fulfilled or have not been triggered, as stated in the December 17, 2002 letter from Janet D. Platt of BPXA to Cynthia Espinoza of ADEC, have been removed from this condition. Added periodic testing.
8	Owner requested limits – Carbon Monoxide Requirements	21	Same requirements except - requirements that have been fulfilled or have not been triggered, as stated in the December 17, 2002 letter from Janet D. Platt of BPXA to Cynthia Espinoza of ADEC, have been removed from this condition. Added periodic testing.
9	Turbine BACT – Nitrogen Dioxide Requirements	23	Same requirements except - the second sentence of Condition 9.3 of Permit No. 0073-AC061 has not been included as it has not been subject to triggering Condition 7.2b(ii). See December 17,

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

Permit No. 0073-AC061 Condition Number	Description of Requirement	Permit No. AQ0272TVP02 Condition Number	How Condition was Revised
			2002 letter from Janet D. Platt of BPXA to Cynthia Espinoza of ADEC.
10	Turbine BACT – Sulfur Dioxide Requirements	23	Same requirements.
27	Continuous Monitoring Systems	None	There are no requirements for continuous monitoring systems at this stationary source.
42.1	VE Observation of exhaust after the installation of lean head end liners	None	Requirements that have been fulfilled, as stated in the December 17, 2002 letter from Janet D. Platt of BPXA to Cynthia Espinoza of ADEC.
42.2	VE Observation for liquid fuel-fired sources after the installation of lean head end liners	None for EU IDs 6 - 9 1.2 & 1.3 for EU IDs 21 – 23	The Permittee has requested an administrative revision to Construction Permit No. 0073-AC061 thereby declaring that EU IDs 6 - 9 are no longer dual-fuel sources. EU IDs 6 - 9 are now gas fired only units. Visible emissions testing on these sources as required by Condition 42.2 of Construction Permit No. 0073-AC061, is no longer necessary except as required in Condition 23 of this permit. Condition revised based on Standard Permit Condition IX.
43	VE Corrective Action	1 – 4	Revised based on Standard Permit Condition IX.
44	Particulate Matter – submit a vendor guarantee or conduct a source test to show that EU IDs 22 and 23 can meet the PM standard	None	Requirements that have been fulfilled, as stated in the December 17, 2002 letter from Janet D. Platt of BPXA to Cynthia Espinoza of ADEC.
49	VE Observation Reporting	4	No change, except reporting is only required for liquid fuel fired units.

## STATEMENT OF BASIS FOR THE PERMIT CONDITIONS

The State and federal regulations for each condition are cited in Operating Permit No. AQ0272TVP02. The Statement of Basis provides the legal and factual basis for each term and condition as set forth in 40 C.F.R. 71.6(a)(1)(i).

### Conditions 1 - 5, Visible Emissions Standard and MR&R

**Legal Basis:** These conditions ensure compliance with the applicable requirements in 18 AAC 50.050(a) and 18 AAC 50.055(a). 18 AAC 50.055(a) applies to the operation of fuel-burning equipment and industrial processes.

- EU IDs 1 – 38 are fuel burning equipment or industrial processes.

U.S. EPA incorporated these standards as revised in 2002 into the State Implementation Plan (SIP) effective September 13, 2007.

**Factual Basis:** Condition 1 prohibits the Permittee from causing or allowing visible emissions in excess of 18 AAC 50.055(a)(1).

The Permittee must monitor, record-keep and report emissions in accordance with Conditions 2 through 5 of the permit. Conditions 2 through 4 MR&R conditions are standard conditions adopted into regulation pursuant to AS 46.14.010(e). These conditions have been modified in this permit as follows. The Department added a provision that clarifies the option to continue an established monitoring frequency for renewal permits. In an attempt to provide more latitude and opportunity to observe visible emissions from stationary sources with flares, the Department made some adjustments to Condition 5.

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

### Gas Fired:

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 PM emissions. However, the Department can request a source test for PM emissions from any smoking equipment.

Reporting - The Permittee must certify that only gaseous fuels are used in the equipment.

### Liquid Fuel-Fired:

Monitoring - The visible emissions may be observed by either Method-9 or the Smoke/No Smoke plans as detailed in Condition 2.2. Corrective actions such as maintenance procedures and either more frequent or less frequent testing may be required depending on the results of the observations.

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

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

**Insignificant Emission Units:**

For EU IDs 22 – 28, 31, and 32, no monitoring is required because these emission units are insignificant based on potential emissions as set out by 18 AAC 50.326(e). As long as the units meet the limits per Conditions 14 and 15, they will be considered insignificant emission units and no monitoring is required in accordance with Department Policy and Procedure No. AWQ 04.02.103, Topic # 3, dated October 8, 2004. The Permittee must annually certify compliance under Condition 74 with the visible emission standard.

