Alaska Department of Environmental Conservation
Air Permits Program

Proposed Permit - February 25, 2014

ConocoPhillips Alaska, Inc.
Kuparuk Central Production Facility #1

STATEMENT OF BASIS
of the terms and conditions for
Permit No. AQ0267TVP02

Reviewed by Jim Plosay
ADEC AQ/APP (Juneau)

Prepared by: Enviroplan Consulting
Permit Writer: Julia Shannon

INTRODUCTION

This document sets forth the statement of basis for the terms and conditions of Operating Permit No. AQ0267TVP02.

STATIONARY SOURCE IDENTIFICATION

Section 1 of Operating Permit No. AQ0267TVP02 contains information on the stationary source as provided in the Title V permit application.

The stationary source is owned and operated by ConocoPhillips Alaska, Inc., and ConocoPhillips Alaska, Inc.is the Permittee for the stationary source's operating permit. The SIC code for this stationary source is 1311 - Petroleum and Natural Gas Production. The NAICS code for this source is 211111.

CPF-1 processes crude oil fluids produced from the Kuparuk River Unit located on the North Slope of Alaska. CPF-1 can process 150,000 barrels of crude oil per day and 250 million standard cubic feet of gas. Three-phase crude is transferred from the surrounding drill sites to CPF-1 where it is separated into crude oil for sale, produced water for reinjection, and natural gas for further processing as fuel and for reinjection. Energy needed to support operations comes primarily from combustion of produced hydrocarbon gas.

CPF-1 also contains a crude oil topping unit, KUTP, for production of Arctic grade diesel. Diesel is used in vehicles, support equipment, and in various well work activities. CPF-1 is also the location of two crude oil divert tanks which are used during upset or emergency situations which may affect transportation of oil.

The Kuparuk Operations Center (KOC), which is the main office and camp service for the Kuparuk River Unit, is located adjacent to CPF-1 on the same gravel pad. A potable water and wastewater treatment plant services KOC. Two incinerators are located at the wastewater treatment plant which are used to incinerate trash generated at KOC and sewage sludge generated at the treatment plant.

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 Kuparuk Central Production Facility #1 that are classified and have specific monitoring, recordkeeping, and reporting requirements are listed in Table A of Operating Permit No. AQ0267TVP02.

Table A of Operating Permit No. AQ0267TVP02 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.

EU IDs 1, 2, and 3 were upgraded from GE Frame 3J AT models to GE Frame 3K HE models in May 2004, October 2003, and November 2004, respectively. These units were originally constructed in the early 1980s after issuance of EPA permit PSD-X82-01, dated December 29, 1981, which authorized construction of these units and other equipment at CPF-1. The units were later modified in May 1993 to upgrade to Advanced Technology parts (ATP upgrade). The J-to-K upgrades completed in 2003 and 2004 were authorized by the Department without the need to first obtain a construction permit as documented in correspondence to CPAI dated November 13, 2003. Letters notifying the Department and EPA of the "off-permit" facility changes were provided by the Permittee on October 9, 2003, May 6, 2004, and October 14, 2004.

EMISSIONS

A summary of the potential to emit (PTE)[1] and assessable PTE as indicated in the permit application from the Kuparuk Central Production Facility #1 is shown in the table below.

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

Pollutant	NO_X	CO	PM-10	SO_2	VOC	HAPs	CO_2e[2]	Total (excl. CO_2e)
PTE	3,314	1,077	129	322	468	60.7 [1]	1,133,172	5,370
Assessable PTE	3,314	1,077	129	322	468	0	0	5,309

Table Note: 1) HAP total is 51.8 tpy for CPF-1 production pad emission units only.

The assessable PTE listed under Condition 75.1 is the sum of the emissions of each individual regulated air pollutant for which the stationary source has the potential to emit quantities greater than 10 TPY other than CO_2e. For the combustion emission units and the volatile organic liquid storage tanks, essentially all the Hazardous Air Pollutant (HAP) emissions are a subset of the VOC emissions, so HAP emissions are not included in the total column for the row labeled assessable "PTE". Doing so would double count emissions. (Note: The HAP emissions shown in Table I are the total HAP PTE for all regulated emission units at all CPF-1 locations. However, per 40 C.F.R. 71.2 and CAA 112(b)1, emissions from oil or gas exploration or production wells with their associated equipment are not aggregated when determining the total potential to emit hazardous air pollutants. Therefore, emissions from units located at any drill site, including DS1E, DS1J, and DS1R are not aggregated with emission units located at CPF-1 when determining the HAPs major status of the stationary source.) The emissions listed in Table I are estimates to be used for informational purposes only. The listing of the emissions does not create an enforceable limit to the stationary source.

[1] *Potential to Emit* or *PTE* means the maximum capacity of a stationary source to emit a pollutant under its physical or operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source, as defined in AS 46.14.990(23), effective 12/3/05.

[2] *CO_2e emissions* are defined as the sum of the mass emissions of each individual GHG adjusted for its global warming potential (GWP).

Potential criteria pollutants and HAPs emissions were estimated in the November 2009 and March 2011 amended permit renewal applications and supplemental data submittals through CPAI's updated HAP emission estimates, Attachment E, December 31, 2012. The PTE for criteria pollutants was estimated based on AP-42 emission factors, EPA's tanks 4.09d program, and any allowable emission rates and/or operational limits applicable to emission units at the stationary source. Potential emissions of SO_2 are estimated based on mass balance and an assumed fuel gas H_2S content of 200 ppmv and liquid fuel sulfur content of 0.25 percent by weight. For Greenhouse Gas (GHG) Emissions CO_2e, CPAI submitted calculations on November 1, 2011. CPAI estimated PTE based on the emission factors found in 40 C.F.R. 98, Subpart C, Tables C-1 and C-2.

HAP emissions were calculated using GRI-HAPCalc Version 3.01 software, AP-42 emission factors, and, for turbine formaldehyde emissions, the results of an August 2005 CPF-3 Frame 5 HAP stack test conducted by the Permittee. Based on revised estimates of HAP emissions from produced water tanks, the estimated aggregated HAP total emission rate is 51.8 TPY from emission units at the CPF-1 production pad. The highest individual HAP is n-hexane (due largely to potential emissions from the CPF-1 VOL storage tanks) with an estimated emission rate of 26.8 TPY.

BASIS FOR REQUIRING AN OPERATING PERMIT

In accordance with AS 46.14.130(b), an owner or operator of a Title V source[3] 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:

(1) A major source;

(2) 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;

(3) 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), and EPA's March 2011 *PSD and Title V Permitting Guidance for Greenhouse Gases* as:

a) 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;

b) A major source as defined in Section 112 of the Clean Air Act that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants;

c) Contains a source, including an area source, subject to a standard, limitation or other requirement under Section 111 of the Act (Standards of Performance for New Stationary Source, NSPS) not exempted or deferred under AS 46.14.120(e) or (f);

[3] *"Title V source"* means a stationary source classified as needing a permit under AS 46.130(b) [*ref. 18 AAC 50.990(111)]*.

d) Contains a source, including an area source, subject to a standard or other requirement under Section 112 of the Act (National Emission Standards for Hazardous Air Pollutants, NESHAP) not exempted or deferred under AS 46.14.120(e) or (f);

e) Contains a source, including an existing or newly constructed GHG emission source, that emits or has a PTE equal to or greater than 100,000 TPY of CO2e and 100 TPY GHGs on a mass basis.

AIR QUALITY PERMITS

Previous Air Quality Permit to Operate

The final permit-to-operate issued to this stationary source is Permit to Operate No. 9373-AA004, as amended through January 3, 1997. This permit included all construction authorizations issued through January 3, 1997.

Title I (Construction and Minor) Permits

Construction Permit No. 9773-AC016 was issued to this facility on February 13, 1998 and was administratively revised on June 27, 2001. Construction Permit No. 267CPT01 was issued to this stationary source on April 28, 2003 and amended Permit to Operate No. 9373-AA004 and PSD Construction Permit No. 9773-AC016 Revision 1. The BACT emission limits for the stationary source contained in EPA PSD permit number PSD-X82-01, as amended through October 7, 1997, have been adopted as the current limits in Construction Permit No. 267CPT01. The stationary source-specific requirements established in this construction permit were included in AQ0267TVP01.

By letter dated May 28, 2003, the Permittee requested an administrative amendment to Operating Permit No. 267TVP01. The administrative amendment, Revision 1 of the permit, was issued on June 20, 2003. The revision consisted of changing the expiration date of the permit from April 28, 2008 to May 27, 2008.

Construction Permit No. 267CP02 was issued March 26, 2004 and was later rescinded by Minor Stationary Source Permit No. AQ0267MSS01 which was issued August 5, 2005 and administratively revised in AQ0267MSS01, Rev. 1, on March 24, 2006. This same permit was later rescinded and replaced by Minor Permit No. AQ0267MSS02, which was issued on November 13, 2006. These permits authorize use of generic drill rig and associated equipment, well servicing equipment, one portable flare, and construction of production heaters at Kuparuk Drill Sites 1E and 1J. Permit No. AQ0267TVP01, Revision 2 was issued on August 8, 2007 to incorporate Minor Permit No. AQ0267MSS02.

The following changes were made as part of AQ0267TVP01, Revision 2:

General revisions that apply to incorporation of Minor Permit No. AQ0267MSS02

- Updated the emission unit inventory to reflect new equipment permitted under AQ0267MSS02, shut down of a freeze protection pump at DS1E, and upgrades to the Frame 3 turbines from J model to K model;
- Updated the assessable PTE to account for the emission unit inventory changes stated above; and
- Updated the Statement of Basis based on permit revisions.

Incorporation of Terms and Conditions of Minor Permit No. AQ0267MSS02

- Updated the visible emissions and PM monitoring, recordkeeping and reporting conditions of the permit to incorporate new permitted equipment and the requirements stated in permit no. AQ0267MSS02.
- Added fuel consumption and hours of operation monitoring for new equipment.
- Revised the liquid fuel sulfur content limits to incorporate the limits in permit no. AQ0267MSS02.
- Carried forward from permit no. AQ0267MSS02 the limits established to protect ambient air quality to avoid classification as PSD major.
- Carried forward the requirement to establish and monitor exclusion zones around DS1E and DS1J; and
- included the off-permit change provisions stated in permit no. AQ0267MSS02.

Add two new Owner Requested Limits

- Add the incinerator recordkeeping requirements of 40 C.F.R. 60, Subpart O and 40 C.F.R. 62, Subpart III to demonstrate exemptions and to remain exempt from the limits of these rules.

Add Operational Flexibility Provisions

- Add the provisions of 40 C.F.R. 71.6(a)(13).

Revised the Permit to indicate that NSPS Subpart J applies to the flare tag no. H-KF01

- Add flare tag no. H-KF01 to conditions that address NSPS Subpart J and applicable portions of NSPS Subpart A

General Permit Revisions and Corrections

- Re-numbered the emission unit ID(s) throughout the permit to account for equipment that has been added and subtracted. Insert the new EU ID(s) into the appropriate EU group types in Table A.
- Updated the citations to NSPS and NESHAP standards to reflect the currently adopted versions of these rules (as of the December 14, 2006 amendment to the Alaska air quality regulations).
- Removed all tanks from the permit that were formerly subject to NSPS Subpart Kb and conditions in the permit that address Subpart Kb.
- Corrected the VOC BACT emission limit for incinerator H-347 to match the administrative revision made to EPA permit no. PSD-X82-01, dated October 27, 2003.
- Added applicable recordkeeping provisions of NSPS Subpart Dc to the permit for the DS1E and DS1J production heaters.
- Revised conditions that outline the NSPS Subpart GG monitoring requirements to incorporate the revisions to Subpart GG dated July 8, 2004.
- Added a new condition to include the applicable recordkeeping and reporting requirements of 40 C.F.R. 61, Subpart FF.
- Revised the permit shield to address new equipment, changes to NSPS Subpart Kb, and new rules that have been promulgated since permit no. AQ0267TVP01 was first issued.

