

DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR QUALITY OPERATING PERMIT

Permit No. AQ0087TVP02

Issue Date: PN Draft - September 29, 2009

Expiration Date: Five Years

The Department of Environmental Conservation, under the authority of AS 46.14 and 18 AAC 50, issues an operating permit to the Permittee, **Marathon Oil Company**, for the operation of the **Kenai Gas Field Pad 34-31**.

This permit satisfies the obligation of the owner and operator to obtain an operating permit as set out in AS 46.14.130(b).

As set out in AS 46.14.120(c), the Permittee shall comply with the terms and conditions of this operating permit.

Upon effective date of this permit, Operating Permit No. AQ0087TVP01 expires.

This Operating Permit becomes effective <insert date—30 days after issue date>.

John F. Kuterbach, Manager
Air Permits Program

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List of Abbreviations Used in this Permit

AAC	Alaska Administrative Code	NO _x	Nitrogen Oxides
ADEC	Alaska Department of Environmental Conservation	NRE	non-road engine
AS	Alaska Statutes	NSPS	Federal New Source Performance Standards [<i>NSPS</i> as contained in 40 C.F.R. 60]
ASTM	American Society for Testing and Materials	O & M	Operation and Maintenance
BACT	Best Available Control Technology	O ₂	Oxygen
BHp	Boiler Horsepower	PAL	Plantwide Applicability Limitation
C.F.R.	Code of Federal Regulations	PM-10	Particulate Matter less than or equal to a nominal ten microns in diameter
The Act	Clean Air Act	ppm	Parts per million
CO	Carbon Monoxide	ppmv, ppmvd	Parts per million by volume on a dry basis
dscf	Dry standard cubic foot	psia	Pounds per Square Inch (absolute)
EPA	US Environmental Protection Agency	PSD	Prevention of Significant Deterioration
EU	Emission Unit	PTE	Potential to Emit
gr./dscf	grain per dry standard cubic foot (1 pound = 7000 grains)	SIC.	Standard Industrial Classification
GPH	gallons per hour	SO ₂	Sulfur dioxide
HAPs	Hazardous Air Pollutants [<i>HAPs</i> as defined in AS 46.14.990(14)]	TPH	Tons per hour
ID	Emission Unit Identification Number	TPY	Tons per year
LAER	Lowest Achievable Emission Rate	VOC	volatile organic compound [<i>VOC</i> as defined in 40 C.F.R. 51.100(s)]
MACT	Maximum Achievable Control Technology as defined in 40 C.F.R. 63.	VOL	volatile organic liquid [<i>VOL</i> as defined in 40 C.F.R. 60.111b, Subpart Kb]
MR&R	Monitoring, Recordkeeping, and Reporting	vol%	volume percent
NESHAPs	Federal National Emission Standards for Hazardous Air Pollutants [<i>NESHAPs</i> as contained in 40 C.F.R. 61 and 63]	wt%	weight percent

Section 1. Stationary Source Information

Identification

Names and Addresses

Permittee: **Marathon Oil Company**
P.O. Box 196168
Anchorage, AK 99519-6168

Stationary Source Name: **Kenai Gas Field Pad 34-31**

Location: 60° 28' North; 151° 16' West

Physical Address: Section 31, T5N; R11W, Seward Meridian
Kenai Peninsula Borough, Alaska

Owner: Marathon Oil Company
P.O. Box 196168
Anchorage, AK 99519-6168

Operator: Marathon Oil Company
P.O. Box 196168
Anchorage, AK 99519-6168

Permittee's Responsible Official: John A. Barnes, Alaska Asset Team Leader

Designated Agent: CT Corporation System (Marathon Oil Company)
9360 Glacier Hwy., Suite 202
Juneau, Alaska 99801
Phone: (907) 586-3340

Stationary Source and Building Contact: Donald Erwin, Field Operations Supervisor
34090 Kalifornsky Beach Road
Kenai, Alaska 99611
(907) 283-1303

Fee Contact: Jennifer Satterwhite - Marathon Oil Company
P.O. Box 196168
Anchorage, Alaska 99519-6168
JSatterwhite@marathonoil.com

Permit Contact: John A. Barnes
P.O. Box 196168
Anchorage, AK 99519-6168

Process Description

SIC Code: 1311 Crude Petroleum & Natural Gas

[18 AAC 50.040(j)(3), 7/25/08 and 18 AAC 50.326(a), 12/1/04]
[40 C.F.R. 71.5(c)(1 & 2), 7/2/07]

Section 2. Emission Unit Inventory and Description

Emission units listed in Table A have specific monitoring, record keeping, or reporting conditions in this permit. Emission unit descriptions and ratings are given for identification purposes only.

Table A -- Emission Units Inventory

EU ID	Emission Unit Name	Emission Unit Description	Rating/size	Construction Date
1	IR A Compressor Drive	Allison 501-KC Turbine-A	5278 Hp	1984
2	IR B Compressor Drive	Allison 501-KC5 Turbine-B	5278 Hp	1984
14	Rig Boiler	Mobile Rig Boiler	4.5 MMBtu/hr	2000
15	Rig Heater	Mobile Rig Heater	2.2 MMBtu/hr	2001
16	Well Test Flare	Well Test Flare	*100 MMCF/yr	1995
18	Glycol Dehydrator	Vent #5	20 MMscf/day	1983
19	Glycol Dehydrator	Vent #6	20 MMscf/day	1983
Glacier Drill Rig (NRE)				
28	Rig Generator		691 Hp	
29	Rig Generator		691 Hp	
30	Rig Drawworks		500 Hp	
31	Rig Drawworks		500 Hp	
32	Rig Mud Pump		500 Hp	
33	Rig Mud Pump		500 Hp	
34	Rig Mud Pump		500 Hp	
35	Rig Camp Power Generator		188 Hp	

Table Notes:

* -- Owner Requested Limit

The stationary source contains a significant amount of NREs that are listed and not listed in this table, as no applicable requirements are contained in Operating Permit No. AQ0087TVP02. The NRE emissions are excluded from the stationary source's assessable PTE, per regulation.

[18 AAC 50.326(a), 12/1/04]
 [40 C.F.R. 51.166(b) and 40 C.F.R. 71.5(c)(3), 7/2/07]

Section 3. State Requirements

Visible Emissions Standards

1. Industrial Process and Fuel-Burning Equipment Visible Emissions. The Permittee shall comply with the following :

1.1 Do not cause or allow visible emissions, excluding condensed water vapor, emitted from EU IDs 1, 2, and 14-16 listed in Table A to reduce visibility through the exhaust effluent by more than 20 percent averaged over any six consecutive minutes.