**Flares:**

Monitoring for flares (EU IDs 33 – 38) require Method-9 observations of scheduled flaring events lasting more than one hour.

The Department developed Condition 5 to provide a standardized version of flare monitoring that is not dependent upon the type or design of upstream equipment. It has been claimed that gas-fired flares normally burn without emitting visible emissions, but actual field data demonstrating this assumption is not available. However, gas-fired flares have been shown to smoke when a control device, i.e. a knockout drum, flare scrubber, gas or steam assist, or vapor recovery system malfunctions. Thus, the condition sets out a protocol to collect actual field data to determine compliance with the 20 percent opacity standard for flares.

A Department analysis of industry flaring operations indicates that 49 percent of the gas flared (by volume) is for pilot/purge, 25 percent is for flaring less than one hour, and 26 percent is for flaring that lasts more than one hour. Pilot/purge flaring constitutes half of all flaring by volume and is continuous in nature and can be observed at any time. This type of flaring has not caused violations of the opacity standard in the past and can be checked at any time by agency inspectors. The remaining half of the flaring volume is split evenly between less than and greater than one-hour duration. Therefore, the monitoring scheme in this condition addresses the half of the non-continuous flaring operations that are scheduled and for which a certified observer can reasonably be located onsite.

Since it is impractical to require a stationary source to have a certified Method-9 opacity reader on site for unpredictable emergency flaring, the monitoring protocol requires Method-9 readings only during scheduled flare events. Scheduled events such as those generated by maintenance activities and well testing of greater than one-hour in duration will be observed. These one-hour events are currently quantified and reported to the Alaska Oil and Gas Conservation Commission for other reasons and thus provides a confirming information record of the occurrence of these events. Only those events as defined in the condition need to be monitored. The Department requires a flare event each 12-months to be monitored in order to monitor flare performance during the life of the permit, not to have all flare events grouped within a short time-frame which does not indicate sustained performance of the control device.

Since only flaring that is scheduled and exceeds one hour is required to be observed, operators will have time to provide certified Method-9 readers onsite. Most oil and gas

production plants in Alaska are located at remote sites, so it is not reasonable to self-monitor all or even a large sample of the flaring that occurs. Data collected from planned events will help the Department refine this monitoring scheme during future permit cycles. Process upsets and emergency events that may or may not exceed one hour occur randomly and do not lend themselves easily to periodic monitoring. At this time, the Department will rely on stationary source excess emission reports, citizen complaints, and agency inspections for information concerning these short term and emergency events. The Permittee must report the results of these observations to the Department.

### **Conditions 6 - 8, 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. EU IDs 1 – 38 are fuel-burning equipment. These PM standards also apply because they are contained in the federally approved SIP effective September 13, 2007.

**Factual Basis:** Condition 6 prohibits emissions in excess of the state PM (also called grain loading) standard applicable to fuel-burning equipment and industrial processes. The Permittee shall not cause or allow fuel-burning equipment to violate this standard.

MR&R requirements are listed in Conditions 7 through 8 of the permit.

#### **Gas Fired:**

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. Therefore, the Department concluded that the standard conditions meet the requirements of 40 C.F.R. 71.6(a)(3).

Although periodic PM monitoring of gas-fired units is waived, the Department has the discretion to request a source test for PM emissions from any fuel burning equipment under 18 AAC 50.220(a) and 345(l).

#### **Liquid Fuel-Fired:**

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

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 particulate matter.

### **Insignificant Emission Units:**

For EU IDs 22 – 28, 31, and 32, no monitoring is required because these emission units are insignificant based on potential emissions as set out by 18 AAC 50.326(e). As long as the units meet the limits per Conditions 14 and 15, they will be considered insignificant emission units and no monitoring is required in accordance with Department Policy and Procedure No. AWQ 04.02.103, Topic # 3, dated October 8, 2004. The Permittee must annually certify compliance under Condition 74 with the particulate matter emission standard.

### **Flares:**

Monitoring of gas fired flares for particulate matter is waived, i.e. no source testing will be required, because of the difficulty and questionable results these tests produce when applied to flares. The Department has recognized this fact by incorporating the waiver in the SIP adopted in November 1984, this plan was approved as part of the September 13, 2007 SIP approval but not incorporated by reference. No recordkeeping or reporting is required.

### **Condition 9, Sulfur Compound Emissions**

**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 – 38 are fuel-burning equipment and industrial processes. 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).

### **Gaseous Fuels:**

Fuel sulfur testing will verify compliance with SO<sub>2</sub> emission standard. Mercaptans are a concentrated thiol molecule (e.g. ethanethiol) composed of hydrogen and sulfur used to detect the presence of natural gas by its strong odor as in t-butyl-mercaptan. Basically, it is the mercaptan that allows the presence of gas to be detected by its odor, so it is naturally used as a leak detectant. However, by that same token it significantly raises the sulfur content of the natural gas and should be accounted for in determining compliance with the State sulfur compound emissions standard. The Department has therefore revised the basic MR&R requirements to monitor the total sulfur quantity, instead of H<sub>2</sub>S concentration, in the natural gas fuel due to the presence of mercaptans in the gas supply which raise the sulfur concentration.