- Updated the HAP emissions totals stated in Table A of the Statement of Basis to incorporated the updated calculations provided by the Permittee in October 2006 application to amend the Permit; and
- Made other general corrections to the permit and Statement of Basis.

The terms and conditions of Minor Stationary Source Permit No. AQ0267MSS03, issued December 14, 2007 and Minor Stationary Source Permit No. AQ0267MSS04, issued October 20, 2009 are incorporated into Title V Permit No. AQ0267TVP01. These permits authorize the use of two well injection pump engines at DS1R. Permit No. AQ0267MSS04 rescinded and replaced Condition 3.3 of Minor Stationary Source Permit No. AQ0267MSS03 (i.e., record keeping requirement for NOx PSD avoidance condition for EU IDs 64 and 65). Also found at DS1R is a drill site heater and a freeze protection pump which were authorized to operate at DS1R prior to the issuance of permit AQ0267MSS03.

The terms and conditions of Minor Stationary Source Permit No. AQ0267MSS05 issued August 5, 2013 are incorporated into this permit. This permit authorizes the Permittee to operate the Cutting Reinjection Module at CPF1 DS1B. The Cutting Reinjection Module will receive drilling fluid slurries via tank trucks and pump those slurries into permitted wells. The maximum capacity for continuous operation of the rock crusher and screening system for this specific site is 75 tons per hour.

All stationary source-specific requirements established in Permit Nos. 9373-AA004 (those not revised by Permit No. 267CPT01), 267CPT01, 9773-AC016 (Rev. 1), AQ0267MSS02, AQ0267MSS03, AQ0267MSS04, AQ0267MSS05, and AQ0267TVP01, Revision 2 are included in Operating Permit No. AQ0267TVP02.

Title V Operating Permit Application, Revisions and Renewal History

The most recent Title V operating permit issued for this stationary source is operating permit number AQ0267TVP01. This operating permit includes all construction authorizations issued through April 28, 2003. All stationary source-specific requirements established in this previous permit are included in the new operating permit as described in Table O.

The owner or operator submitted an application on November 19, 2007. Additional information (emission calculations) was received on June 2, 2008. The application was amended on November 19, 2009 and March 7, 2011.

The Permittee also submitted a permit revision request on March 5, 2012. The Permittee indicated that the construction and post-construction drilling phases authorized by Minor Source Permit AQ0267MSS02, Revision 1, issued on November 13, 2006, concluded in 2009. According to the Permittee, all drilling that has occurred since 2009 at the 1E and 1J pads should be considered as routine drilling covered under the Kuparuk Transportable Drill Rig Title V permit. As such, the Permittee requested the Department “sunset”, as obsolete and no longer applicable, several specified conditions of Minor Permit No. AQ0267MSS02 that had been incorporated into Title V Permit No. AQ0267TVP01 Revision 2. The Department agrees that the sunsetted conditions will not be incorporated into the current renewal since the request does not change the existing minor source permit terms. The Permittee should submit a separate application to the Department’s Title I permitting section to request a revision to AQ0267MSS02 to eliminate the same sunsetted conditions, as delineated in the March 5, 2012 request.

The Department has made updates to the emission unit inventory in Permit AQ0267TVP02 compared to previous Title V operating Permit No. AQ0267TVP01 Revision 2. The updates and their bases are documented in Table J.

Table J – Emission Unit Inventory Revisions

EU ID (See Table Note 1)	Tag No.	Emission Unit Description	Rating/ Size	Explanation
Engines				
	P-1E02	GM Detroit Allison Freeze Protection Pump (1E)	240 hp	Removed from service and no longer located at Drill Site 1E
Liquid Fuel-Fired Equipment				
21	P-CL04-ECC	GM Detroit Allison Water Booster Pump	215 hp	Removed from service and abandoned in place.
Storage Tanks				
	T-175	Emulsion Breaker	595 bbls	Not subject to any enforceable requirements (as of 10/15/03, NSPS Subpart Kb no longer applies)
	T-176	Triethylene Glycol (TEG)	595 bbls	Not subject to any enforceable requirements (as of 10/15/03, NSPS Subpart Kb no longer applies)
	T-177	Ideal Plus (Lube Oil)	476 bbls	Not subject to any enforceable requirements (as of 10/15/03, NSPS Subpart Kb no longer applies)
	T-178	Methanol	357 bbls	Not subject to any enforceable requirements (as of 10/15/03, NSPS Subpart Kb no longer applies)
	T-1009	Waste Hydrocarbons (Recycle)	870 bbls	Not subject to any enforceable requirements (as of 10/15/03, NSPS Subpart Kb no longer applies)
	T-1H01	Corrosion Inhibitor (Drill Site 1H)	870 bbls	Not subject to any enforceable requirements (as of 10/15/03, NSPS Subpart Kb no longer applies)
	T1-P101A	Divert Tank (Crude Oil)	55,000 bbls	In a letter to CPAI dated August 18, 2006, EPA determined that these tanks fall within the definition of process tanks in 40 C.F.R. 60.111b (as amended 10/15/03), which are exempt from Subpart Kb.
	T1-P101B	Divert Tank (Crude Oil)	55,000 bbls	
Flares				
34	PF1	Portable Flare	150 Mscf/day 16.2 MMscf/yr	Removed per 3/5/12 CPAI request to sunset obsolete AQ0267MSS02, Revision 1 Conditions.
Portable Storage Tanks				
56	Various	Temporary Crude Oil Storage Tank(s)	<10,000 gallons each	Removed per 3/5/12 CPAI request to sunset obsolete AQ0267MSS02, Revision 1 Conditions.

EU ID (See Table Note 1)	Tag No.	Emission Unit Description	Rating/ Size	Explanation
Drilling Rig (Portable Emission Units) at Drill Sites 1E and 1J				
58	Various	Drill Rig Engines	Various	Removed per 3/5/12 CPAI request to sunset obsolete AQ0267MSS02, Revision 1 Conditions.
59	Various	Drill Rig Heaters and Boilers	Various	Removed per 3/5/12 CPAI request to sunset obsolete AQ0267MSS02, Revision 1 Conditions.
60	Various	Rig Camp Engines	Various	Removed per 3/5/12 CPAI request to sunset obsolete AQ0267MSS02, Revision 1 Conditions.
Generic Well Servicing Equipment and Well Frac Units (Portable Emission Units) at Drill Sites 1E and 1J				
61	Various	Well Servicing Heaters	Various	Removed per 3/5/12 CPAI request to sunset obsolete AQ0267MSS02, Revision 1 Conditions.
62	Various	Well Servicing Engines	Various	Removed per 3/5/12 CPAI request to sunset obsolete AQ0267MSS02, Revision 1 Conditions.
63	Various	Well Frac Unit Engines	Various	Removed per 3/5/12 CPAI request to sunset obsolete AQ0267MSS02, Revision 1 Conditions.
		Grinding		
68a		Small Mill (A6061585)	25 tph	Added due to incorporation of Minor Permit No. AQ0267MSS05
68b		Large Mill (A6061585)	50 tph	Added due to incorporation of Minor Permit No. AQ0267MSS05
		Screening		
68c		Shaker #1	160 tph	Added due to incorporation of Minor Permit No. AQ0267MSS05
68d		Shaker #2	160 tph	Added due to incorporation of Minor Permit No. AQ0267MSS05

Note 1: EU ID numbers are provided only for units that were included in Rev 2 of permit AQ0267TVP01.

COMPLIANCE HISTORY

The stationary source has operated at its current location since 1979. 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. Minor reporting violations noted in the latest Full Compliance Evaluation of June 8, 2010 are believed to have been corrected.

The Department did pursue a compliance action regarding two emission units brought to Kuparuk River Unit (KRU) in 1996 as portable non-road engines. The units lost their non-road engine status as both engines have remained in operation at DS1R since 2000. The action resulted in CPAI applying for and obtaining Air Quality Minor Permit AQ0267MSS03 on December 14, 2007.

APPLICABLE REQUIREMENTS FROM PRE-CONSTRUCTION PERMITS

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

Alaska's State Implementation Plan 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 effective January 17, 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 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 K through Table Q below list the requirements carried over from Construction Permit No. 267CPT01 and 9773-AC016; Minor Source Specific Permit Nos. AQ0267MSS02, AQ0267MSS03, AQ0267MSS04, and AQ0267MSS05; and Operating Permit No. AQ0267TVP01 Revision 2 respectively into Operating Permit No. AQ0267TVP02 to ensure compliance with the applicable requirements. These tables do not include standard and general conditions.

Table K - Comparison of Construction Permit No. 267CPT01 Conditions to Operating Permit No. AQ0267TVP02 Conditions[4]

Permit No. 267CPT01 Condition number	Description of Requirement	Permit No. AQ0267TVP02 Condition Number	How condition was revised
3 and Exhibit A	Emission unit inventory list	Section 2	Same requirements.
4 and Exhibit B	BACT and other Emission Limits. H_2S content of natural gas fuel used and sulfur content of liquid fuel.	17 - 20, 23, 35	Same requirements except the liquid fuel sulfur content of 0.5% for heater H-102A is not carried forward because this heater is no longer capable of firing liquid fuel.
5 and Exhibit C	Monitoring – Fuel gas meters for Turbines and Heaters.	21	Same requirements.

[4] This table does not include all standard and general conditions.

Table L - Comparison of Construction Permit No. 9773-AC016 Conditions to Operating Permit No. AQ0267TVP02 Conditions[5]

Permit No. 9773-AC016 Condition number	Description of Requirement	Permit No. AQ0267TVP02 Condition Number	How condition was revised
III.E, IX.B.1.e, IX.C.1.b, IX.C.1.c	The Permittee shall install, calibrate, and conduct applicable continuous monitoring system performance test listed in 40 C.F.R. 60, Appendix B.	None.	Deleted. These conditions are not triggered and are no longer applicable. The two initial NOx emissions source tests results for EU ID 14 were both below 90%.
IV.A	Rated capacities of G-3203, H-3204, and H-102A.	Section 2	Changed rated capacities of G-3203, H-3204, and H-102A based on updated information received from CPAI.
IV.E	Monitor, record and report the hours of operation of emission units in Condition IV.A	22	Same requirements. Different format.
V.A.3	Limits on fuel type and quality	23	No change.
V.B, VII.C.3, VI.B.3	Monitoring and recordkeeping – the Permittee shall conduct periodic fuel tests or obtain vendor certification of fuel sulfur content.	23.5 and 49.1	Deleted "or obtain vendor certification of the fuel sulfur content". Fuel vendors do not certify the sulfur content of their fuel.
V.C	Reporting – the Permittee shall report fuel sulfur test results or copies of vendor certification.	23.6 and 49.3.a	Deleted "or copies of vendor certification of the fuel sulfur content". Fuel vendors do not certify the sulfur content of their fuel.
VI.A	40 C.F.R. 60, Subpart A – General Requirements	35 through 44	Included all applicable requirements of 40 C.F.R. 60, Subpart A.
IX.B.2 and VI.B	40 C.F.R. 60, Subpart GG (SO_2)	49	MR&R requirements are based on EPA granted custom fuel monitoring and applicable Subpart GG requirements.
VII.C.1 & C.2	Conduct a visible emission surveillance no less than once each calendar year and upon Department request conduct a particulate matter emission test or visible emission surveillance to demonstrate compliance with the limits in 18 AAC 50.055(a)(1) and (b)(1).	1.1	Replaced condition. The monitoring for gas-fired emission units for visible emissions is waived. The Department has found that natural gas-fired equipment inherently has negligible PM emissions. Monitoring shall consist of an annual compliance certification.
VII.C.4	Fuel consumption	21	Removed the obsolete requirement to submit a copy of the manufacturer's certification for each fuel meter within 90 days after installation.