[18 AAC 50.040(j) & 50.055(a)(1), 7/25/08; and 18 AAC 50.326(j), 12/1/04]
[40 C.F.R. 71.6(a)(1), 7/2/07]

1.2 For EU IDs 14 and 15, monitor, record and report in accordance with Conditions 2 - 4.

1.3 For EU IDs 1, and 2 burn only gas as fuel. Monitoring for these emission units shall consist of a certification in each operating report under Condition 53 that each of these emission units fired only gas. Report under Condition 52 if any fuel is burned other than gas.

1.4 For EU ID 16, monitor, record and report in accordance with Condition 5.

[18 AAC 50.040(j), 7/25/08; 18 AAC 50.326(j), 12/1/04 and 18 AAC 50.346(c), 11/9/08]
[40 C.F.R. 71.6(a)(3), 7/2/07]

Visible Emissions Monitoring, Recordkeeping and Reporting

Liquid Fuel-fired Sources (EU IDs 14 and 15)

2. Visible Emissions Monitoring. The Permittee shall observe the exhaust of EU IDs 14 and 15 for visible emissions using either the Method 9 Plan under Condition 2.1 or the Smoke/No-Smoke Plan under Condition 2.2. The Permittee may change visible-emissions plans for an emission unit at any time unless prohibited from doing so by Condition 2.3. The Permittee may elect to continue a visible emission monitoring schedule in effect from the previous permit at the time a renewed permit is issued if applicable.

[18 AAC 50.040(j), 7/25/08; 18 AAC 50.326(j), 12/1/04 and 18 AAC 50.346(c), 11/9/08]
[40 C.F.R. 71.6(a)(3)(i), 7/2/07]

2.1 **Method 9 Plan.** For all 18-minute observations in this plan, observe exhaust, following 40 C.F.R. 60, Appendix A-4, Method 9, adopted by reference in 18 AAC 50.040(a), for 18 minutes to obtain 72 consecutive 15-second opacity observations.

a. First Method 9 Observation. For any unit, observe exhaust for 18 minutes within 14 calendar days after changing from the Smoke/No-Smoke Plan of Condition 2.2. For any units replaced during the term of this permit, observe exhaust for 18 minutes within 30 days of startup.

- b. Monthly Method 9 Observations. After the first Method 9 observation, perform 18-minute observations at least once in each calendar month that an emission unit operates.
- c. Semiannual Method 9 Observations. After observing emissions for three consecutive operating months under Condition 2.1a, unless a six-minute average is greater than 15 percent and one or more observations are greater than 20 percent, perform 18-minute observations at least semiannually.

Semiannual observations must be taken between four and seven months after the previous set of observations.

- d. Annual Method 9 Observations. After at least two semiannual 18-minute observations, unless a six-minute average is greater than 15 percent and one or more individual observations are greater than 20 percent, perform 18-minute observations at least annually.

Annual observations must be taken between 10 and 13 months after the previous observations.

For any unit that is operated intermittently¹, perform 18-minute observations within 12 months after the previous observation or during the next month that unit operates, whichever is later.

- e. Increased Method 9 Frequency. If a six-minute average opacity is observed during the most recent set of observations to be greater than 15 percent and one or more observations are greater than 20 percent, then increase or maintain the 18-minute observation frequency for that emission unit to at least monthly intervals, until the criteria in Condition 2.1b for semiannual monitoring are met.

For a unit that is operated intermittently, then increase or maintain the 18 minute observation frequency for that unit to at least monthly or during the next month the unit operates whichever is later.

2.2 **Smoke/No Smoke Plan.** Observe the exhaust for the presence or absence of visible emissions, excluding condensed water vapor.

- a. Initial Monitoring Frequency. Observe the exhaust during each calendar day that an emission unit operates.
- b. Reduced Monitoring Frequency. After the emission unit has been observed on 30 consecutive operating days, if the emission unit operated without visible smoke in the exhaust for those 30 days, then observe emissions at least once in every calendar month that an emission unit operates.

¹ *Intermittently operated equipment* for the purpose of this permit is equipment that operates at non-repetitive periodic intervals and does not operate for more than 400 hours per rolling 12-month period.

- c. Smoke Observed. If smoke is observed, either begin the Method 9 Plan of Condition 2.1 or perform the corrective action required under Condition 2.3

2.3 **Corrective Actions Based on Smoke/No Smoke Observations.** If visible emissions are present in the exhaust during an observation performed under the Smoke/No Smoke Plan of Condition 2.2, then the Permittee shall either follow the Method 9 plan of Condition 2.1 or

- a. initiate actions to eliminate smoke from the source within 24 hours of the observation;
- b. keep a written record of the starting date, the completion date, and a description of the actions taken to reduce smoke; and
- c. after completing the actions required under Condition 2.3a,
 - (i) take Smoke/No Smoke observations in accordance with Condition 2.2.
 - (A) at least once per day for the next seven operating days and until the initial 30 day observation period is completed; and
 - (B) continue as described in Condition 2.2b; or
 - (ii) if the actions taken under Condition 2.3a do not eliminate the smoke, or if subsequent smoke is observed under the schedule of Condition 2.3c(i)(A), then observe the exhaust using the Method 9 Plan unless the Department gives written approval to resume observations under the Smoke/No Smoke Plan; after observing smoke and making observations under the Method 9 Plan, the Permittee may at any time take corrective action that eliminates smoke and restart the Smoke/No Smoke Plan under Condition 2.2a.