The Permittee is currently limited to 168 ppm H<sub>2</sub>S for EU IDs 1 – 14 and 33 – 38 and 600 ppmv for EU IDs 15 – 20, averaged over three consecutive hours. The Department used these owner requested H<sub>2</sub>S limits to assure compliance with the State standard of 500 ppm for sulfur compound emissions. Condition 9.2b requires the Permittee to conduct monthly analysis for the fuel gas H<sub>2</sub>S concentration using either ASTM D4084, D5504, D6228, D4810, D4913, or GPA Standard 2377, or a listed method approved in 18 AAC 50.035(b)-(c) and 40 C.F.R. 60.17 incorporated by reference in 18 AAC 50.040(a)(1).

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

**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 MR&R conditions have been streamlined based on the more stringent sulfur limits of 0.15 percent rather than have two sets of MR&R. The Department also corrected Condition 9.9 to replace the text “...method listed in 18 AAC 50.035 or an alternative method approved by the Department” with “...method listed in 18 AAC 50.035(b)-(c) and 40 C.F.R. 60.17 incorporated by reference in 18 AAC 50.040(a)(1)”. The text “...or an alternative method approved by the Department” was discarded during the Revised Action Plan submitted to EPA on July 15, 2007, as a result of the EPA Audit of the September 2006 Title V Program Review. This text is not to be used in subsequent permits since it allows a Permittee to bypass the public process for changing monitoring requirements by submitting off-record requests to change monitoring methods.

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

**Conditions 10 - 23, Pre-Construction Permit Requirements**

**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 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:** Conditions 10 through 21 incorporate owner requested limits to protect ambient air and avoid PSD major modification as developed in Permit to Operate No. 9473-AA025 Amendment 2 and Construction Permit No. 0073-AC061. The permit incorporates associated monitoring, recordkeeping, and reporting requirements.

Condition 17 - EU IDs 41 and 42 are process tanks as defined under NSPS Subpart Kb at 40 C.F.R. 111b, and storage vessels under 40 C.F.R. 60.111b (as amended October 15, 2003) do not include process tanks. Therefore, per correspondence from EPA dated August 11, 2005, these tanks are not subject to NSPS Subpart Kb. However, the Permittee requested that the

requirement of Subpart Kb that previously applied be retained in the permit in order to establish an enforceable limit, and therefore, the potential emission from these tanks.

Condition 22 - EU IDs 41 and 42 are process tanks as defined under NSPS Subpart Kb at 40 C.F.R. 111b, and storage vessels under 40 C.F.R. 60.111b (as amended October 15, 2003) do not include process tanks. Therefore, per correspondence from EPA dated August 11, 2005, these tanks are not subject to NSPS Subpart Kb. However, the Permittee requested that the requirement of Subpart Kb that previously applied be retained in the permit in order to establish an enforceable limit, and therefore, the potential emission from these tanks.

Condition 23 incorporates best available control technology limits as developed in Permit to Operate No. 9473-AA025 Amendment 2 and revised by Construction Permit No. 073-AC061. The permit incorporates associated monitoring, recordkeeping, and reporting requirements. Emission factors for turbines were established by required source test in the construction permit. The Permittee is required to use the worst case emission factor found at the worst case operation load. Emission factors for the boilers were not covered by the construction permit. Therefore, the Permittee should use AP-42 or source test to establish emission factors for EU ID 10 through 20 (boilers).

#### **Conditions 24, Insignificant Emission Units**

**Legal Basis:** The Permittee is required to meet state emission standards set out in 18 AAC 50.050 and 50.055 for all industrial processes fuel-burning equipment, and incinerators regardless of size.

**Factual Basis:** The conditions re-iterate the emission standards and require compliance for insignificant emission units not otherwise listed in the permit. 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 24.4a requires certification that the units did not exceed State emission standards during the previous year and did not emit any prohibited air pollution.

#### **Conditions 25 - 33, 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>5</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 – 9, 20, 33 – 37 are subject to NSPS requirements and therefore subject to Subpart A.

Condition 25.1 through 25.3 - The Permittee has already complied with the notification requirements in 40 C.F.R. 60.7 (a)(1) & (3). However, the Permittee is still subject to these

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<sup>5</sup> EPA has not delegated to the Department the authority to administer the NSPS program as of the issue date of this permit.

requirements in the event of a new NSPS affected facility<sup>6</sup> or in the event of a modification or reconstruction of an existing facility<sup>7</sup> into an affected facility.

Condition 25.5 – The requirements to notify the EPA and the Department of any proposed replacement of components of an existing facility (40 C.F.R. 60.15) apply in the event that the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility.