[5] This table does not include all standard and general conditions.

Permit No. 9773-AC016 Condition number	Description of Requirement	Permit No. AQ0267TVP02 Condition Number	How condition was revised
IX.C.2 and VII.D	Reporting – Facility Operating Reporting Requirements	99	Replaced with Title V standard condition.
IX.A.1.a(1) & (2)	Install and operate EU IDs 14 and 17 with operational controls (CZ liner lean-head for EU ID 14, and low NO_X burners for EU ID 17) as BACT.	20.1	Installation of CZ liners and low NO_X Burners had been fulfilled; however, it is an ongoing requirement to operate with the CZ lean head liners for EU ID 14 and low NO_X burners for EU ID 17.
IX.A.1.b(1) & (2) and IX.A.2	BACT Emission Limits	20	No change.
IX.B.1.d	NO_X Monitoring for EU ID 14	20.2	No change.
IX.B.1. and IX.C.1	NO_X Recordkeeping and Reporting for EU ID 14	20.2.a	Replaced with current recordkeeping and reporting requirements for NO_X. The requirements in conditions IX.B.1.a & b and IX.C.1.a had already been fulfilled and are no longer applicable. The requirements in conditions IX.B.1.c & e and IX.C.1.b & c were not triggered and are therefore no longer applicable.

Table M - Comparison of Minor Source Specific Permit No. AQ0267MSS02 Conditions to Operating Permit No. AQ0267TVP02 Conditions[6]

Permit No. AQ0267MSS02 Condition number	Description of Requirement	Permit No. AQ0267TVP02 Condition Number	How condition was revised
3	Establish an ambient air boundary exclusion zone	None	Per CPAI, construction and post-construction phases of development at drill sites 1E and 1J were completed in 2009. This requirement has been retired.
4	Prohibit public access within the established ambient air boundary	None	Per CPAI, construction and post-construction phases of development at drill sites 1E and 1J were completed in 2009. This requirement has been retired.
5	Limit NOx emissions from units C-2101A, C-2101B and C-2101C to no greater than 824 tons per 12 consecutive month period	27	Same requirements.

[6] This table does not include all standard and general conditions.

Permit No. AQ0267MSS02 Condition number	Description of Requirement	Permit No. AQ0267TVP02 Condition Number	How condition was revised
7	Document when construction and post-construction drilling commence and are completed	None	Per CPAI, construction and post-construction phases of development at drill sites 1E and 1J were completed in 2009. This requirement has been retired.
8, 9, 10,	Limits on fuel combustion by drill rig operations	None	Per CPAI, construction and post-construction phases of development at drill sites 1E and 1J were completed in 2009. This requirement has been retired. EU IDs 34 and 58-63 were removed from the permit.
11, 12.3, 13.3	Monitor, record, and report daily and monthly fuel consumption	None	Per CPAI, construction and post-construction phases of development at drill sites 1E and 1J were completed in 2009. This requirement has been retired. EU IDs 34 and 58-63 were removed from the permit.
12	Limits on fuel consumption by well service heaters and engines and well frac unit engines	None	Per CPAI, construction and post-construction phases of development at drill sites 1E and 1J were completed in 2009. This requirement has been retired. EU IDs 34 and 58-63 were removed from the permit.
13	Limits on gas burned in portable flare	None.	Per CPAI, construction and post-construction phases of development at drill sites 1E and 1J were completed in 2009. This requirement has been retired. EU IDs 34 and 58-63 were removed from the permit.
14	Limit heat input rating of production heaters to 184 MMBtu/hr	28	Same limit. Reporting requirement has not been carried forward as the one-time requirement has been met.
15	Limit fuel oil sulfur content to 0.150% by weight and fuel gas H_2S content to 275 ppmvd	23	Same fuel gas requirement for production heaters in a different format. Per CPAI, construction and post-construction phases of development at drill sites 1E and 1J were completed in 2009. EU IDs 34 and 58-63 were removed from the permit and the fuel oil sulfur limit established by this permit was not carried forward.
16	Limit combined SO_2 emission from drill rig heaters and boilers, production heaters, and portable flare to no greater than 35 tons per 12 consecutive month period.	29	Same requirement for production heaters. Per CPAI, construction and post-construction phases of development at drill sites 1E and 1J were completed in 2009. EU IDs 34 and 58-63 were removed from the permit.

Permit No. AQ0267MSS02 Condition number	Description of Requirement	Permit No. AQ0267TVP02 Condition Number	How condition was revised
17	Limit VOC emissions from the temporary crude oil storage tank to no greater than 34 tons per 12 consecutive month period. Record, estimate, and report emissions.	None.	Per CPAI's 3/5/12 request, this project is complete. Therefore, emissions limits for project-specific flowback emissions associated with the Temporary Crude Oil Storage Tanks (EU ID 56) are complete. EU ID 56 was removed from the permit.
18, 18.1, 18.2, 18.3, 18.4	Visible emission limits and associated monitoring and reporting	1 through 5	Same requirements in a different format for production heaters. EU IDs 59, 60, and 34 were removed from the permit.
19, 19.1, 19.2, 19.3	Particulate matter emission limit and associated monitoring and reporting	7	Same requirements in a different format for production heaters. EU IDs 59, 60, and 34 were removed from the permit.
20	Sulfur compound emission limit	16	Same requirements in a different format for production heaters. EU IDs 59, 60, and 34 were removed from the permit.
Section 4	Public access control plan for ambient air boundaries	None	Public access control was established and enforced only during post construction phase of drill site 1E and 1J development, which has been completed per CPAI.
Section 5	Emission unit inventory	Table A	EU IDs 34, 56, and 58-63 have been removed from the permit.

Table N - Comparison of Minor Source Specific Permit No. AQ0267MSS03 Conditions to Operating Permit No. AQ0267TVP02 Conditions[7]

Permit No. AQ0267MSS03 Condition Number	Description of Requirement	Permit No. AQ0267TVP02 Condition Number	How condition was revised
1.2 and 1.3	Document installation of a replacement unit for EU IDs 64 and 65	24	Same requirement
3	Limit combined total fuel consumption for EU IDs 64 and 65 to no more than 148,000 gallons per 12 consecutive month period	30	Same requirement, including the revised version of Condition 3.3 established under permit AQ0267MSS04.
4	Visible emission limits	1	Same requirement
4.1	Visible emission monitoring and reporting	n/a	Reporting requirement has not been carried forward as the one-time requirement has been met.
5	Particulate matter emissions limit	7	Same requirement
6	Sulfur compound emission limit	16	Same requirement

[7] This table does not include all standard and general conditions.

Permit No. AQ0267MSS03 Condition Number	Description of Requirement	Permit No. AQ0267TVP02 Condition Number	How condition was revised
7	Maintain equipment according to manufacturer's or operator's maintenance procedures	77	Same requirement
8	Assessable potential to emit	75	Same requirement, revised to reflect current emissions

Table O – Comparison of Minor Source Specific Permit No. AQ0267MSS04 Conditions to Operating Permit No. AQ0267TVP02 Conditions[8]

Permit No. AQ0267MSS04 Condition number	Description of Requirement	Permit No. AQ0267TVP02 Condition Number	How condition was revised
2 & 3	rescinded and replaced Condition 3.3 of AQ0267MSS03	30	Same requirement

Table P – Comparison of Minor Source Specific Permit No. AQ0267MSS05 Conditions to Operating Permit No. AQ0267TVP02 Conditions[9]

Permit No. AQ0267MSS05 Condition number	Description of Requirement	Permit No. AQ0267TVP02 Condition Number	How condition was revised
Table 1	Emission unit inventory list	Table A & Table J	Same requirement
Table 1 Notes a & b	Emission unit inventory list	Table A Notes 5 & 6	Added Note 5 : Emission Units 68a through 68d are operated using high line power and Note 6: tph = Ton per hour
1	Rock Crusher Installation and Operation authorization.	33	New condition due to Rock Crusher
2	Rock Crusher Maintenance requirements.	77	Same requirement
3	Visible Emissions	1 & 1.5	Same requirement
4	Particulate Matter	6 & 6.5	Same requirement
5	Fugitive Dust: For EU IDs 68a through 68d; all material processing to be performed under wet, saturated conditions in an enclosed space without exhaust ports	81	Same requirement, including the revised version of Condition 81 established under permit AQ0267MSS05

[8] This table does not include all standard and general conditions.
[9] This table does not include all standard and general conditions.

Table Q - Comparison of Previous Operating Permit No. AQ0267TVP01 Revision 2 Conditions to Operating Permit No. AQ0267TVP02 Conditions[10]

Permit No. AQ0267TVP01 Revision 2 Condition number	Description of Requirement	Permit No. AQ0267TVP02 Condition Number	How condition was revised
1.1	Assessable Emissions	75	Updated the CPF-1 assessable PTE.
10	Fuel Consumption Monitoring for EU IDs 1 - 50	21	Condition revised to clarify the requirements to monitor and report liquid fuel consumption by dual fired units (EU IDs 4 through 9, 12, 13, and 15).
NA	Installation of Replacement Units at DS1R	24	Conditions carried forward from permits AQ0267MSS03 and AQ0267MSS04 were not included in AQ0267TVP01 Revision 2 permit.
NA	Limit combined total fuel consumption for EU IDs 64 and 65 to no more than 148,000 gallons per 12 consecutive month period	30	Conditions carried forward from permits AQ0267MSS03 and AQ0267MSS04 were not included in AQ0267TVP01 Revision 2 permit.
NA	NSPS Subpart A, Monitoring.	43	40 C.F.R. 60.13 requirements were added to the permit to include the specific applicable provisions that apply to operation and maintenance of a CEMS. This language was added because it is applicable via NSPS Subpart J and the EEMSPR requirement.
32	NSPS Subpart GG Fuel Sulfur Monitoring and Reporting	49	Revise this condition to include the EPA-approved December 7, 2007 custom fuel monitoring schedule.
33	NSPS Subpart J SO_2 Emission Standard	46	Revised condition so that it is consistent with the actual limitation expressed in the NSPS
44	Charging Rate ORL for EU ID 36	32	Clarified the basis for this owner-requested limit
88	Operating Reports	99	Changed the reporting deadlines for the first, second and third quarterly reports to allow 45 days after each quarter to submit the report.
NA	NESHAP Subpart A, Monitoring.	54 - 56	40 C.F.R. 61. requirements were added to the permit.
NA	NESHAP Subpart ZZZZ	60 - 67	Added applicable NESHAP Subpart ZZZZ to permit. EU IDs 19, 20, 22 through 28, and 64 through 66 shall comply with these requirements beginning no later than May 3, 2013.
Table 4	Permit Shield Granted	Table G	Added permit shield for NESHAP Subparts EEEE, YYYY, ZZZZ, BBBBBB, and CCCCCC with applicable explanations.

[10] This table does not include all standard and general conditions.

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 some of the regulations that are potentially applicable to this stationary source and the specific reasons why these rules are not included in the permit. Additional information for other rules is included in the permit shield provided as Table G of the permit.