3. **Visible Emissions Recordkeeping.** The Permittee shall keep records as follows:

[18 AAC 50.040(j), 7/25/08; 18 AAC 50.326(j), 12/1/04 and 18 AAC 50.346(c), 11/9/08]
[40 C.F.R. 71.6(a)(3)(ii), 7/2/07]

3.1 When using the Method 9 Plan of Condition 2.1,

- a. the observer shall record
 - (i) the name of the stationary source, emission unit and location, stationary source type, observer's name and affiliation, and the date on the Visible Emissions Field Data Sheet in Section 11;
 - (ii) the time, estimated distance to the emissions location, approximate wind direction, estimated wind speed, description of the sky condition (presence and color of clouds), plume background, and operating rate (load or fuel consumption rate) on the sheet at the time opacity observations are initiated and completed;

- (iii) the presence or absence of an attached or detached plume and the approximate distance from the emissions outlet to the point in the plume at which the observations are made;
 - (iv) opacity observations to the nearest five percent at 15-second intervals on the Visible Emissions Observation in Section 11, and
 - (v) the minimum number of observations required by the permit; each momentary observation recorded shall be deemed to represent the average opacity of emissions for a 15-second period;
- b. to determine the six-minute average opacity, divide the observations recorded on the record sheet into sets of 24 consecutive observations; sets need not be consecutive in time and in no case shall two sets overlap; for each set of 24 observations, calculate the average by summing the opacity of the 24 observations and dividing this sum by 24; record the average opacity on the sheet;
 - c. Calculate and record the highest 18-consecutive-minute averages observed.
- 3.2 If using the Smoke/No Smoke Plan of Condition 2.2, record the following information in a written log for each observation and submit copies of the recorded information upon request of the Department:
- a. the date and time of the observation;
 - b. from Table A, the ID of the source observed;
 - c. whether visible emissions are present or absent in the exhaust;
 - d. a description of the background to the exhaust during the observation;
 - e. if the source starts operation on the day of the observation, the startup time of the source;
 - f. name and title of the person making the observation; and
 - g. operating rate (load or fuel consumption rate).
- 3.3 Record the operating hours of intermittently operated equipment.

4. Visible Emissions Reporting. The Permittee shall report visible emissions as follows:

[18 AAC 50.040(j), 7/25/08; 18 AAC 50.326(j), 12/1/04 and 18 AAC 50.346(c), 11/9/08]
[40 C.F.R. 71.6(a)(3)(iii), 7/2/07]

- 4.1 include in each stationary source operating report under Condition 53, include for the period covered by the report:
- a. which visible-emissions plan of Condition 2 was used for each source; if more than one plan was used, give the time periods covered by each plan;
 - b. for each source under the Method 9 Plan,

- (i) copies of the observation results (i.e. opacity observations) for each source that used the Method 9 Plan, except for the observations the Permittee has already supplied to the Department; and
 - (ii) a summary to include:
 - (A) number of days observations were made;
 - (B) highest six-minute average observed; and
 - (C) dates when one or more observed six-minute averages were greater than 20 percent;
 - c. for each source under the Smoke/No Smoke Plan, the number of days that Smoke/No Smoke observations were made and which days, if any, that smoke was observed; and
 - d. a summary of any monitoring or record keeping required under Conditions 2 and 3 that was not done;
 - e. the operating hours of any intermittently operated equipment categorized under Conditions 2.1d and 3.3.
- 4.2 report under Condition 52:
- a. the results of Method 9 observations that exceed an average 20 percent for any six-minute period; and
 - b. if any monitoring under Condition 2 was not performed when required, report within three days of the date the monitoring was required.

Flares, EU ID 16

5. Visible Emissions Monitoring, Recordkeeping, and Reporting. The Permittee shall observe one daylight flare event² within 12 months of the preceding flare event observation. If no event exceeds 1 hour within that 12-month period, then the Permittee shall observe the next daylight flare event.

5.1 Monitor flare events using Method-9.

5.2 Record the following information for observed events:

- a. the flare(s) EU ID number;
- b. results of the Method-9 observations;
- c. reason(s) for flaring;

² For purposes of this permit, a “flare event” is flaring of gas for greater than one hour as a result of scheduled release operations, i.e. maintenance or well testing activities. It does not include non-scheduled release operations, i.e. process upsets, emergency flaring, or de-minimis venting of gas incidental to normal operations.

- d. date, beginning and ending time of event; and
 - e. volume of gas flared.
- 5.3 Monitoring of a flare event may be postponed for safety or weather reasons, or because a qualified observer is not available. Until the Permittee completes the monitoring on the flare events described in this condition, the Permittee shall either monitor each qualifying flare event or include in the next operating report required by Condition 53 an explanation of the reason that the event was not monitored. If no events meeting this definition occur during a reporting period then no monitoring is required.
- 5.4 Attach copies of the records required by Condition 5.2 with the stationary source operating report required by Condition 53 for the period covered by that report.
- 5.5 Report under Condition 52 whenever the opacity standard in Condition 1 is exceeded.

[18 AAC 50.040(j), 7/25/08 and 18 AAC 50.326(j)(4), 12/1/04]
[40 C.F.R. 71.6(a)(3) & (c)(6), 7/2/07]

Particulate Matter Emissions Standards

- 6. Industrial Process and Fuel-Burning Equipment Particulate Matter.** The Permittee shall not cause or allow particulate matter emitted from EU IDs 1, 2 and 14 - 16 listed in Table A to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.

[18 AAC 50.040(j) & 50.055(b)(1), 7/25/08; and 18 AAC 50.326(j), 12/1/04]
[40 C.F.R. 71.6(a)(1), 7/2/07]

- 6.1 For EU IDs 14 and 15, monitor, record and report in accordance with Conditions 7 - 9.
- 6.2 For EU IDs 1, and 2 burn only gas as fuel. Monitoring for these emission units shall consist of a certification in each operating report under Condition 53 that each of these emission unit(s) fired only gas. Report under Condition 52 if any fuel is burned other than gas.
- 6.3 For EU ID 6, the Permittee must annually certify compliance under Condition 54 with the particulate matter standard.

[18 AAC 50.040(j), 7/25/08; 18 AAC 50.326(j), 12/1/04 and 18 AAC 50.346(c), 11/9/08]
[40 C.F.R. 71.6(a)(3), 7/2/07]

PM Monitoring, Recordkeeping and Reporting

For Liquid-Fired Boilers and Heaters (EU IDs 14 and 15)

- 7. Particulate Matter Monitoring.** The Permittee shall conduct source tests on EU IDs 14 and 15 to determine the concentration of PM in the exhaust of EU IDs 14 and 15 as follows:

[18 AAC 50.040(j), 7/25/08 and 18 AAC 50.326(j)(4), 12/1/04]

[40 C.F.R. 71.6(a)(3)(i) & (c)(6), 7/2/07]

- 7.1 Conduct a PM source test according to the requirements set out in Section 6 no later than 90 calendar days after any time corrective maintenance fails to eliminate visible emissions greater than the 20 percent opacity threshold for two or more 18-minute observations in a consecutive six-month period.
- 7.2 During each one-hour PM source test run, observe the exhaust for 60 minutes in accordance with Method 9 and calculate the average opacity that was measured during each one-hour test run.
- 7.3 The PM source test requirement in Condition 7 is waived for an emission unit if:
 - a. PM source test during the most recent semiannual reporting period on that unit shows compliance with the PM standard since permit issuance, or
 - b. if a follow-up visible emission observation conducted using Method-9 during the 90 days shows that the excess visible emissions described in Condition 2.1e no longer occur.