Condition 26 – Start-up, shutdown, or malfunction record maintenance requirements in 40 C.F.R. 60.7(b) are applicable to all NSPS affected facility subject to Subpart A.

Conditions 27 and 28 – NSPS excess emission reporting requirements and summary report form in 40 C.F.R. 60.7(c) & (d) are applicable to affected units that use continuous monitoring device and for turbines subject to Subpart GG that use periodic sulfur monitoring requirement in Condition 37.1a. The Department has included in Attachment A of the statement of basis a copy of the federal EEMSP summary report form for use by the stationary source.

Recordkeeping requirements in 40 C.F.R. 60.7(f) are applicable to all NSPS sources. (Satisfied by Condition 68).

Condition 29 – The Permittee has already complied with the initial performance test requirements in 40 C.F.R. 60.8 for EU IDs 1 – 9. 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 30 – Good air pollution control practices in 40 C.F.R. 60.11 are applicable to all NSPS sources subject to Subpart A (EU IDs 1 – 9, 20, 33 – 37, and 43).

Condition 31 – This condition states that any credible evidence may be used to demonstrate compliance or establishing violations of relevant NSPS standards for 1 – 9, 20, 33 – 37, and 43.

Condition 32 – Concealment of emissions prohibitions in 40 C.F.R. 60.12 are applicable to EU IDs 1 – 9, 20, 33 – 37, and 43.

Condition 33 – Control device requirements in 40 C.F.R. 60.18 are applicable to EU IDs 33 – 37. These flares are used as control devices for EU ID 43, the natural gas plant, which is subject to Subpart KKK. On October 19, 2005, EPA determined that EU ID 38 was not a flare control device and therefore not subject to this subpart.

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

### Conditions 34 - 35, NSPS Subpart Dc Requirements

<sup>6</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, effective 7/1/07.

<sup>7</sup> *Existing facility* means, with reference to a stationary source, any apparatus of the type for which a standard is promulgated in this part, and the construction or modification of which was commenced before the date of proposal of that standard; or any apparatus which could be altered in such a way as to be of that type, as defined in 40 C.F.R. 60.2, effective 7/1/07.

**Legal Basis:** The NSPS applies to steam generating units for which construction, modification, or reconstruction commenced after June 9, 1989 and have maximum design heat input capacities of 29 MW (100 MMBtu/hr) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr). EU ID 20 was constructed on September 1, 1993 and has a maximum design heat input capacity of 25.5 MMBtu/hr and is, therefore, subject to Subpart Dc.

EU ID 20 burns natural gas fuel. Therefore, the only requirements this subpart require are notification and fuel monitoring.

**Factual Basis:** These conditions require the Permittee to comply with the Subpart Dc. The Permittee may not cause or allow EU ID 20 to violate these requirements.

### Conditions 36 - 37, NSPS Subpart GG Requirements

**Legal Basis:** These conditions prohibit 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 degrees 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.

**Factual Basis:** These conditions incorporate NSPS Subpart GG NO<sub>x</sub> emission and sulfur compound limits. The Permittee may not allow equipment to violate these standards.

NO<sub>x</sub> Standard: For a turbine subject to 40 C.F.R. 60.332, the NO<sub>x</sub> standard is determined by the following equation:

$$STD_{NOx} = 0.015(14.4/Y) + F$$

where,

$STD_{NOx}$  = allowable NO<sub>x</sub> emissions (percent by volume at 15 percent oxygen and on a dry basis)

$Y$  = manufacturer's maximum rated heat input (kJ/W-hr), or actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the affected stationary source. The value of  $Y$  shall not exceed 14.4 kJ/W-hr

$F$  = NO<sub>x</sub> emissions allowance for fuel bound nitrogen, percent by volume, assumed to be zero for Alaska fuel.

Based on the manufacturer's heat rating at manufacturer's rated peak load, and assuming fuel bound nitrogen of zero, the NO<sub>x</sub> standard is 153 ppmv at 15 percent O<sub>2</sub> dry exhaust basis from EU ID 1 – 3; 173 ppmv at 15 percent O<sub>2</sub> dry exhaust basis from EU ID 4 and 5; and 198 ppmv at 15 percent O<sub>2</sub> dry exhaust basis from EU ID 6 – 9.

SO<sub>2</sub> Standard: The Permittee is required to comply with one of the following sulfur requirements for EU IDs 1 – 9 (turbines):

- (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 – 9 to exceed 0.8 percent by weight.

The Permittee chooses to comply with option (2) above.

Exemptions: Gas turbines exempted from NSPS Subpart GG emission standards are as provided in 40 C.F.R. 60.332(e) – (l).