40 C.F.R. 63 (NESHAP) Subpart HH: Although the Permittee operates several triethylene glycol (TEG) dehydration units at the stationary source, the glycol reboilers use electric elements to heat the glycol. There are no atmospheric vents in the glycol dehydration system, although the units do have pressure safety protection vents that are routed into the flare system.

Once the TEG is heated in the reboilers, the TEG off the bottom is pumped back around in the captive TEG system. The overhead from the reboilers is routed to an overhead condenser system, where the condensed water is pumped back into the CPF1 Produced Water system and the uncondensed material (the gas) is compressed into the plant fuel gas system. Further, the black oil exemption §63.760(e)(1) applies for the Subpart HH rule.

40 C.F.R. 60 (NSPS) Subpart KKKK: Although the source includes several turbines (EU IDs 1 - 14), they are not currently affected by the provisions of this Subpart as they have not been modified or reconstructed since the Subpart applicability date. The permit shield reflects this qualified non-applicability determination.

40 C.F.R. 63 (NESHAPS) NESHAP Subpart CCCCCC applies to gasoline storage tanks at gasoline dispensing facilities at an area source of HAP emissions. EU ID 67 is a storage tank that started operation in June 2009 and is part of a new gasoline dispensing facility as defined in 40 C.F.R. 63.11112 (Subpart CCCCCC). Since CPF-1 is a major source and not an area source of HAPS, the provisions of the rule do not apply. There is no comparable major-source provision.

40 C.F.R. 64 Compliance Assurance Monitoring (CAM) Rule: The requirements of 40 C.F.R. 64 apply to a pollutant-specific emissions unit at a major source if the unit satisfies **all** of the following criteria: (1) the emission unit is subject to an applicable emission limitation or standard; (2) the unit uses a control device to comply with any such applicability emission limitation or standard; and (3) the unit has potential pre-control device emissions of the applicable regulated air pollutant equal to or greater than the major source thresholds for the applicable regulated air pollutant. Except for the KUTP (EU ID 57), no emission unit at this stationary source uses a control device to achieve compliance with any emission limitation or standard. The KUTP does not have potential pre-control device emissions of an applicable regulated air pollutant equal to or greater than 100 tpy of criteria pollutants, 10 tpy of any hazardous air pollutant (HAP), or 25 tpy of all HAPs combined. Additionally, the following Part 64 exemption further applies to the KUTP:

> **Kuparuk Unit Topping Plant (KUTP):** The closed vent systems installed at KUTP (EU ID 57) uses a control device (flare, EU ID 30) to comply with 40 C.F.R. 60, Subpart GGG/VV. The Department determined that the stationary source is exempt from CAM based on the exemption allowed under §64.2(b)(1)(vi) because EU ID 30 must comply with a permit condition that specifies a continuous compliance determination method, as defined in §64.1 and Condition 50.

Risk Management Plan (RMP); 40 C.F.R. 68: The Kuparuk Central Production Facility #1 is not subject to the general duty clause under the Clean Air Act Section 112(r)(1) (40 C.F.R. 68.10) because it does not have a threshold quantity of a regulated substance in a process as determined in §68.115.

STATEMENT OF BASIS FOR THE PERMIT CONDITIONS

The state and Federal regulations for each condition are cited in Operating Permit No. AQ0267TVP02. 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 through 6, & 15 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 – 20, 22 - 33, 37 – 50, 64, and 65 are fuel-burning equipment or industrial processes.
- 18 AAC 50.050(a) applies to the operation of incinerators. EU IDs 35 and 36 are incinerators that are affected by this rule.

U.S. EPA incorporated these standards as revised in 2002 into the State Implementation Plan 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).

Condition 2 prohibits the Permittee from causing or allowing visible emissions in excess of 18 AAC 50.050(a). This visible emission standard applies to the operation of any incinerator in Alaska, including an air curtain incinerator. The Permittee shall not cause or allow the affected incinerator to violate this standard.

MR&R requirements are listed in Conditions 3 through 6, and 15 of the permit.

These conditions have been adopted into regulation as Standard Permit Condition (SPC) IX. These conditions have been modified as follows:

- The Department added a footnote in Condition 3.1 which states “Emergency operations are exempt from the visible emissions observations deadlines associated with emission unit “operation” under this condition.” The Department approved of this footnote as logistically it would be challenging to schedule and coordinate a certified reader to conduct readings during emergency operations.
- 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 revised the Standard Permit Condition language for flares by adding *“or within 12 months after the permit effective date, whichever is later”* at the end of the first sentence in Condition 6.
- The Department revised the deadline in Condition 15.2 for notification and commencement of Method 9 monitoring for dual fuel fired emission units from 15 days to 30 days after the end of a calendar month when the additional MR&R has been triggered. The 30-day deadline in this condition is consistent with the deadline to begin additional MR&R for liquid fuel fired emission units found in Condition 3.1.a(ii).

Beyond as noted above, the Department has 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 that 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).

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 standards for liquid and gas fired emission units and incinerators. Equipment types covered by these conditions are internal combustion engines, turbines, heaters, boilers, flares, and incinerators. Initial monitoring frequency schedules are established for the liquid fuel-fired emission units 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.

Insignificant Emission Units:

For EU IDs 19, 20, 22 through 28, 64, 65, and 68a through 68d visible emissions monitoring is not required unless these units are significant emission units based on actual emissions. As long as the calendar year operating time or fuel consumption does not exceed the values shown in Table B, these units are insignificant by emissions rate as specified in 18 AAC 50.326(e) and no monitoring is required in accordance with Department Policy and Procedure No. AWQ 04.02.103, Topic # 3, 10/8/04. The Permittee must annually certify compliance under Condition 100 with the visible emissions standard.

Gas-Fired Emission Units:

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. However, the Department can request a source test for visible 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 Emission Units Other Than IEUs:

Monitoring – The visible emissions shall be observed using Method 9 as detailed in Condition 3.

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

Reporting - The Permittee is required to report: 1) the results of visible emissions observations, 2) incidents when emissions have been observed in excess of the State visible emissions standard or in excess of the BACT opacity limit, and 3) 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 Emission Units:

For any of EU IDs 4-9, 12, 13, and 15 as long as the unit operates only on gas, monitoring consists of a statement in each operating report 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 15 is required for that emission unit in accordance with Department Policy and Procedure No. AWQ 04.02.103, Topic # 2, 10/8/04. 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.

Flares:

Monitoring for flares (EU IDs 29 - 33) requires annual Method 9 observations of scheduled flaring events lasting more than one hour. The Permittee must report the results of these observations to the Department.

Incinerator Visible Emissions MR&R:

For EU IDs 35 and 36, the Permittee is required to monitor, record and report according to Condition 2 as well as Condition 19.3 for EU ID 36. The incinerators at CPF-1 have historically demonstrated no visible emissions compliance problems. As such, the Department requires an annual VE monitoring schedule and Method 9 monitoring (rather than smoke/no-smoke) specified in Condition 2.1. This is consistent with permit no. AQ0267TVP01 Revision 2.

Conditions 7, and 9 through 15, Particulate Matter (PM) Standard and MR&R for Fuel-Burning Equipment

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 – 20, 22 - 33, 37 - 50, 64, and 65 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 7 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 9 - 15 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 Emission Units:

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 permit conditions meet the requirements of 40 C.F.R. 71.6(a)(3).

Monitoring - The monitoring of gas-fired emission units 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.

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 Emission Units:

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

Dual Fuel-Fired Emission Units:

For any of EU IDs 4 - 9, 12, 13, and 15, as long as the unit operates only on gas, monitoring consists of a 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 15 is required for that emission unit in accordance with Department Policy and Procedure No. AWQ 04.02.103, Topic # 2, 10/8/04. When any of these emission units operates on a backup liquid fuel for 400 hours or less in a calendar year, monitoring for that emission unit consists of an annual certification of compliance with the particulate matter standard. The 400-hour trigger for additional monitoring applies to each individual unit and not as a combined total for all units.

Insignificant Emission Units:

For EU IDs 19, 20, 22 – 28, 64, 65, and 68a through 68d monitoring is not required unless these units are significant emission units based on actual emissions. As long as the calendar year operating time or fuel consumption does not exceed the values shown in Table B, these units are insignificant by emissions rate as specified in 18 AAC 50.326(e) and no monitoring is required in accordance with Department Policy and Procedure No. AWQ 04.02.103, Topic # 3, 10/8/04. The Permittee must annually certify compliance under Condition 100 with the particulate matter 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 State Implementation Plan (SIP) adopted in November 1984. This SIP was approved as part of the September 13, 2007 SIP approval but not incorporated by reference. No recordkeeping or reporting is required.

Drill Site 1 B Cutting Reinjection Module

For EU IDs 68a-68d, the Department imposed no particulate matter MR&R because these industrial processes are conducted on wet material. As such, the activities should not generate measurable particulate matter.

Conditions 8, 12 through 14, Incinerator Particulate Matter Emissions and MR&R

Legal Basis: These conditions ensure compliance with the applicable incinerator particulate matter standard under 18 AAC 50.050(b). The particulate matter emission standard for EU ID 35 as listed in Condition 8 for this permit applies to the operation of the incinerator based on its rated capacity. The Permittee may not cause or allow the affected incinerator to violate this standard.

U.S. EPA incorporated this standard as revised in 2002 into the State Implementation Plan effective September 13, 2007.

Factual Basis: Under 18 AAC 50.050(b), EU ID 36 is not subject to particulate matter standard because the incinerator has a rated capacity of less than 1000 pounds per hour.

For EU ID 35, the Permittee is required to monitor, record and report in accordance with Conditions 8.1 and 12 through 14.

Condition 16, 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 – 20, 22 - 33, 37 - 50, 64 and 65 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). Fuel sulfur testing will verify compliance with the SO_2 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 that 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: Condition 16.5.a(ii) requires the Permittee to conduct a monthly analysis for the fuel gas sulfur content using either ASTM D4084, D5504, D4810, D4913, D6228 or GPA Standard 2377, or a listed method approved in 18 AAC 50.035(b)-(c) or 40 C.F.R. 60.17 incorporated by reference in 18 AAC 50.040(a)(1). If a natural gas demonstration is made under Condition 49.1.a(i), the frequency of fuel sulfur analysis may be reduced to no less frequent than semi-annually. For emission units using the same fuel gas as that combusted by EU ID 16, compliance with Condition 16 can be demonstrated using records from the H_2S CEMS monitoring of the fuel.

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 the sulfur content analysis with the operating report.

Conditions 17 through 20, Pre-Construction Permit Requirements (BACT Emission Limits)

Legal Basis: The Permittee is required to comply with all currently applicable 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 (ORLs) established under 18 AAC 50.225. These requirements include Best Available Control Technology (BACT) limits, limits to ensure compliance with the attainment or maintenance of ambient air quality standards or maximum allowable ambient concentrations, and owner requested limits. 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: On December 29, 1981, EPA Region 10 issued PSD permit number PSD-X82-01 to ARCO Alaska, Inc. for construction of new equipment at four Kuparuk facilities. EPA twice administratively approved equipment lists under this PSD permit, once on March 23, 1983, and a second time on June 13, 1984. EPA on October 7, 1997 and October 27, 2003 issued revisions to the EPA PSD permit. The primary revisions include apportionment of field-wide ton per year limits to stationary source-specific equipment group limits, and updated emission limits based solely on AP-42 factors to the values in the edition of AP-42 that were current in 1997.

As part of the EPA process, ARCO Alaska demonstrated to Region 10 that on a ton per year basis an overall decrease in allowable emissions would occur under the permit revision. The only exception was an increase in allowable SO_2 emissions due to subsequent permitting by the Department that raised the SO_2 BACT limit originally established by EPA.