8. Particulate Matter Recordkeeping. The Permittee shall keep records of the results of any PM testing and visible emissions observations conducted under Condition 7.

[18 AAC 50.040(j), 7/25/08 and 18 AAC 50.326(j)(4), 12/1/04]
[40 C.F.R. 71.6(a)(3)(ii) & (c)(6), 7/1/04]

9. Particulate Matter Reporting. The Permittee shall report as follows:

[18 AAC 50.040(j), 7/25/08 and 18 AAC 50.326(j)(4), 12/1/04]
[40 C.F.R. 71.6(a)(3)(iii) & (c)(6), 7/2/07]

- 9.1 In each stationary source operating report required by Condition 53, include
 - a. the dates, EU ID(s), and results when an 18-minute opacity observation was greater than the applicable threshold criterion in Condition 2.1e.
 - b. a summary of the results of any PM testing and visible emissions observations conducted under Condition 7.
- 9.2 Report as excess emissions, in accordance with Condition 52, any time the results of a source test for PM exceeds the PM emission limit stated in Condition 6.

Sulfur Compound Emission Standards Requirements

10. Sulfur Compound Emissions. . The Permittee shall not cause or allow sulfur compound emissions, expressed as SO₂, from EU IDs 14 & 15 to exceed 500 ppm averaged over three hours.

[18 AAC 50.040(j) & 50.055(c), 7/25/08 and 18 AAC 50.326(j), 12/1/04;]
[40 C.F.R. 71.6(a)(1), 7/2/07]

For Diesel fuel oil³, EU IDs 14 and 15

- 10.1 The Permittee shall do one of the following for each shipment of fuel:
- a. If the fuel grade requires a sulfur content less than 0.5 percent by weight, keep receipts that specify fuel grade and amount; or
 - b. If the fuel grade does not require a sulfur content less than 0.5 percent by weight, keep receipts that specify fuel grade and amount and
 - (i) test the fuel for sulfur content; or
 - (ii) obtain test results showing the sulfur content of the fuel from the supplier or refinery; the test results must include a statement signed by the supplier or refinery of what fuel they represent.
- 10.2 Fuel testing under Condition 10.1 must follow an appropriate method listed in 18 AAC 50.035(b)-(c) and 40 C.F.R. 60.17 incorporated by reference in 18 AAC 50.040(a)(1).
- 10.3 If a load of fuel contains greater than 0.75 percent sulfur by weight, the Permittee shall calculate SO₂ emissions in ppm using either Section 12 or Method 19 of 40 C.F.R. 60, Appendix A-7, adopted by reference in 18 AAC 50.040(a).
- 10.4 The Permittee shall report as follows:
- a. If SO₂ emissions calculated under Condition 10.3 exceed 500 ppm, the Permittee shall report under Condition 52. When reporting under this condition, include the calculation under Section 12
 - b. The Permittee shall include in the report required by Condition 53
 - (i) a list of the fuel grades received at the stationary source during the reporting period;
 - (ii) for any grade with a maximum fuel sulfur greater than 0.5 percent sulfur, the fuel sulfur of each shipment; and
 - (iii) for fuel with a sulfur content greater than 0.75 percent, the calculated SO₂ emissions in ppm.
[18 AAC 50.040(j), 7/25/08; 18 AAC 50.326(j), 12/1/04 and 18 AAC 50.346(c), 11/9/08]
[40 C.F.R. 71.6(a)(3), 7/2/07]

For fuel gas⁴, EU IDs 1, 2, and 16

³ *Oil* means crude oil or petroleum or a liquid fuel derived from crude oil or petroleum, including distillate and residual oil, as defined in 40 C.F.R. 60.41b, effective 7/1/03.

⁴ *Fuel gas* has the meaning taken as natural gas as defined in 40 C.F.R. 60.41b, effective 7/1/07.

10.5 Monitoring – The Permittee shall either

- a. obtain a semiannual statement from the fuel supplier of the fuel total sulfur level in ppm; or
- b. analyze a representative sample of the fuel semiannually to determine the sulfur content using either ASTM D4084, D5504, D4810, D4913, D6228 or GPA Standard 2377, or a listed method approved in 18 AAC 50.035(b)-(c) and 40 CFR 60.17 incorporated by reference in 18 AAC 50.040(a)(1).

10.6 Recordkeeping - Keep records of the semiannual statement from the fuel supplier or the sulfur content analysis required under Conditions 10.5a or 10.5b.

10.7 Reporting -

- a. Report as excess emissions, in accordance with Condition 52, whenever the fuel combusted causes sulfur compound emissions to exceed the standard of Condition 10.
- b. Include copies of the records required by Condition 10.6 with the stationary source operating report required by Condition 53 for the period covered by the report.

[18 AAC 50.040(j), 7/25/08 and 18 AAC 50.326(j)(4), 12/1/04]
 [40 C.F.R. 71.6(a)(3) & (c)(6), 7/2/07]

PSD Avoidance Limits

The Permittee requested the limits in Condition 11 in order to avoid classification as a Prevention of Significant Deterioration Major Source.

11. The Permittee shall limit the stationary source emissions of carbon monoxide and nitrogen oxides to no more than 249 tons in any consecutive twelve-month by limiting the operations for EU IDs 1, 2 and 16 as shown in Table B:

Table B-- PSD Limited Sources

EU ID	Source Description	Limit in any consecutive 12-month period
1 and 2	Allison KC5 Turbines A and B	Turbines A and B not to exceed 15,500 hrs combined.
16	Temporary Flare	100 MMCF gas

Table notes: Owner Requested PSD Limits for EU IDs 1, 2 and 16

- 11.1 Maintain a monthly log for EU IDs 1 and 2 showing the number of operating hours each month and the total hours in the previous consecutive twelve-month period.
- 11.2 Maintain a monthly log for EU ID 16 showing the number of million cubic feet of gas burned each month and the total cubic feet burned in the previous consecutive twelve-month period.

- 11.3 Submit consecutive 12-month summaries of the records of Conditions 11.1 and 11.2 with the semiannual operating report in Condition 53.
- 11.4 Report under Condition 52 whenever the hours of operation of EU IDs 1 and 2 exceed the limits in Condition 11 (Table B).
- 11.5 Report under Condition 52 whenever the gas consumption of EU ID 16 exceeds the fuel consumption rate in Condition 11 (Table B).