### **Condition 36, NO<sub>x</sub> Monitoring, Recordkeeping, and Reporting**

**Legal Basis:** Periodic monitoring is included in Condition 36.2 for all turbines that normally operate for greater than 400 hours in a 12 month period. This additional monitoring is necessary to ensure that turbine emissions comply with the NSPS NO<sub>x</sub> standard and is required under 40 C.F.R. 71.6(a)(3) as the subpart does not contain MR&R sufficient for an operating permit.

**Factual Basis:** The Department does not have enough information to make categorical determinations that certain types of turbines, or turbines with emission test results below a certain percentage of the Subpart GG NO<sub>x</sub> emission limit will inherently comply with the Subpart GG limit at all times and will never need additional testing. After a sufficient body of NO<sub>x</sub> data is gathered under monitoring conditions for compliance with 40 C.F.R. 60, Subpart GG, the Department may find that it has enough information to make such categorical determinations. In that event, the Department would revise the NO<sub>x</sub> monitoring conditions. The Department may determine that to assure compliance it is necessary to retain or increase the current monitoring frequency.

These conditions do not include the initial NSPS performance test requirements as the Subpart A conditions cover these requirements. If an existing or new turbine under this permit is still subject to the performance test requirement of 40 C.F.R. 60.8 is covered under the Subpart A related conditions.

The intent of these conditions is that turbines or groups of turbines be routinely tested on no less than a 5-year cycle. If the most recent performance test on a turbine showed NO<sub>x</sub> emissions at less than or equal to 90 percent of the limit shown in Condition 36 then periodic monitoring is required at the first applicable of three criteria: either within 5 years of the last performance test, or within a year of the issue date of the permit, or within a year of exceeding 400 hours of operation within a 12-month period. For clarification, the Department added a 6 month cut-off date for triggering source testing within 1 year after permit issue date in accordance with Condition 36.2a(i)(B). The 6-month trigger identifies when Condition 36.2a(i)(C) would be enacted to require source testing within 1 year of triggering 400 hours. This ensures that a unit would not appear to be out of compliance with Condition 36.2a(i)(B) once it finally triggered Condition 36.2a(i)(C).

If the most recent performance test showed operations at greater than 90 percent of the limits listed in Condition 36, then periodic monitoring source testing is required every year until two consecutive tests show emissions at less than or equal to 90 percent of the limit.

The condition does not state how load must be measured. For some turbines it may be possible to directly measure load as either mechanical or electrical output. For others, it may be necessary to calculate load indirectly based on measurements of other parameters. The Department is not attempting to dictate what method is most appropriate through the permit condition, but should evaluate the adequacy of methods of calculating load based on the load

monitoring proposed by the Permittee.

Subpart GG defines “emergency gas turbine<sup>8</sup>” and exempts turbines meeting that definition from the GG emission standards. Some turbines may be operated as standby equipment but not meet the definition of emergency turbine, so the Department has added a Method 20, or Method 7E and either Method 3 or 3A, monitoring threshold of 400 hours per 12-month period. For turbines expected to operate less than 400 hours the Department has also added recordkeeping for hours of operation. The Department does not intend to require the Permittee to operate a turbine solely for the purpose of testing.

The condition requires testing at a range of loads, consistent with the performance test requirements in Subpart GG, that is, test at 30, 50, 75, and 100 percent load. If testing at these four loads is not reasonable, the condition allows the Permittee to propose to the Department what test loads will be reasonable and adequate, and the Department will have the responsibility to make a finding on that proposal. If EPA has already approved alternative test loads for the initial performance test the Department would allow those test loads if the information that went into that decision were still representative of the turbine operation.

In Condition 36.2b(ii)(C)(4), the Department considers “fuel type” to mean, for liquid fuels a type of fuel as described in an ASTM or similar fuel specification.

Load measurements or load calculations from load surrogate measurements are for one-hour periods. The intent is to match the averaging period for the test method. Method 20 identifies a number of traverse points that vary with the size of the stack. From these points the tester is to choose at least 8 points for NO<sub>x</sub> measurements. The time at each point is to be at least one minute plus the average response time of the instrument. The recorded value is the average steady state response. Presumably, the steady state response would exclude some or all of the response time of the instrument. Three runs are to be done at each test load.

The three runs would represent 24 minutes of measurement time or more. A one-hour average load is therefore a reasonable approximation of a load period corresponding to the test method.

### **Conditions 37, 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> or fuel quality monitoring, record keeping 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 37.1 incorporates NSPS Subpart GG fuel sulfur monitoring requirements.

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<sup>8</sup> *Emergency Gas Turbine* means any stationary gas turbine that operates as a mechanical or electrical power source only when the primary power source for a stationary source has been rendered inoperable by an emergency situation, as defined in 40 C.F.R. 60.331(e), effective 7/1/07.

**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 Condition 68.

**Reporting:** NSPS Subpart GG SO<sub>2</sub> standard reporting requirements for turbines monitored under Condition 37.1a are incorporated in the permit in Condition 37.4. 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 stated in Conditions 27, 28, and 72, reports are to be submitted to the Department and EPA, and summarized in the operating report required under Condition 73.