The majority of these changes reflect the revised emission limits granted by EPA on October 7, 1997 and October 27, 2003. The EPA revisions established ton per year emission limitations on a group basis for turbines and heaters, and one incinerator. For turbines and one incinerator, ton per year emission limits apply for NO_X, CO, SO_2, PM, and VOC. Ton per year emissions limits for heaters apply to the same pollutants except there is no limit for VOCs. For NO_X and CO emissions from turbines and heaters, EPA established BACT emission limits in terms of tons per year as well as other terms (e.g. ppmv and lb/MMBtu). Emission limits for SO_2, PM, and VOC were established by EPA only in terms of tons per year. EPA also established an opacity limit of 10% for certain turbines and one incinerator.

ADEC has five clarifying table notes for the Turbine BACT Table C and two table notes for the Heater BACT Table D. ADEC updated the original footnotes to bring forward text in the original Operating Permit action in 2003. ADEC interprets these footnotes such that the short-term turbine NO_X emission limits only apply at full load, 15% O_2, and ISO conditions. The other short-term emission limits refer to full load. The updated table notes also reference the PSD permitting decision for the tabulated limits.

Further, based upon a PSD BACT correspondence from Ms. Bonnie Thie, EPA X, issued May 28, 1997, ADEC added a table note that the requirement to operate using good combustion practices applies at all times. ADEC carried this note forward into the CPAI decision notwithstanding its application to the neighboring field, because EPA's PSD approval for Kuparuk River Unit changes are contemporaneous with those of Prudhoe Bay and contain analogous short-term emission limits on turbines and process heaters. Although this letter pertained to the Prudhoe Bay EPA PSD decisions and determined that BACT was based upon use of pipeline quality natural gas coupled with good operational practices, CPAI has configured certain turbine units at the Kuparuk River Unit to burn liquid fuels in the event of primary fuel interruptions and readiness testing. Therefore, ADEC did not include Ms. Thie's pipeline quality natural gas determination in the table notes.

As the term "full load" could be subject to interpretation, the Department clarifies that full load is the maximum load achievable at the time of the periodic emission source test. This avoids potential "unenforceable" arguments that the gap-filled test results are not representative of full-load operations.

Compliance with the short-term BACT NOx emission limits for turbines EU IDs 1 - 3, 8 - 13, and 14 reflect the MR&R NO_x requirements for NSPS Subpart GG in Conditions 48.2 - 48.4. While only EU IDs 1 - 3 and 10 - 13 are subject to the NSPS Subpart GG - NOx emission limit, the same MR&R conditions (Conditions 48.2 - 48.4) are applied to the remaining turbines except EU ID 14 based on the periodic MR&R requirements of 40 C.F.R. Part 71. EU ID 14 is not subject to the testing schedule outlined in Condition 48.2 because the Permittee is required to test EU ID 14 every two years as discussed below.

Periodic turbine CO BACT testing and related record keeping and reporting require routine testing on no less than a 5-year cycle for those emission units operating at least 400 hours per year on a given fuel at any time during this 5-year cycle. If the most recent performance test on a turbine that represents a group of like units showed CO emissions at less than or equal to 90 percent of the limit shown in Condition 17, then periodic monitoring is required as follows. Within 12 months after exceeding 400 hours of run time and fuel type in any 12-month period ending after the effective date of this permit, if CPAI has not tested any representative unit of the turbine group during the previous 4 years. If the most recent performance test showed operations at greater than 90 percent of the emissions listed in Condition 17, 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.

For performance testing, the Department permits substitution testing subject to restrictions analogous to those for the turbine NSPS Subpart GG NO_x testing.

Source testing requirements to assess compliance with the short-term heater BACT NOx and CO emission limits for EU IDs 16, 17, 37 - 41, 43 - 45, and 48 - 50 including MR&R are included in Condition 18.4.

EU IDs 14 and 17 were permitted under Construction Permit No. 9773-AC016 on February 13, 1998 and were installed in 1999. The Department derived NO_x and SO_2 BACT limits for these emission units during the PSD pre-construction review conducted in 1998 as part of this construction permit decision.

For EU ID 14, Condition IX.B.1(d) of that permit required the Permittee to demonstrate compliance with the short term NO_x BACT limit by conducting periodic testing once every two years. The results of the initial two source tests conducted for EU ID 14 were between 80% and 90% of the limit NO_x BACT limit. Since neither source test exceeded 90% of the NO_x BACT limit, the CEMS requirement under Condition IX.B.1(e) of Permit No. 9773-AC016 does not apply.

The EPA revisions for Permit No. PSD-X82-01 and the BACT emissions limits from Construction Permit No. 9773-AC016 have been incorporated into Construction Permit No. 267CPT01 and this Title V Operating Permit. For affected turbines and incinerators, the Permittee is required to calculate and report emission levels for NO_x, SO_2, CO, PM, and VOC. For affected heaters, the Permittee is required to calculate and report emission levels for NO_x, SO_2, CO and PM.

Under Permit No. PSD-X82-01 (revised October 7, 1997), U.S. EPA established a particulate matter BACT limit of 12 tpy and of 0.1 gr/dscf at 12% CO_2 for EU ID 36, carried forward as Condition 19. Conditions 19.4 and 19.5 outline the monitoring, recordkeeping, and reporting to demonstrate compliance with these limits.

Conditions 21 through 23, Operating and Construction Permit Conditions Carried Forward

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: Permit to Operate No. 9373-AA004, Construction Permit No. 9773-AC016, and Minor Stationary Source Permit No. AQ0267MSS02 contain conditions that must be carried forward to this Title V permit. These conditions contain requirements to monitor fuel consumption and operating hours for fuel-fired equipment so that emission levels may be calculated, and to monitor the H_2S concentration for the gas-fired equipment and sulfur content in the liquid fuel for certain emission units, to demonstrate compliance with the limits in Conditions 23 and 16.

Some of these conditions were applied to the stationary source to verify compliance with BACT limits. Other conditions were applied to avoid classification as a PSD-major modification at DS1E and DS1J in the case of certain limits established under Permit No. AQ0267MSS02. With respect to AQ0267MSS02, the applicant submitted a notification on March 5, 2012 to advise that construction drilling and post-construction drilling activities were completed during 2009; and that certain of the permit conditions have “sunsetted” and are obsolete. The affected emission units and conditions are identified in Table J and Table M.

Condition 24, Installation of Replacement Units at DS1R

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: This condition applies to the well injection pump engines (EU IDs 64 and 65) in operation at DS1R as carried forward from Minor Stationary Source Permit No. AQ0267MSS03, Conditions 1.2 and 1.3. Condition 24 requires the Permittee to notify the Department whenever a replacement unit is to be installed in place of EU IDs 64 and 65, and to include documentation of the replacement unit with the notification.

Condition 25, ORL Emergency Equipment Operating Hours

Legal Basis: The Permittee requested this condition as an owner requested limit with the original (TVP01) operating permit application processed under the operating permit program in effect before October 1, 2004. That program included mechanisms for the applicant and Department to develop new owner requested limits through the operating permit process.

Factual Basis: This condition requires MR&R to verify compliance with the 200-hour limit for non-emergency operation (EU IDs 19 – 28). The Permittee requested this limit so that the emergency equipment will be considered insignificant emission units and thus avoid monitoring for compliance with opacity and particulate matter standards. There is no limit on emergency operation. The Permittee is required to monitor the rolling 12-month operational hours of the remaining EU IDs subject to this operating hour limit as EU ID 21 was removed from this source.

Condition 26, ORL to Limit Firing Rate of EU ID 16

Legal Basis: The Permittee requested this condition as an owner requested limit with the original (TVP01) operating permit application processed under the operating permit program in effect before October 1, 2004. That program included mechanisms for the applicant and Department to develop new owner requested limits through the operating permit process.

Factual Basis: Permit to Operate No. 9373-AA004 established a requirement for Process Heaters rated at greater than 43 MMBtu/hr to install, maintain, and operate in good working order a Continuous Emission Monitoring System (CEMS) for recording and monitoring flue gas content of CO or O_2 calibrated and operated according to 40 C.F.R. Part 60, Appendix B. As an alternative to the CEMS requirement, the Permittee may conduct monitoring of the process heater not less than once per month. The CPF-1 stationary source has one process heater (EU ID 16) with a heat input rating of 44.4 MMBtu/hr.

In order to avoid the above stated monitoring requirement, the Permittee proposed an owner-requested limit for EU ID 16 to restrict the heat input firing rate to 42.9 MMBtu/hr by maintaining a daily average of 0.039 MMscf/hr based on a fuel LHV of 1,100 MMBtu/MMscf. If, at any time, CPAI elects to remove this ORL, the requirement for process heaters greater than 43 MMBtu/hr would still apply. The Permittee is required to monitor the daily operating time and fuel consumption using the emission unit's fuel monitoring device. The maximum daily average fuel consumption rate (MMscf/hr) for each month is to be included in each operating report.

Conditions 27 through 30, ORLs to Avoid Project Classification as a PSD Major Modification

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. The Permittee has requested these conditions as owner requested limits to avoid PSD. These limits are carried forward from Minor Stationary Source permit nos. AQ0267MSS02, AQ0267MSS03, and AQ0267MSS04.

Factual Basis: Conditions 27 through 29 require MR&R to verify compliance with the NOx, SO_2, and VOC emission limits established to avoid a PSD modification for the West Sak Development Project drilling, construction, and production activities at DS1E and DS1J. Condition 28 does not include MR&R because the total duty rating of the installed production heaters is less than the imposed limit.

Condition 30 includes MR&R to verify compliance with the fuel consumption limit established for the well injection pump engines at DS1R to avoid a PSD modification for NOx.

Condition 31, ORL for Incinerators

Legal Basis: The Permittee requested this limit with their original (TVP01) operating permit application. Implementation of this owner-requested operating limit was originally intended to ensure that the stationary source's potential to emit any single Hazardous Air Pollutant would remain below 10 tpy or 25 tpy in the aggregate of two or more HAPs. Although the stationary source has become HAP-major as a result of updated emissions estimates, the Permittee has elected to retain this owner-requested limit.

Factual Basis: The Permittee has requested that the Department limit the combined solid throughput of EU IDs 35 and 36The Permittee is required to keep daily records of the combined solid waste throughput, which is restricted to a rolling total of no greater than 5,500 tons on an annual basis for EU IDs 35 and 36.

Condition 32, ORL to Limit the Charging Rate of Incinerator EU ID 36

Legal Basis: The limit stated in this condition was requested by the Permittee with the original (TVP01) operating permit application.

Factual Basis: EU ID 36 (incinerator tag no. H-347) was subject to EPA PSD review in the early 1980s. At that time, and at all times leading up to issuance of the original operating permit for the stationary source, the incinerator was listed in air permits as having a design charging rate of 765 pounds per hour. EU ID 36 has federally enforceable emission limits in tons per year based on calculations using a charging rate of 765 pounds per hour (see Condition 19). Upon preparing the original operating permit application, the Permittee discovered that this incinerator actually has a maximum charging rate of 900 pounds per hour. To ensure that EU ID 36 conforms with the limitations in EPA PSD permit no. PSD-X82-01 and to avoid having to go through a permit revision to raise the allowable charging rate for this incinerator, the Permittee opted for an owner-requested limit of 765 pounds per hour. With this limit in place, the charging rate matches that listed in air permits issued to the stationary source prior to issuance of the operating permit.

The Permittee is required to keep records of the daily charging rate for EU ID 36, which is restricted to 765 lbs waste per hour calculated based on the total daily charge.