[18 AAC 50.040(j), 7/25/08 and 18 AAC 50.326(j), 12/01/04]
[40 C.F.R. 71.6(a), 7/2/07]

Insignificant Emission Units

- 12.** For emission units at the stationary source that are insignificant as defined in 18 AAC 50.326(d)-(i) that are not listed in this permit, the following apply:

- 12.1 The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from an industrial process, fuel-burning equipment, or an incinerator to reduce visibility through the exhaust effluent by more than 20 percent averaged over any six consecutive minutes.

[18 AAC 50.050(a) & 50.055(a)(1), 7/25/08]

- 12.2 The Permittee shall not cause or allow particulate matter emitted from an industrial process or fuel-burning equipment to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.

[18 AAC 50.055(b)(1), 7/25/08]

- 12.3 The Permittee shall not cause or allow sulfur compound emissions, expressed as SO₂, from an industrial process or fuel-burning equipment, to exceed 500 ppm averaged over three hours.

[18 AAC 50.055(c), 7/25/08]

- 12.4 General MR&R for Insignificant Emission Units

- a. The Permittee shall submit the compliance certifications of Condition 54 based on reasonable inquiry for Condition 12;
- b. The Permittee shall comply with the requirements of Condition 32;
- c. The Permittee shall report in the operating report required by Condition 53 if an emission unit is insignificant because of actual emissions less than the thresholds of 18 AAC 50.326(e) and actual emissions become greater than any of those thresholds;
- d. No other monitoring, recordkeeping or reporting is required,;

Section 4. Federal Requirements

Emission Units Subject to Federal New Source Performance Standards (NSPS), Subpart A

13. NSPS Subpart A Notification. For any affected source⁵ regulated under NSPS requirements in 40 C.F.R. 60, the Permittee shall furnish the Department and EPA written or electronic notification of:

[18 AAC 50.035, 11/9/08; and 18 AAC 50.040(a)(1), 7/25/08]
[40 C.F.R. 60.7(a) 7/1/07 & 60.15(d), Subpart A, 7/01/07]

- 13.1 the date that construction or reconstruction of an affected source commences postmarked no later than 30 days after such a date;
[40 C.F.R. 60.7(a)(1), Subpart A, 7/1/07]
- 13.2 the actual date of initial startup of an affected source postmarked within 15 days after startup;
[40 C.F.R. 60.7(a)(3), Subpart A, 7/1/07]
- 13.3 any physical or operational change to an existing source which may increase the emission rate of any air pollutant to which a standard applies unless that change is specifically exempted under an applicable subpart or in 40 C.F.R. 60.14(e), postmarked 60 days or as soon as practicable before the change is commenced and shall include:
- a. information describing the precise nature of the change,
 - b. present and proposed emission control systems,
 - c. productive capacity of the facility before and after the change, and
 - d. the expected completion date of the change
- [40 C.F.R. 60.7(a)(4), Subpart A, 7/1/07]
- 13.4 the date of a continuous monitoring system performance demonstration, postmarked not less than 30 days prior to such date;
[40 C.F.R. 60.7(a)(5), Subpart A, 7/1/07]
- 13.5 the anticipated date for conducting the opacity observations required by 40 C.F.R. 60.11(e)(1), including, if appropriate, a request for the Department to provide a visible emissions reader during a performance test, postmarked not less than 30 days prior to such date;
[40 C.F.R. 60.7(a)(6), Subpart A, 7/1/07]
- 13.6 that continuous opacity monitoring system data results will be used to determine compliance with the applicable opacity standard during a performance test required in lieu of Method 9 observation data as allowed by 40 C.F.R. 60.11(e)(5), postmarked not less than 30 days prior to the date of the performance test; and

⁵ *Affected source* means, with reference to a stationary source, any apparatus to which a standard applies, as defined in 40 C.F.R. 60.2, effective 7/1/07

[40 C.F.R. 60.7(a)(7), Subpart A, 7/1/07]

13.7 any proposed replacement of an existing source, for which 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 source, postmarked as soon as practicable, but no less than 60 days before commencement of replacement, and including the following information:

[40 C.F.R. 60.15(d), 7/1/07]

- a. the name and address of owner or operator,
- b. the location of the existing source,
- c. a brief description of the existing source and the components that are to be replaced,
- d. a description of the existing and proposed air pollution control equipment,
- e. an estimate of the fixed capital cost of the replacements, and of constructing a comparable entirely new source,
- f. the estimated life of the existing source after the replacements, and
- g. a discussion of any economic or technical limitations the source may have in complying with 40 C.F.R. 60, after the replacements.

14. NSPS Subpart A Startup, Shutdown, & Malfunction Requirements. The Permittee shall maintain records of the occurrence and duration of any start-up, shutdown, or malfunction in the operation of EU IDs 1 and 2, any malfunctions of associated air-pollution control equipment, or any periods during which a continuous monitoring system or monitoring device for EU IDs 1 and 2 is inoperative.

[18 AAC 50.040(a)(1), 7/25/08]

[40 C.F.R. 60.7(b), Subpart A, 7/1/07]

15. NSPS Subpart A Performance (Source) Tests. The Permittee shall conduct initial source tests according to Section 6 and as indicated in this condition on any affected source within 60 days after achieving the maximum production rate at which the unit will be operated, but not later than 180 days after initial startup, and at such other times as may be required by EPA, and shall provide the Department and EPA with a written report of the results of the source test. The Permittee shall:

[18 AAC 50.040(a)(1), 7/25/08]

[40 C.F.R. 60.8(a), Subpart A, 7/1/07]

15.1 Conduct source tests and reduce data as set out in 40 C.F.R. 60.8(b), and provide the Department copies of any EPA waivers or approvals of alternative methods.

[40 C.F.R. 60.8(b), Subpart A, 7/1/07]

15.2 Conduct source tests under conditions specified by EPA to be based on representative performance of EU IDs 1 and 2.

[40 C.F.R. 60.8(c), Subpart A, 7/1/07]

15.3 Notify the Department and EPA at least 30 days in advance of the source test.

[40 C.F.R. 60.8(d), Subpart A, 7/1/07]

15.4 Provide adequate sampling ports, safe sampling platform(s), safe access to sampling platform(s), and utilities for sampling and testing equipment.