### **Conditions 38 - 40, NSPS Subpart KKK Requirements**

**Legal Basis:** These conditions incorporate NSPS Subpart KKK standards and the requirements to ensure that those standards are met. Subpart KKK applies to the stationary source because it is engaged in the extraction of natural gas liquids from field gas, fractionation of mixed natural gas liquids to gas products, or both, and is located onshore. Subpart KKK frequently references the equipment requirements contained in Subpart VV.

**Factual Basis:** These conditions incorporate NSPS Subpart KKK requirements and contain processing equipment standards and monitoring requirements designed to minimize VOC leaks and detect any that occur at an early stage in order to institute repairs. These requirements are drawn from Subpart VV where standard has already been developed for pumps in light liquid service; compressors, pressure relief devices in gas/vapor service; open-ended vales or lines; vales in gas/vapor service in light liquid service; pumps and valves in heavy liquid service, pressure relief devices in light liquid service or heavy liquid service, and flanges and other connectors; and closed vent systems and control devices.

For recordkeeping, the stationary source must keep logs for 5 years that detail leaks detected and repairs accomplished. This log must be available for agency inspection and submitted semi-annually to EPA and ADEC.

### **Conditions 41 - 43, 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.

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

### **Condition 44, Administration Fees**

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

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

## Conditions 45 - 46, 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 Condition I under 18 AAC 50.346(b) adopted pursuant to AS 46.14.010(e). Except for the modification noted in the last paragraph of this “Factual Basis”, the Department determined that these standard conditions adequately meet the requirements of AS 46.14.250. No emission unit or stationary source operational or compliance factors indicate that unit-specific or stationary-source specific conditions would better meet these requirements. Therefore, the Department concluded that the standard conditions meet the requirements of AS 46.14.250.

These standard conditions require the Permittee to pay fees in accordance with the Department's billing regulations. The billing regulations set the due dates for payment of fees based on the billing date.

The default assessable emissions are emissions of each air pollutant authorized by the permit (AS 46.14.250(h)(1)(A)).

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

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

The Department modified the standard condition to correct Condition 46.2 such that it referenced “submitted” (i.e., postmarked) rather than “received” in accordance with the timeframe of Condition 46.1.

## Condition 47, 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 10 – 19, 21, 29, 30, 38, 41, and 42.

**Factual Basis:** The condition requires the Permittee to comply with good air pollution control practices for all emission units (except insignificant emission units).

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 48, 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 49, 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 engineering in an industrial activity in accordance with the applicable requirement in 18 AAC 50.045(d). Bulk material handling requirements apply to the Permittee because the Permittee will engage in bulk material handling, transporting, or storing; or will engage in industrial activity at the stationary source.

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

#### **Condition 50, Stack Injection**

**Legal Basis:** This condition ensures compliance with the applicable requirement in 18 AAC 50.045(e)-(f) and 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 source constructed or modified after November 1, 1982.

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

#### **Condition 51, Air Pollution Prohibited**

**Legal Basis:** This condition ensures compliance with the applicable requirement in 18 AAC 50.110. The condition prohibits the Permittee from causing any emission which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property. Air Pollution Prohibited requirements apply to the stationary source because the stationary source will have emissions.

**Factual Basis:** While the other permit conditions and emissions limitation should ensure compliance with this condition, unforeseen emission impacts can cause violations of this

standard. These violations would go undetected except for complaints from affected persons. Therefore, to monitor compliance, the Permittee must monitor and respond to complaints.

ADEC adopted this standard condition into 18 AAC 50.346(a) pursuant to AS 46.14.010(e). The Department determined that this condition adequately meet the requirements of 40 C.F.R. 71.6(a)(3). No emission unit or stationary source operational or compliance factors indicate that unit-specific or stationary-source specific conditions would better meet these requirements. Therefore, the Department concluded that the standard condition meets the requirements of 40 C.F.R. 71.6(a)(3).

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

### **Condition 52, 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 72. Excess emission reporting under Condition 72 requires information on the steps taken to minimize emissions. Monitoring of compliance for this condition consists of the report required under Condition 72.

### **Condition 53, 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 54, Refrigerant Recycling and Disposal**

**Legal Basis:** This condition ensures compliance with the applicable requirement in 18 AAC 50.040(d) and applies if the Permittee engages in the recycling or disposal of certain refrigerants. The condition requires the Permittee to comply with the standards for recycling and emission reduction of refrigerants set forth in 40 C.F.R. 82, Subpart F, which will apply if the Permittee uses certain refrigerants.

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

### **Condition 55, NESHAPs Applicability Determinations**

**Legal Basis:** This condition requires the Permittee to keep and make available to the Department copies of the major stationary source determination and applicability of specific federal regulations that may apply to its stationary sources.