Condition 33, Drill Site 1B Cutting Injection Module Installation and Operation Authorization

Legal Basis: The Permittee is required to meet currently applicable minor permit terms and conditions. The Department issued AQ0267MSS05 on August 5, 2013 to authorize a cutting injection module at Drill Site 1B.

Factual Basis: This condition reiterates Minor Permit Condition 1 which authorizes installation and operation. No additional elements are required for this condition under 40 CFR 71.6 to comply with the operating permit program.

Conditions 34, 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, fuel-burning equipment, and incinerators regardless of size.

Factual Basis: This condition re-iterates the state emission standards and required annual compliance certification for insignificant emission units (IEUs). The Permittee may not cause or allow their equipment to violate these standards. The Permittee has identified in the permit application IEUs that need not appear on the permit. They are portable in nature and not always located at the stationary source. Included among the IEUs are nonroad engines, which do not have any applicable requirements under this permit. Generally, IEUs are not listed in the permit unless the permit includes specific monitoring, recordkeeping and reporting necessary to ensure compliance.

The Department finds that IEUs at this stationary source do not require specific monitoring, recordkeeping and reporting to ensure compliance under this condition.

Condition 34.4 requires certification that the units did not exceed state emission standards during the previous year and did not emit any prohibited air pollution.

In addition, EU IDs 19, 20, and 22 - 28, would be IEUs based on actual emissions, but the permit lists conditions that limit their hours of operation. In addition, these units are subject to federal emission standards. EU IDs 19, 20, and 22 through 28 have actual emissions based on historical operating hours less than the significant emissions thresholds in 18 AAC 50.326(e) and EU ID 66 has potential emissions below the significant emissions thresholds. This notwithstanding, EU IDs 19, 20, 22 through 28 and 66 do not qualify as insignificant units per 18 AAC 50.326(d)(1) because they are subject to a Federal requirement (NESHAP Subpart ZZZZ).
For Condition 34, as long as these units do not exceed the operating hour thresholds found in Table B, the Department treats these units as insignificant emission units by emission rate as specified in 18 AAC 50.326(e). No additional monitoring is required for state emission standards in accordance with Department Policy and Procedure No. AWQ 04.02.103, Topic # 3, 10/8/04.

Conditions 35 – 44, NSPS Subpart A Requirements

Legal Basis: The Permittee must comply with those New Source Performance Standard (NSPS) provisions in 40 C.F.R. 60 incorporated by reference effective July 1, 2011, for specific industrial activities, as listed in 18 AAC 50.040[11].

Most affected facilities (with the exception of some storage tanks) subject to an NSPS are subject to Subpart A. At this stationary source, NSPS Subpart A applies to all emission units subject to NSPS Subparts Dc, Ka, GG, J, and GGG/VV. EU IDs 1 - 14 are subject to NSPS Subpart GG. EU IDs 42, 46, and 47 are subject to NSPS Subpart Dc. EU IDs 51 - 55 are subject to NSPS Subpart Ka. EU IDs 16 and 30 are subject to Subpart J. EU ID 57 is subject to Subparts GGG/VV.

Conditions 35.1 through 35.3 - The Permittee has already complied with the notification requirements in 40 C.F.R. 60.7 (a)(1) & (3) for EU IDs 1 - 14, 16, 30, 42, 46, 47, 51 - 55, and 57. However, the Permittee is still subject to these requirements in the event of a new NSPS affected facility[12] or in the event of a modification or reconstruction of an existing facility[13] into an affected facility.

Condition 35.4 - The requirements to notify the EPA and the Department of any proposed replacement of components of an affected facility (40 C.F.R. 60.15) apply to EU IDs 1 - 14, 16, 30, 42, 46, 47, 51 - 55, and 57 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 36 - 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.

[11] EPA has not delegated to the Department the authority to administer the NSPS and NESHAP programs as of the issue date of this permit.
[12] *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.
[13] *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 37 and 38- NSPS excess emission reporting requirements and summary report form in 40 C.F.R. 60.7(c) & (d) are applicable to EU IDs 1 - 14, 16, and 30 because EU IDs 1 - 14 are required to conduct periodic fuel sulfur monitoring, and EU IDs 16 and 30 are equipped with an NSPS required continuous monitoring system. The Permittee is required to state in the EEMSP if the emergency fuel exemption provided in §60.332(k) is in effect for EU IDs 12 and 13. 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 Permittee.

The Permittee obtained EPA approval for annual instead of semi-annual fuel sulfur reporting in Custom Fuel Monitoring Schedules dated April 5, 2000 (for fuel gas) and December 7, 2007 (for liquid fuel). Therefore, the EEMSP reports that address fuel sulfur monitoring for Subpart GG-affected turbines are required to be submitted annually for these units instead of semi-annually.

Recordkeeping requirements in 40 C.F.R. 60.7(f) are applicable to all NSPS affected facilities. (Satisfied by Condition 94)

Condition 39 - The Permittee has already complied with the initial performance test requirements in 40 C.F.R. 60.8 for EU IDs 1 - 14. 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 40 - Good air pollution control practices in 40 C.F.R. 60.11(d) are applicable to all NSPS affected facilities subject to Subpart A (EU IDs 1 - 14, 16, 30, 42, 46, 47, 51 - 55, and 57).

Condition 41 - states that any credible evidence may be used to demonstrate compliance or establishing violations of relevant NSPS standards for EU IDs 1 - 14, 16, 30, 42, 46, 47, and 57.

Condition 42 - Concealment of emissions prohibitions in 40 C.F. R. 60.12 are applicable to the standards set forth in Conditions 43, 44, 46, 48, 49, 50, and 57.

Condition 43 – Monitoring requirements in 40 C. F. R. 60.13 are applicable to EU IDs 16 and 30 because a CEMS is used to determine compliance with NSPS Subpart J emission standards for fuel gas combustion devices.

Condition 44 - General Control Device Requirements in 40 C.F.R. 60.18 are applicable to EU ID 30 (Kaldair I-58-VS Emergency Flare**)** since it is used as a control device for EU ID 57 and to meet the NSPS Subpart VV requirements. As a control device, it is required to meet the operational and performance standards of 40 C.F.R. 60.18. Monitoring requirements were added to this condition to verify compliance.

The Permittee has provided explanation to indicate that flare EU IDs 31 – 33 are not subject to 40 C.F. R. 60.18 because they are safety devices and not control devices. No gas from the topping plant is routed to these safety flares unless the plant malfunctions or is upset.

Factual Basis: General provisions of Subpart A of 40 C.F.R. 60 (NSPS) apply to owners or operators who are subject to a relevant subpart under Parts 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.

Condition 45, NSPS Subpart Dc Requirements

Legal Basis: This condition requires the Permittee to comply with NSPS Subpart Dc. The Permittee may not cause or allow EU IDs 42, 46, and 47 to violate these requirements.

Factual Basis: NSPS Subpart Dc applies to steam generating units for which construction, modification, or reconstruction commenced after June 9, 1989 and have maximum design heat input capacities of 29 MW (100 MMBtu/hr) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr). EU IDs 42, 46 and 47 were constructed on 8/15/05, 12/1/04, and 12/1/04, respectively, and have maximum design heat input capacities of 30, 36.8, and 36.8 MMBtu/hr, respectively. They are, therefore, subject to Subpart Dc.

EU IDs 42, 46 and 47 are only subject to the recordkeeping and reporting provisions of 40 C.F.R. 60.48c(g) and (i) because they burn only fuel gas. The Permittee must keep records of the amount of fuel used by these units. The record retention schedule in 40 C.F.R. 60.48c(i) is satisfied by Condition 94. The Permittee has previously complied with the initial notification requirement.

A 2006 amendment to Subpart Dc provides an alternative for keeping monthly instead of daily records of fuel combustion by affected units under certain circumstances. EU IDs 42, 46, and 47 qualify for this alternative because, as stated in 40 C.F.R. 60.48c(g)(2), the units combust a fuel not subject to an emissions standard in Subpart Dc.

Condition 46, NSPS Subpart J Requirements

Legal Basis: NSPS Subpart J applies to fluid catalytic cracking units, catalyst regenerators, fuel gas combustion devices, and all Claus sulfur recovery plants except Claus plants of 20 long tons per day or less at a petroleum refinery. The Kuparuk Unit Topping Plant (KUTP, EU ID 57) of Central Production Facility #1 is a petroleum refinery and EU IDs 16 and 30 are “fuel gas combustion devices” as defined by 40 C.F.R. 60, Subpart J, and were constructed after June 11, 1973. Therefore, these emission units are subject to certain provisions of Subpart J (40 C.F.R. 60.104(a)(1), 40 C.F.R. 60.105(e)(3)(ii), 40 C.F.R. 60.105(a)(4), 40 C.F.R. 60.106(e)(1), and 40 C.F.R. 60.13).

Factual Basis: This condition incorporates the Subpart J sulfur oxides (as H_2S) emission standard. The Permittee may not cause or allow EU IDs 16 or 30 to violate this standard. It is noted that the emission standard was expressed as an equivalent converted value of 162 ppmv, based on a temperature of 59°F, in Condition 33 of AQ0267TVP01 Revision 2; however, the emission standard is specified in this permit AQ0267TVP02 in units of milligram per dry standard cubic meter (i.e., 230 mg/dscf), which is consistent with the NSPS. Compliance monitoring for this requirement includes maintenance and operation of two continuous emissions monitoring systems (CEMS) in good working order.

Condition 47, NSPS Subpart Ka Requirements

Legal Basis: NSPS Subpart Ka applies to storage vessels for petroleum liquids with storage capacity > 40,000 gallons that were built or modified after May 18, 1978 and prior to July 23, 1984. EU IDs 51 - 55 were constructed during this time frame. These affected facilities have storage capacities > 40,000 gallons and store petroleum liquids.

Factual Basis: If the true vapor pressure of the liquid stored within a tank is maintained below 1.0 psia, then there are no operational monitoring requirements. If the true vapor pressure is maintained below 1.5 psia, then there are no applicable equipment standards. If these thresholds are not exceeded, then there are no applicable requirements other than those found in 40 C.F.R. 60, Subpart A. Otherwise, MR&R for Subpart Ka tanks are as provided in this condition.

Conditions 48 through 49, 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. EU IDs 1 through 14 are subject to NSPS Subpart GG. The NO_x standard applies only to EU IDs 1 through 3 and 10 through 13 as discussed under *Exemptions* below.

Factual Basis: These conditions incorporate NSPS Subpart GG NO_X emission and sulfur compound limits. The Permittee may not allow equipment to violate these standards.

NO_X Standard: For a turbine subject to 40 C.F.R. 60.332, the NO_X standard is determined by the following equation:

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

where,

STD_{NOX} = allowable NO_X 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_X emissions allowance for fuel bound nitrogen, percent by volume, assumed to be zero for distillate fuel oil and gaseous fuels.

Based on the manufacturer's heat rating at manufacturer's rated peak load, and assuming fuel bound nitrogen of zero, the NO_X standard is 161 ppmvd for EU IDs 1 - 3 and 162 ppmvd for EU IDs 10 - 13.

SO_2 Standard: The Permittee is required to comply with one of the following sulfur requirements for EU IDs 1 - 14 (turbines):

(1) do not cause or allow SO_2 emission in excess of 0.015 percent by volume, at 15 percent O_2 and on a dry basis (150 ppmv), or

(2) do not cause or allow the sulfur content for the fuel burned to exceed 0.8 percent by weight.