- 16. NSPS Subpart A Good Air Pollution Control Practice.** At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate EU IDs 1 and 2 including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. The administrator will determine whether acceptable operating and maintenance procedures are being used based on information available, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance records, and inspections of EU IDs 1 and 2.

[18 AAC 50.040(a)(1), 7/25/08]
[40 C.F.R. 60.11(d), Subpart A, 7/1/07]

- 17. NSPS Subpart A Credible Evidence.** For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of the standards set forth in Conditions 19 and 20. Nothing in 40 C.F.R. Part 60 shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether EU IDs 1 and 2 would have been in compliance with applicable requirements of 40 C.F.R. Part 60 if the appropriate performance or compliance test or procedure had been performed.

[18 AAC 50.040(a)(1), 7/25/08]
[40 C.F.R. 60.11(g), Subpart A, 7/1/07]

- 18. NSPS Subpart A Concealment of Emissions.** The Permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of a standard set forth in Conditions 19 and 20. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard that is based on the concentration of a pollutant in the gases discharged to the atmosphere.

[18 AAC 50.040(a)(1), 7/25/08]
[40 C.F.R. 60.12, Subpart A, 7/1/07]

Turbines Subject to NSPS Subpart GG (EU IDs 1 and 2)

- 19. NSPS Subpart GG NO_x Standard.** The Permittee shall not allow the exhaust gas concentration of NO_x from EU IDs 1 and 2 to exceed 162 ppmv at 15 percent O₂ dry exhaust basis.

[18 AAC 50.040(a)(2)(V), 7/25/08]
[40 C.F.R. 60.332(a)(2) & (d), Subpart GG, 7/1/07]

19.1 **Waivers.** The Permittee shall provide to the Department a written copy of any U.S. EPA granted waiver of the federal emission standards, recordkeeping, monitoring, performance testing, or reporting requirements, or approved custom monitoring schedules upon request by the Department. The Permittee shall keep a copy of each U.S. EPA issued monitoring waiver or custom monitoring schedule with the permit.

19.2 **Monitoring.** The Permittee shall comply with the following:

[18 AAC 50.040(j), 7/25/08 and 18 AAC 50.326(j)(4), 12/1/04]
[40 C.F.R. 71.6(a)(3)(i) & (c)(6), 7/2/07]

- a. **Periodic Testing.** For each turbine subject to Condition 19 that operates for 400 hours or more in any 12-month period during the life of this permit, the Permittee shall satisfy either Condition 19.2a(i) or 19.2a(ii)
- (i) For existing turbines whose latest emissions source testing was certified as operating at less than or equal to 90% of the limit shown in Condition 19, the Permittee shall conduct a NO_x and O₂ source test under 40 C.F.R. 60, Appendix A-7, Method 20 within the first applicable criteria below in the noted timeframe or no later than the listed permit expiration date except as set out in Condition 19.2a(ii):
 - (A) Within 5 years of the latest performance test, or
 - (B) Within 1 year of the date of issue of this permit if the last source test occurred greater than five years prior to issuance of this permit and the 400-hour threshold was triggered within 6 months of the permit issue date, or
 - (C) Within 1 year after exceeding 400 hours of operation in a 12-month period if the last source test occurred greater than 5 years prior to the exceedance.
 - (ii) For existing turbines whose latest emissions source testing was certified as operating at greater than 90% of the limit shown in Condition 19, the Permittee shall conduct a NO_x and O₂ source test under 40 C.F.R. 60, Appendix A, Method 20, or Method 7E and either Method 3 or 3A, annually until two consecutive tests show performance results certified at less than or equal to 90 percent of the limit of Condition 19.
- b. **Substituting Test Data.** The Permittee may use a Method 20 or Method 7E and either Method 3 or 3A, test under Condition 19.2a performed on only one of a group of turbines to satisfy the requirements of those conditions for the other turbines in the group if
- (i) the Permittee demonstrates that test results are less than 90 percent of the emission limit of Condition 19, and are projected under Condition 19.2c to be less than 90 percent of the limit at maximum load;
 - (ii) for any source test done after the issuance date of this permit, the Permittee identifies in a source test plan under Condition 44
 - (A) the turbine to be tested;
 - (B) the other turbines in the group that are to be represented by the test; and

- (C) why the turbine to be tested is representative, including that each turbine in the group
 - (1) is located at a stationary source operated and maintained by the Permittee;
 - (2) is tested under close to identical ambient conditions;
 - (3) is the same make and model and has identical injectors and combustor;
 - (4) uses the same fuel type from the same source.
- (iii) The Permittee may not use substitute test results to represent emissions from a turbine or group of turbines if that turbine or group of turbines is operating at greater than 90% of the emission limit of Condition 19.

c. Load.

- (i) Conduct all tests under Condition 19.2 in accordance with 40 C.F.R. 60.335, except as otherwise approved in writing by the Department, or by EPA if the circumstances at the time of the EPA approval are still valid. For the highest load condition, if it is not possible to operate the turbine during the test at maximum load, the Permittee will test the turbine when operating at the highest load achievable by the turbine under the ambient and stationary source operating conditions in effect at the time of the test.
- (ii) Demonstrate in the source test plan for any test performed after the issue date of this permit whether the test is scheduled when maximum NO_x emissions are expected.
- (iii) If the highest operating rate tested is less than the maximum load of the tested turbine or another turbine represented by the test data,
 - (A) for each such turbine the Permittee shall provide to the Department as an attachment to the source test report
 - (1) additional test information from the manufacturer or from previous testing of units in the group of turbines; if using previous testing of the group of turbines, the information must include all available test data for the turbines in the group, and
 - (2) a demonstration based on the additional test information that projects the test results from Condition 19.2 to predict the highest load at which emissions will comply with the limit in Condition 19;

- (B) the Permittee shall not operate any turbine represented by the test data at loads for which the Permittee's demonstration predicts that emissions will exceed the limit of Condition 19;
- (C) the Permittee shall comply with a written finding prepared by the Department that
 - (1) the information is inadequate for the Department to reasonably conclude that compliance is assured at any load greater than the test load, and that the Permittee must not exceed the test load;
 - (2) the highest load at which the information is adequate for the Department to reasonably conclude that compliance assured is less than maximum load, and the Permittee must not exceed the highest load at which compliance is predicted, or
 - (3) the Permittee must retest during a period of greater expected demand on the turbine; and
- (D) the Permittee may revise a load limit by submitting results of a more recent Method 20 test done at a higher load, and, if necessary, the accompanying information and demonstration described in Condition 19.2c(iii)(A); the new limit is subject to any new Department finding under Condition 19.2c(iii)(C) and
- (iv) In order to perform a Method 20 emission test or Method 7E and either Method 3 or 3A, emission test, the Permittee may operate a turbine at a higher load than that prescribed by Condition 19.2c(iii).
- (v) For the purposes of Conditions 19.2 through 19.4, maximum load means the hourly average load that is the smallest of
 - (A) 100 percent of manufacturer's design capacity of the gas turbine at ISO standard day conditions;
 - (B) the highest load allowed by an enforceable condition that applies to the turbine; or
 - (C) the highest load possible considering permanent physical restraints on the turbine or the equipment which it powers.