**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 keep and make available to the Department copies of the major stationary source determination.

### **Conditions 56 - 57, Halon Prohibitions**

**Legal Basis:** These prohibitions apply to all stationary sources that use halon for fire extinguishing and explosion inerting. The condition prohibits the Permittee from causing or allowing violations of these prohibitions. The stationary source uses halon and is therefore subject to the federal regulations contained in 40 C.F.R. 82.

**Factual Basis:** These conditions incorporate applicable 40 C.F.R. 82 requirements. This condition is aimed at halon fire fighting systems used at stationary sources with significant sized emission units. Although the condition is titled Halon Prohibitions, it references the Protection of Stratospheric Ozone prohibitions in both Subpart G (Significant New Alternatives Policy Program) and Subpart H (Halon Emission Reduction).

### **Condition 58, Open Burning**

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

**Factual Basis:** No specific monitoring is required for this condition. The Department has modified the condition by incorporating the requirements of 18 AAC 50.065 by reference. Condition 58.1 requires the Permittee to keep "sufficient records" to demonstrate compliance with the standards for conducting open burning, but does not specify what these records should contain.

More extensive monitoring and recordkeeping is not warranted because the Permittee does not conduct open burning as a routine part of their business. Also, most of the requirements are prohibitions, which are not easily monitored. Compliance is demonstrated through annual certification required under Condition 74.

### **Condition 59, Requested Source Tests**

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

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

### **Conditions 60 - 62, Operating Conditions, Reference Test Methods, Excess Air Requirements**

**Legal Basis:** These conditions ensure compliance with the applicable requirement in 18 AAC 50.220(b) and apply because the Permittee is required to conduct source tests by this permit. The Permittee is required to conduct source test as set out in Conditions 60 through 62.

**Factual Basis:** These conditions supplement the specific monitoring requirements stated elsewhere in this permit. Compliance monitoring with Conditions 60 through 62 consists of the test reports required by Condition 67.

### **Condition 63, Test Exemption**

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

**Factual Basis:** As provided in 18 AAC 50.345(a), amended May 3, 2002, 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 64 - 67, 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 68, 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 69, Certification**

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

**Factual Basis:** This standard condition is required in all operating permits under 18 AAC 50.345(j). This condition requires the Permittee to certify any permit application, report, affirmation, or compliance certification submitted to the Department. To ease the certification burden on the Permittee, the condition allows the excess emission reports to be **certified** with the stationary source report, even though it must still be **submitted** more

frequently than the stationary source operating report. This condition supplements the reporting requirements of this permit.

### **Condition 70, 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 requires the Permittee to send submittals to the address specified in this condition. The Permittee is required to submit an original and one copy of reports, compliance certifications, and other submittals required by this permit. Receipt of the submittal at the correct Department office is sufficient monitoring for this condition. This condition supplements the reporting requirements of this permit.

### **Condition 71, Information Requests**

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

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

### **Condition 72, 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 Operating Permit Condition III under 18 AAC 50.346(c) pursuant to AS 46.14.010(e). The Department made a correction to the Standard Operating Permit Condition III to allow identical reporting methodology for both Excess Emissions and Permit Deviations reports which use identical forms and should have identical submissions methods. Beyond as noted above, the Department has previously determined that the standard conditions adequately meet the requirements of 40 C.F.R. 71.6(a)(3). No additional emission unit or stationary source operational or compliance factors indicate the unit-specific or stationary-source-specific conditions would better meet the requirements. Therefore, the Department concludes that the standard conditions as modified meets the requirements of 40 C.F.R. 71.6(a)(3).

#### *Section 12, Notification Form*

The Department modified the notification form, deviating from Standard Permit Condition IV, to more adequately meet the requirements of Chapter 50, Air Quality Control. The

modification consisted of correcting typos and moving failure to monitor/report and recordkeeping to the permit deviations Section 2.

### **Condition 73, Operating Reports**

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

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

The Department used the Standard Permit Condition VII as adopted into regulation on August 20, 2008. 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 correction to the Standard Permit Condition VII by changing the number of copies of documents to be submitted from “an original and two copies” to “an original and one copy”. Beyond as noted above, the Department has previously determined that the standard conditions adequately meet the requirements of 40 C.F.R. 71.6(a)(3). No additional emission unit or stationary source operational or compliance factors indicate the unit-specific or stationary-source-specific conditions would better meet the requirements. Therefore, the Department concludes that the standard conditions as modified meets the requirements of 40 C.F.R. 71.6(a)(3).

### **Condition 74, 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. The reports themselves provide monitoring for compliance with this condition.

Condition 74.2 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 were 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 and the effective permit at that time, 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.

This condition was further modified to allow the Permittee to submit one of the required two copies in electronic format. This change more adequately meets the requirements of 18 AAC 50 and agency needs, as the Department can more efficiently distribute the electronic copy to staff in other locations.