Exemptions: Gas turbines exempted from NSPS Subpart GG emission standards are as provided in 40 C.F.R. 60.332(e) – (l). EU IDs 12 and 13 are dual-fired emission units and are exempt from this standard when fired on emergency liquid fuel. EU IDs 4 - 9 are exempt from the NSPS Subpart GG NOx standard of 40 C.F.R. 60.332(a) because they meet the exemption criteria of 40 C.F.R. 60.332(e). EU ID 14 is exempt from the NSPS Subpart GG NOx standard of 40 C.F.R. 60.332(a) because its rated base load at ISO conditions exceeds 30 MW (ref. 40 C.F.R. 60.332(d)).

Conditions 48.2 through 48.4, NO_X Monitoring, Recordkeeping, and Reporting

Legal Basis: Periodic monitoring, recordkeeping, and reporting are included in Conditions 48.2 through 48.4 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 applicable BACT and NSPS NO_X standards 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 BACT and Subpart GG NOx emission limits will inherently comply with the limits at all times and will never need additional testing. After a sufficient body of NOx data is gathered under monitoring conditions for compliance with BACT and 40 C.F.R. 60, Subpart GG limits, the Department may find that it has enough information to make such categorical determinations. In that event, the Department would revise the NOx 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. An existing or new turbine under this permit that 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 NOx emissions at less than or equal to 90% of each of the limits shown in Conditions 17 and/or 48, then periodic monitoring is required at the first applicable of two criteria: 1) within 1 year of the effective date of this permit if the last source test occurred greater than four years prior to the effective date of this permit and the turbine operated 400 hours or more with a given fuel type in any 12-month period ending within 6 months before the permit effective date of this permit, or 2) within 1 year after operating 400 hours or more with a specific fuel type -in a 12-month period if the last source test occurred less than 4 years prior to operation over the 400-hour threshold at any time during the permit term. If the most recent performance test showed operations at greater than 90% of the emissions listed in Conditions 17 and/or 48, then periodic monitoring source testing is required every year until two consecutive tests show emissions at less than or equal to 90% 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[14]" 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 on a specific fuel, 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 or four equally spaced loads in the normal operation of the turbine. 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 48.2.b(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 NOx 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 49.1 through 49.3, SO_2 Monitoring, Recordkeeping, and Reporting

Legal Basis: These conditions require the Permittee to comply with NSPS Subpart GG SO_2 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_2 standard.

The MR&R scheme provided for the NSPS GG SO_2 emissions standard is in accordance with the EPA-approved custom fuel monitoring schedules (CFMS) for CPF-1, dated April 5, 2000 (gaseous fuel) and December 7, 2007 (liquid fuel) granted to the Permittee in accordance with 40 C.F.R. 60.334(i)(3).

Monitoring: Condition 49.1 incorporates NSPS Subpart GG fuel sulfur monitoring requirements and approved custom monitoring requirements from the CFMS letters.

[14] *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 facility has been rendered inoperable by an emergency situation, as defined in 40 C.F.R. 60.331(e), effective 7/1/11.

Recordkeeping: The Permittee is required to maintain records of all sulfur monitoring data required by NSPS Subpart GG, records to document a constant fuel supplier, and records of turbine operation on fuels other than natural gas as set out in the April 5, 2000 and December 7, 2007 CFMS letters.

Reporting: NSPS Subpart GG SO_2 standard reporting requirements and other reports required by the Department and EPA as set out in the CFMS letters are incorporated in the permit in Condition 49.3. According to the CFMS letters for CPF-1, the Permittee is required to submit results of gaseous and liquid fuel sulfur monitoring to EPA at least annually and notify EPA Region 10 within 60 days of any changes in fuel supplier or source of fuel, or of use of any fuel other than natural gas.

For EEMSP reports and summary report required under 40 C.F.R. 60.7(c) and (d) and stated in Conditions 37 and 38, the Permittee is required to report as excess emissions any period during which the sulfur content of the fuel being fired in the turbine exceeds 0.8 percent. Subpart GG [at 40 C.F.R. 60.334(j)(5)] requires EEMSP reporting 30 days after the end of each 6-month period, but the alternative monitoring schedules approved for CPF-1 reduce the required report frequency for gaseous fuel and liquid fuel to at least annually as set out in Condition 49.3.a(i). As stated in Conditions 37 and 38, reports are to be submitted to the Department and EPA, and summarized in the operating report required under Condition 99. However, per Conditions 49.1.a(i) and 49.3.a(iii), 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.

In Condition 49.3 the Department requests that a summary report of the results from the monitoring requirements in Condition 49.1 be included in the Operating Report required under Condition 99. State excess emissions and permit deviation reports are to be submitted in accordance with Condition 49.3.e.

Condition 50, NSPS Subpart GGG/VV Requirements

Legal Basis: This condition applies to the group of all the equipment, as defined in 40 C.F.R. 60.591 Subpart GGG, within a process unit (in this case, EU ID 57[KUTP]) and that commenced construction or modification after January 4, 1983. The equipment in KUTP subject to this condition include each valve, pump, pressure relief device, sampling connection system, open-ended valve or line, and flange or other connector in VOC service.

Factual Basis: This condition requires the Permittee to comply with the applicable requirements of Subparts GGG and VV - Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries and in the Synthetic Chemicals Manufacturing Industry. The MR&R are as provided in Subparts GGG/VV. EU ID 30 is used as control device in meeting these requirements.

Condition 51, ORL for Incinerators for Exemption from 40 C.F.R. 60, Subpart O

Legal Basis: The Permittee requested this condition as an owner requested limit with the original (TVP01) operating permit application.

Factual Basis: The Permittee requested that the Department limit the sewage sludge burned in each of EU IDs 35 and 36 to 10 percent or less sewage sludge on a dry basis to avoid classification as a Sewage Treatment Plant under 40 C.F.R. 60, Subpart O and 18 AAC 50.040(2)(Q). The Permittee is required to sample biennially the dry sewage sludge weight as a percentage of the total wastes charged into the incinerators.

Condition 52, **ORL for Incinerators for exemption from 40 C.F.R. 62, Subpart HHH**

Legal Basis: The Permittee requested this condition as an owner requested limit with the original (TVP01) operating permit application.

Factual Basis: The Permittee has requested that the Department limit each incinerator (EU IDs 35 and 36) to combust a fuel feed stream, the weight of which is comprised of ten percent or less hospital waste and medical/infectious waste, aggregated. Compliance with this requirement allows each incinerator to meet the definition of a co-fired combustor in 40 C.F.R. 60.14490, which is exempt from the requirements of 40 C.F.R. 62, Subpart HHH.

Condition 53, **ORL for Incinerators for Exemption from 40 C.F.R. 62, Subpart III**

Legal Basis: The Permittee requested this condition as an owner requested limit with the original (TVP01) operating permit application for the incinerators, which commenced construction on or before November 30, 1999 and meet the definition of existing Commercial/Industrial Solid Waste Incinerators.

Factual Basis: The purpose of the owner-requested limit and the record keeping required under 40 C.F.R. 62.14525(c)(2)(ii) is to confirm that the incinerators burn greater than 30 percent municipal solid waste or refuse-derived fuel and thereby satisfy the exemption criterion of 40 C.F.R. 62, Subpart III as stated in 40 C.F.R. 62.14525(c)(2).

Municipal Solid Waste (MSW) includes household, commercial/retail, and/or institutional waste.

Household waste includes material discarded by residential dwellings, hotels, motels, and other similar permanent or temporary housing.

Commercial/retail waste includes material discarded by stores, offices, restaurants, warehouses, nonmanufacturing activities at industrial facilities, and other similar establishments or facilities.

Institutional waste includes materials discarded by schools, by hospitals (nonmedical), by nonmanufacturing activities at prisons and governmental facilities, and other similar establishments or facilities.

Conditions 54-56, NESHAP Subpart A Requirements

Legal Basis: The Permittee must comply with those NESHAP provisions incorporated by reference effective July 1, 2011, for specific industrial activities, as listed in 18 AAC 50.040[15].

NESHAP Subpart A applies to EU IDs 35 and 36, which are also subject to NESHAP Subpart E.

Condition 54 prohibits the Permittee from operating a stationary source subject to an applicable NESHAP if it is in violation of that standard.

Condition 55 - Good air pollution control practices in 40 C.F.R. 61.12(c) are applicable to all NESHAP affected facilities subject to Subpart A (EU IDs 35 and 36).

Condition 56 - Concealment of emissions prohibitions in 40 C.F.R. 61.19 are applicable to the standards set forth in Condition 57.

[15] EPA has not delegated to the Department the authority to administer the NSPS and NESHAP programs as of the issue date of this permit.

Factual Basis: General provisions of Subpart A of 40 C.F.R. 61 (NESHAP) apply to owners or operators who are subject to a relevant subpart under Part 61, 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 NESHAP.

Condition 57, NESHAP Subpart E National Emission Standard for Mercury

Legal Basis: NESHAP Subpart E applies to stationary sources which process mercury ore to recover mercury, use mercury chlor-alkali cells to produce chlorine gas and alkali metal hydroxide, and incinerate or dry wastewater treatment plant sludge. EU IDs 35 and 36 incinerate the stationary source's wastewater treatment plant sludge.

Factual Basis: The condition requires the Permittee to comply with the mercury emission standard provided in 40 C.F.R. 61.52(b) for sludge incinerators. The Permittee obtained an EPA approved waiver for stack and sludge mercury sampling and monitoring on October 16, 1997 from Bonnie Thie with EPA Region X. Changes must not be made in the operation of EU IDs 35 or 36 which would potentially increase emissions above the levels estimated to support the waiver granted by EPA under 40 C.F.R. 61.13 without first providing new estimates to EPA per 40 C.F.R. 61.53(d)(4) and 61.54(e).

Monitoring for this requirement consists of an annual compliance certification.

Condition 58, NESHAPs Subpart A Requirements

Legal Basis: The Department has incorporated by reference the NESHAP requirements effective February 17, 2011, for specific industrial activities, as listed in 18 AAC 50.040(c).

Most affected facilities subject to a NESHAP requirement are subject to Subpart A. The Permittee shall comply with the applicable requirements of 40 C.F.R 63 Subpart A as specified in the provisions for applicability of Subpart A in 40 C.F.R. 63, Subpart ZZZZ Table 8 and 40 C.F.R. 63 Subpart CCCCCC Table 3.

Factual Basis: This condition incorporates applicable 40 C.F.R. 63 requirements. The Permittee may not cause or allow violations of these requirements.

Condition 59, Benzene Waste Operations NESHAP

Legal Basis: The reporting and recordkeeping requirements of 40 C.F.R. 61 Subpart FF (§61.356(b)(1) and §61.357(b)) apply to the Kuparuk Unit Topping Plant (KUTP).

Factual Basis: The condition cites and requires compliance with the regulations that will apply if the Permittee has certain quantities of benzene in the wastewater. Because these regulations include adequate monitoring and reporting requirements, simply citing the regulatory requirements is sufficient to ensure compliance with these federal regulations.

Conditions 60 through 67, NESHAP Subpart ZZZZ Requirements

Legal Basis: The Department has incorporated by reference the NESHAPs requirements effective February 17, 2011, for specific industrial activities, as listed in 18 AAC 50.040(c). The provisions of 40 C.F.R. 63, Subpart ZZZZ apply to owners or operators of any existing, new, or reconstructed stationary Reciprocating Internal Combustion Engine (RICE) located at a major or area source of HAP emissions, excluding stationary RICE units being tested at a stationary RICE test cell/stand. Subpart ZZZZ defines the source containing the engines as the production field facility. The production field facility portion of Kuparuk Central Production Facility #1 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 19, 20, 22 through 28, and 64 through 66) whose construction commenced before June 12, 2006.