19.3 Recordkeeping. The Permittee shall keep records as follows:

[18 AAC 50.040(j), 7/25/08 and 18 AAC 50.326(j)(4), 12/1/04]
[40 C.F.R. 71.6(a)(3)(ii) & (c)(6), 7/2/07]

- a. The Permittee shall comply with the following for each turbine for which a demonstration under Condition 19.2c(iii) does not show compliance with the limit of Condition 19 at maximum load.
 - (i) The Permittee shall keep records of
 - (A) load; or
 - (B) as approved by the Department, surrogate measurements for load and the method for calculating load from those measurements.
 - (ii) Records in Condition 19.3a shall be hourly or otherwise as approved by the Department.
 - (iii) Within one month after submitting a demonstration under Condition 19.2c(iii)(A)(2) that predicts that the highest load at which emissions will comply is less than maximum load, or within one month of a Department finding under Condition 19.2c(iii)(C), whichever is earlier, the Permittee shall propose to the Department how they will measure load or load surrogates, and shall propose and comply with a schedule for installing any necessary equipment and beginning monitoring. The Permittee shall comply with any subsequent Department direction on the load monitoring methods, equipment, or schedule.
- b. For any turbine subject to Condition 19, that will operate less than 400 hours in any 12 consecutive months, keep monthly records of the hours of operation.

19.4 Reporting. The Permittee shall keep report as follows:

[18 AAC 50.040(j), 7/25/08 and 18 AAC 50.326(j)(4), 12/1/04]
[40 C.F.R. 71.6(a)(3)(iii) & (c)(6), 7/2/07]

- a. In each stationary source operating report under Condition 53 the Permittee shall list for each turbine tested or represented by testing at less than maximum load and for which the Permittee must limit load under Condition 19.2c(iii)
 - (i) the load limit;
 - (ii) the turbine identification; and
 - (iii) the highest load recorded under Condition 19.3a during the period covered by the operating report.
- b. In each stationary source operating report under Condition 53 for each turbine for which Condition 19.2 has not been satisfied because the turbine normally operates less than 400 hours in any 12 consecutive months, the Permittee shall identify
 - (i) the turbine;

- (ii) the highest number of operating hours for any 12 consecutive months ending during the period covered by the report.
- c. The Permittee shall report under Condition 52 if
- (i) a test result exceeds the emission standard;
 - (ii) Method 20, or Method 7E and either Method 3 or 3A, testing is required under Condition 19.2 or 19.3b but not performed, or
 - (iii) the turbine was operated at a load exceeding that allowed by Conditions 19.2c(iii)(B) and 19.2c(iii)(C); exceeding a load limit is deemed a single violation rather than a multiple violation of both monitoring and the underlying emission limit.

[18 AAC 50.220(a) - (c), 10/1/04 and 18 AAC 50.040(a)(1), 7/25/08]
[40 C.F.R. 60.8(b), Subpart A, 7/01/07]

20. NSPS Subpart GG Sulfur Standard. The Permittee shall comply with either the SO₂ standard in Condition 20.a, or the fuel sulfur content standard in Condition 20.b below:

[18 AAC 50.040(a)(2)(V), 7/25/08]
[40 C.F.R. 60.333-60.335, Subpart GG, 7/1/07]

- a. do not allow the exhaust gas concentration of SO₂ from EU IDs 1 and 2 to exceed 150 ppmvd corrected to 15 percent O₂, or
- b. do not allow the sulfur content for the fuel burned in EU IDs 1 and 2 to exceed 0.8 percent by weight.

[40 C.F.R. 60.333(a), Subpart GG, 7/1/07]
[40 C.F.R. 60.333(b), Subpart GG, 7/1/07]

20.2 Monitoring - Monitor compliance with the standards listed in this condition as follows:

[18 AAC 50.040(a)(2)(V), 7/25/08]
[40 C.F.R. 60.334 & 60.335, Subpart GG, 7/1/07]

- a. Monitor the total sulfur content of the fuel being fired in the turbine, except as provided in Condition 20.2b. The sulfur content of the fuel must be determined using total sulfur methods described in 40 C.F.R. 60.335(b)(10) and Condition 54.3. Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than 0.4 weight percent (4000 ppmw), ASTM D4084-82, 94, D5504-01, D6228-98, or Gas Processors Association Standard 2377-86, which measure the major sulfur compounds may be used.

[40 C.F.R. 60.334(h)(1), Subpart GG, 7/1/07]

- b. The owner or operator may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in 40 C.F.R. 60.331(u), regardless of whether an existing custom schedule approved by the Administrator requires such monitoring. The owner or operator shall use one of the following sources of information to make the required demonstration:
- [40 C.F.R. 60.334(b)(2), Subpart GG, 7/1/07]
- (i) The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or
- (ii) (Representative fuel sampling data, which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in 40 C.F.R. 75, Appendix D, Section 2.3.1.4 or 2.3.2.4 is required.
- [40 C.F.R. 60.334(h)(3), Subpart GG, 7/1/07]
- c. For any turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and for which a custom fuel monitoring schedule has previously been approved, the owner or operator may, without submitting a special petition to the Administrator, continue monitoring on this schedule.
- [40 C.F.R. 60.334(h)(4), Subpart GG, 7/1/07]
- d. The frequency of determining the sulfur content of the fuel shall be as follows:
- [18 AAC 50.040(j), 7/25/08; 18 AAC 50.326(j), 12/1/04]
[40 C.F.R. 60.334(i), Subpart GG, 7/1/07.]
- (i) Fuel oil. For fuel oil, use one of the total sulfur sampling options and the associated sampling frequency described in Sections 2.2.3, 2.2.4.1, 2.2.4.2, and 2.2.4.3 of Appendix D of 40 C.F.R Part 75 (i.e., flow proportional sampling, daily sampling, sampling from the unit's storage tank after each addition of fuel to the tank, or sampling each delivery prior to combining it with fuel oil already in the intended storage tank). If an emission allowance is being claimed for fuel-bound nitrogen, the nitrogen content of the oil shall be determined and recorded once per unit operating day.
- [40 C.F.R. 60.334(i)(1), Subpart GG, 7/1/07]
- (ii) Gaseous fuel. For owners and operators that elect not to demonstrate sulfur content using options in Condition 20.2b, and for which the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel shall be determined and recorded once per unit operating day.
- [40 C.F.R. 60.334(i)(2), Subpart GG, 7/1/07.]