### **Condition 75, NSPS and NESHAP Reports**

**Legal Basis:** The Permittee is required to provide the federal administrator and Department a copy of each emission unit report for units subject to NSPS or NESHAP

federal regulations under 18 AAC 50.326(j)(4). 40 C.F.R. 70 Appendix A documents that EPA fully approved the Alaska operating permit program effective November 30, 2001.

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

### **Condition 76, Permit Applications and Submittals**

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

**Factual Basis:** Standard Condition XIV directs the applicant to send copies of all application materials required to be submitted to the Department directly to the EPA, in electronic format if practicable. This condition shifts the burden of compliance from the Department to ensure that copies of application materials are submitted to EPA by transferring that responsibility to the Permittee.

### **Conditions 77 - 79, Permit Changes and Revisions Requirements**

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

**Factual Basis:** These are conditions required in 40 C.F.R. 71.6 for all operating permits to allow changes within a permitted stationary source without requiring a permit revision. The Permittee did not request trading of emission increases and decreases as described in 71.6(a)(13)(iii).

### **Condition 80, Permit Renewal**

**Legal Basis:** The Permittee must submit a timely and complete operating permit renewal application if the Permittee intends to continue source operations in accord with the operating permit program under 18 AAC 50.326(j)(3). The obligations for a timely and complete operating permit application are set out in 40 C.F.R. 71.5 incorporated by reference in 18 AAC 50.040(j)(3). 40 C.F.R. 70 Appendix A documents that EPA fully approved the Alaska operating permit program effective November 30, 2001.

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

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

### **Conditions 81 - 85, General Compliance Requirements**

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

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

### **Conditions 86 - 87, 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 shields the source from the applicable requirements listed in Table C under the federally approved State operating program effective November 30, 2001.

**Factual Basis:** Table C of Operating Permit No. AQ0272TVP02 shows the permit shields that the Department granted to the Permittee. The following table shows the requests that were denied and the reasons that they were denied. The Department based the determinations on the permit application, past operating permit, construction permits and inspection reports.

**Table H – Permit Shields Denied**

Shield Requested:	Reason for Shield Request:	Reason for Request Denial:
18 AAC 50.045(b) – Prohibitions	The permit implements all applicable air quality requirements for the stationary source. Since compliance with the permit will constitute compliance with applicable local, state, or federal air quality laws, this requirement is not applicable to the stationary source.	These prohibitions are ongoing requirements and therefore cannot be shielded. The prohibitions have not been placed in the permit because they add no value to the permit with respect to controlling stationary source emission units.
18 AAC 50.045(c) – Prohibitions	This requirement will be implemented through 18 AAC 50.201, which is otherwise addressed in the permit. This requirement is not applicable because the Department will impose any special requirements to protect ambient air quality through permit conditions adopted under 50.201.	These prohibitions remain in effect because they are in regulation whether they appear in the stationary source operating permit or not. Shielding the applicant from subparagraph (b), for instance, would have the effect of shielding the applicant from all requirements contained in the Air Quality Control Regulations including the requirement to obtain a permit if the shield requested is granted.
40 C.F.R. 60 Subpart A – General Provisions for the Natural Gas Processing Plant.  §60.7(a)(1), (2) & (3) – Notification and Recordkeeping (Initial Notification)	Initial notification was completed.	These are general NSPS requirements that are applicable anytime a modification or reconstruction of an existing emission unit will result into NSPS subpart applicability, or in the event a new NSPS rule becomes applicable during the life of the permit.
40 C.F.R. 60 Subpart A – General Provisions for the Natural Gas Processing Plant.  §60.7(a)(4) – Notification and Recordkeeping	This requirement only applies to “existing facilities”, as defined in 40 C.F.R. 60.2.	

**Attachment A**

**Figure 1. Summary Report - Gaseous and Opacity Excess Emission and Monitoring System Performance**

Pollutant (Circle One—SO<sub>2</sub>/NO<sub>x</sub>/fuel sulfur)

Reporting period dates:

From \_\_\_\_\_ to \_\_\_\_\_

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

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

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

Monitor Manufacturer and Model No.: \_\_\_\_\_

Date of latest CMS (CEMS and PEMS) Certification or Audit: \_\_\_\_\_

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

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

Emission Data Summary <sup>1</sup>	CMS (CEMS and PEMS) Performance Summary <sup>1</sup>
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 emission _____ 3. Total duration of excess emissions X _____ (100)/[Total source operating time] _____ % <sup>2</sup>	1. CMS (CEMS and PEMS) downtime in reporting period 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 (CEMS and PEMS) Downtime _____ 3. [Total CMS (CEMS and PEMS) Downtime] X _____ (100)/[Total source 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 (CEMS or PEMS) downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in this condition shall be submitted.

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