Factual Basis: Subpart ZZZZ emissions and operating limitations and corresponding MR&R requirements are provided in Conditions 60 through 67.

Pursuant to 40 C.F.R. 63.6585, diesel-fired emergency engines, EU IDs 19, 20 and 22 – 28, and non-emergency engines EU IDs 64 - 66 are affected stationary RICEs subject to NESHAP Subpart ZZZZ. The Permittee must comply with 40 C.F.R. 63, Subpart ZZZZ no later than May 3, 2013.

Existing, non-emergency engines rated between 301 and 500 hp at area sources (EU IDs 64 and 65) are subject to initial performance test or other initial compliance demonstration requirements and the associated required test notifications and reports. These units are also subject to initial notification requirements, CO emission limits of 40 C.F.R. 63.6603(a) and Table 2d, crankcase ventilation or filtration emissions control system installation, use of ULSD fuel, and the general compliance requirements of 40 C.F.R. 63.6605 (good air pollution control practice) after the initial performance testing, compliance reports, and recordkeeping. No subsequent performance testing is required. The initial notification for EU IDs 64 and 65 was originally submitted on June 24, 2010 and a revised notification was submitted on October 28, 2010 in accordance with §63.6645(a)(2).

Emergency RICEs (EU IDs 19, 20, 22 through 28) and non-emergency RICE rated ≤300 hp (EU ID 66) are not subject to any numerical emission limitations under Subpart ZZZZ. In addition, per 40 C.F.R. 63.6645(a)(5), initial notification is not required for existing stationary emergency CI RICEs or existing stationary CI RICEs that are not subject to any numerical emission standards.

To retain the designation of emergency engine under the NESHAP Subpart ZZZZ, EU IDs 19, 20 and 22 - 28 must not exceed non-emergency operations over 100 hours per calendar year. There is no limit on emergency operation. However, if the 100 hour limit is exceeded the Permittee must comply with the work practices and emission limitations under Subpart ZZZZ.

Condition 68, 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 69, Protection of Stratospheric Ozone, 40 C.F.R. 82

Legal Basis: Condition 69.1 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 69.2 - 69.3 apply to all stationary sources that use halon for extinguishing fires and inert gas to reduce explosion risk. The Kuparuk Central Production Facility #1 uses halon and is, therefore, subject to the Federal regulations contained in 40 C.F.R. 82 Subparts G and H.

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 these Federal regulations. 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.

Condition 70, NESHAPS Applicability Determinations

Legal Basis: This condition requires the Permittee to determine rule applicability for NESHAPS, and requires record keeping for those determinations if required by the source classification.

Factual Basis: The Permittee has conducted an analysis of the Kuparuk Central Production Facility #1 and determined that it contains a major HAPs stationary source based on emissions. This condition requires the Permittee to comply with any issued NESHAP and NESHAP that becomes effective subsequent to the issuance date of this permit, if such NESHAP is determined to apply to the source.

Conditions 71 through 73, 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 State operating permit program effective November 30, 2001, as updated effective November 9, 2008.

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

Condition 74, 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 75 through 76, Emission Fees

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

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

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

The assessable emissions are the lesser of potential or projected emissions of each air pollutant for which fees are assessed (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 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 emissions are based on the previous year, the Department will not give refunds or make additional billings at the end of the current year if the estimated emissions and current year actual emissions do not match.

Condition 77, 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 1 through 14, 16, 30, 35, 36, 42, 46, 47, 51 through 55, and 57 (emission units subject to NSPS) and EU IDs 19, 20, 22 through 28, and 68a through 68d (if actual emissions from these units are less than the thresholds set in 18 AAC 50.326(e) for emission rate-based insignificant emission units).

EU ID(s) 19, 20, 22 through 28, 64, and 65 would be subject to the Good Air Pollution Control Practice (GAPCP) condition only until the applicable compliance date for NESHAP Subpart ZZZZ as set forth in Condition 60.

Factual Basis: The Department adopted this condition under 18 AAC 50.346(b) as Standard operating Permit Condition VI pursuant to AS 46.14.010(e). This condition has been modified in the permit as follows. The Department added the text, "EU ID(s) 19, 20, 22 through 28, 64, and 65 are subject to this condition only until the applicable compliance date as set forth in Condition 60". On the compliance date in Condition 60, EU IDs 19, 20, 22 through 28, 64, and 65 that are subject to NESHAP Subpart ZZZZ standards will no longer be subject to this State GAPCP condition (as units subject to Federal emission standards) and will instead be required to comply with Condition 62.1. Records kept in accordance with Condition 77.2 for units previously subject to GAPCP need to be maintained for 5 years in accordance with Condition 94 even if a unit is no longer subject to this State GAPCP condition.

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

Maintaining and operating equipment in good working order is fundamental to preventing unnecessary or excess emissions. Standard conditions for monitoring compliance with emission standards are based on the assumption that good maintenance is performed. Without appropriate maintenance, equipment can deteriorate more quickly than with appropriate maintenance. If appropriate maintenance is not applied to the equipment, the Department may have to apply more frequent periodic monitoring requirements (unless the monitoring is already continuous) to ensure that the monitoring results are representative of actual emissions.

The Permittee is required to keep maintenance records to show that proper maintenance procedures were followed, and to make the records available to the Department. The Department may use these records as a trigger for requesting source testing if the records show that maintenance has been deferred.

Condition 78, 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 79, 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 a significant source of fugitive PM emissions, there is no need for enhanced monitoring or recordkeeping. Except as discussed below for the applicant request and the minor permit text, the Department imposed Standard Permit Condition X for fugitive dust. While not considered as enhanced monitoring, the Permittee has requested, and the Department has included, a clarifying monitoring requirement (annual certification that reasonable precautions were taken) be included in Condition 79.

From Minor Permit No. AQ0267MSS05, the Department added Condition 5 as a subcondition. For EU ID's 68a through 68d, the Permittee shall perform all material processing under wet, saturated conditions in an enclosed space without exhaust ports.

Condition 80, 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 a stack at a stationary source constructed or modified after November 1, 1982.

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

Condition 81, 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.

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 82, 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 98. Excess emission reporting under Condition 98 requires information on the steps taken to minimize emissions. Monitoring of compliance for this condition consists of the report required under Condition 98.

Condition 83, Open Burning

Legal Basis: 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: The Permittee has certified that they do not conduct open burning at the stationary source. However, the Permittee may conduct open burning by first requesting and obtaining a separate open burn permit in accordance with the Department guidelines posted at the website http://www.dec.state.ak.us/air/ap/applic.htm. No specific monitoring is required for this condition. 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 100.

Condition 84, 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 the federally approved State operating permit program 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 85 through 87, 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 this permit to conduct source tests. The Permittee is required to conduct source tests in the manner set out in Conditions 85 through 87.

Factual Basis: These conditions supplement the specific monitoring requirements stated elsewhere in this permit. Compliance monitoring with Conditions 85 through 87 consists of the test reports required by Condition 92.

Condition 88, Test Exemption

Legal Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.345(a) and applies when the 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 89 through 92, 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 by this permit to conduct source tests.

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 these conditions.

Condition 93, 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 94, 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 95, 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 the federally approved State operating permit program effective November 30, 2001, as updated as of 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 operating report, even though they must still be **submitted** more frequently than the operating report. This condition supplements the reporting requirements of this permit.

Condition 96, Submittals

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

Factual Basis: This condition lists the Department's appropriate address for reports and written notices. The Permittee is required to submit an original and one copy of reports, compliance certifications, and other submittals required by this permit. Receipt of the submittal at the correct Department office is sufficient monitoring for this condition. This condition supplements the standard reporting and notification requirements of this permit.

Condition 97, 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 amended effective November 9, 2008.

Factual Basis: This condition incorporates a standard condition in regulation. Monitoring consists of receipt of the requested information.

Condition 98, 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 through 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 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 condition meets the requirements of 40 C.F.R. 71.6(a)(3).

Section 14, Notification Form

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

Not all permit deviations are excess emissions, but all excess emissions of limits set out in the permit are permit deviations. Example permit deviations that are not also defined as excess emissions include, but are not limited to, a failure to report required information, incorrect or incomplete reported information, submittal of a report after the required deadline, failure to conduct monitoring prior to the required deadline, failure to maintain required records, etc.

Condition 99, 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.

The Permittee would be providing 3-months of records 3 months earlier than under the standard condition deadline, and providing 3 months of records 15 days later than under the standard condition deadline. The early reporting more than offsets the 15-day delay for the remaining months. As such, these changes satisfy the requirement for a "stationary source specific" change to the Standard Permit Condition. 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 permits during the reporting period. 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 100, 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 100.2 provides clarification of transition periods between an expiring permit and a renewal permit to ensure that the Permittee certifies compliance with the permit terms and conditions of the permit that was in effect during those partial date periods involved in the transition. No format is specified: the Permittee may provide one report certifying compliance with each permit term or condition for each of the effective permits during the certification period, or may choose to provide two reports – one certifying compliance with permit terms and conditions from January 1 until the date of expiration of the old permit, and a second report certifying compliance with terms and conditions in effect from the effective date of the renewal permit until December 31.

The Permittee is required to submit to the Department an original and one copy of an annual compliance certification report. The Permittee may submit one of the required copies electronically at their discretion. Electronic submission meets the requirements of 18 AAC 50 and allows for more efficient distribution of the certification report to staff in other locations.

Condition 101, NSPS and NESHAP Reports

Legal Basis: The Permittee is required to provide 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). 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 102, Emission Inventory Reporting

Legal Basis: This condition requires the Permittee to submit emissions data to the State to satisfy the Federal requirement that applies to the State 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. In the past, the Department has made information requests to point sources, to which the point source is obligated to reply under 18 AAC 50.200. The information requests occur on a routine basis as established by 40C.F.R. Part 51 Subpart A and consume significant staff resources. To increase governmental efficiency and reduce costs associated with information requests that occur on a routine basis, it has been determined that a standard permit condition best fulfills the need to gather the information needed to satisfy the requirements of Subpart A of 40 C.F.R. 51.

To ensure that the Department's electronic system reports complete information to the National Emissions Inventory, Title V stationary sources classified as Type A in Table 1 of Appendix A to Subpart A of 40 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.

Condition 103, 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 103 through 106, Permit Changes and Revision Requirements

Legal Basis: The Permittee is obligated to notify the Department of certain off-permit source changes and operational changes under18 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 conditions are 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). Therefore, language addressing these provisions has not been included in this permit.

Condition 107, Permit Renewal

Legal Basis: The Permittee must submit a timely and complete operating permit renewal application if the Permittee intends to continue source operations in accordance with the operating permit program under18 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 Kuparuk Central Production Facility #1 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 108 through 112, General Compliance Requirements and Schedule

Legal Basis: These conditions ensure compliance with the applicable requirement in 18 AAC 50.326(j)(3) and 40 C.F.R. 71.6(c). The Permittee is required to comply with these standard permit conditions set out in 18 AAC 50.345 and 40 C.F.R. 71.6(c) 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 113 through 114, 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 non-applicable requirements listed under these conditions under the Federally approved State operating program effective November 30, 2001, as updated effective November 9, 2008.

Factual Basis: Table G of Operating Permit No. AQ0267TVP02 shows the permit shield that the Department granted to the Permittee. Should any of the shielded requirements become applicable during the permit term, the Permittee is required to take necessary steps to comply with all applicable requirements in a timely manner. The Department based the determinations on the permit application, past operating permit, likelihood for the source to become subject during the life of the permit, Title I permits and inspection reports.

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_2 NO_X TRS H_2S 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 [1]: _____

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

[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] 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) 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: _____