- (iii) Custom schedules. Notwithstanding the requirements of Condition 20.2b(ii), operators or fuel vendors may develop custom schedules for determination of the total sulfur content of gaseous fuels, based on the design and operation of the affected facility and the characteristics of the fuel supply. Except as provided in 40 C.F.R. 60.334(i)(3)(i) and (i)(3)(ii), custom schedules shall be substantiated with data and shall be approved by the Administrator before they can be used to comply with the standard in Condition 20. The two custom sulfur monitoring schedules set forth in 40 C.F.R. 60.334(i)(3)(i)(A) through (D) and 60.334(i)(3)(ii) are acceptable without prior Administrative approval.

[40 C.F.R. 60.334(i)(3), Subpart GG, 7/1/07:

20.3 Test Methods and Procedures. If the owner or operator is required under Conditions 20.2d(i) or 20.2d(iii) to periodically determine the sulfur content of the fuel combusted in the turbine, a minimum of three fuel samples shall be collected during the performance test. Analyze the samples for the total sulfur content of the fuel using Conditions 20.3a and/or 20.3b:

[18 AAC 50.040(a)(2)(V), 7/25/08]
[40 C.F.R. 60.335(b), Subpart GG, 7/1/07]

- a. For liquid fuels, ASTM D129–00, D2622–98, D4294–02, D1266–98, D5453–00 or D1552–01; or
- b. For gaseous fuels, ASTM D1072-80, 90; D3246-81, 92, 96; D4468-85; or D6667-01. The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the prior approval of the Administrator.
- c. The fuel sulfur analysis required under Condition 20.3 may be performed by the owner or operator, a service contractor retained by the owner or operator, and fuel vendor, or any other qualified agency.

[40 C.F.R. 60.335(b)(10)(1), Subpart GG, 7/1/07]

[40 C.F.R. 60.335(b)(10)(2), Subpart GG, 7/1/07]

[40 C.F.R. 60.335(e), Subpart GG, 7/1/07]

20.4 Recordkeeping – Keep records as required by Condition 20.2 or 20.3 and in accordance with Condition 48.

[18 AAC 50.040(j), 7/25/08 and 18 AAC 50.326(j), 12/1/04]
[40 C.F.R. 71.6(a)(3)(ii), 7/2/07]

20.5 Reporting - For each affected unit that periodically determines the fuel sulfur content under Condition 20.2a, the owner or operator shall submit reports of excess emissions and monitor downtime, in accordance with 40 C.F.R. 60.7(c) except where otherwise approved by a custom fuel monitoring schedule. Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction as described by 40 C.F.R. 60.334(j)(2)..

[18 AAC 50.040(j), 7/25/08; 18 AAC 50.326(j), 12/1/04]
[40 C.F.R. 60.334(j), Subpart GG, 7/1/07]

Glycol Dehydrator Vents Subject to NESHAP Subpart HH (EU IDs 18 and 19)

21. The Permittee shall maintain a record of the per-unit actual natural gas flow rate for EU IDs 18 and 19.

21.1 The twelve month annual average natural gas flow rates are not to exceed 3.0 MMdscf per unit.

[40 CFR 63.760(f)(5)(ii), 63.764(e)(1)(i), 63.772(b)(1)(ii), and 63.774(d)(1)(i), 1/3/2007]

21.2 Recordkeeping – Keep records as required by Condition 21. Record the monthly and rolling twelve-month total natural gas flow rates.

[18 AAC 50.040(j), 7/25/08 and 18 AAC 50.326(j), 12/1/04]

[40 C.F.R. 71.6(a)(3)(ii), 7/2/07]

21.3 Reporting – report in the operating report required by Condition 53 the record of natural gas flow rate as recorded including the rolling twelve month total.

[18 AAC 50.345(i), 11/09/08]

[40 C.F.R. 71.6(a)(3)(ii), 7/2/07]

Section 5. General Conditions

Standard Terms and Conditions

- 22.** Each permit term and condition is independent of the permit as a whole and remains valid regardless of a challenge to any other part of the permit.

[18 AAC 50.326(j)(3), 12/1/04 and 18 AAC 50.345(a) & (e), 11/9/08]

- 23.** The permit may be modified, reopened, revoked and reissued, or terminated for cause. A request by the Permittee for modification, revocation and re-issuance, or termination or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

[18 AAC 50.326(j)(3), 12/1/04 and 18 AAC 50.345(a) & (f), 11/9/08]

- 24.** The permit does not convey any property rights of any sort, nor any exclusive privilege.

[18 AAC 50.326(j)(3), 12/1/04 and 18 AAC 50.345(a) & (g), 11/9/08]

- 25. Administration Fees.** The Permittee shall pay to the Department all assessed permit administration fees. Administration fee rates are set out in 18 AAC 50.400-405.

[18 AAC 50.326(j)(1), 12/1/04; 18 AAC 50.400, 7/25/2008; 18 AAC 50.403, 12/3/05 and 18 AAC 50.405, 1/29/05]
[AS 37.10.052(b), 11/04 and AS 46.14.240, 6/7/03]

- 26. Assessable Emissions.** The Permittee shall pay to the Department an annual emission fee based on the stationary source's assessable emissions as determined by the Department under 18 AAC 50.410. The assessable emission fee rate is set out in 18 AAC 50.410(b). The Department will assess fees per ton of each air pollutant that the stationary source emits or has the potential to emit in quantities greater than 10 tons per year. The quantity for which fees will be assessed is the lesser of

26.1 the stationary source's assessable potential to emit of 532 TPY; or

26.2 the stationary source's projected annual rate of emissions that will occur from July 1 to the following June 30, based upon actual annual emissions emitted during the most recent calendar year or another 12-month period approved in writing by the Department, when demonstrated by

- a. an enforceable test method described in 18 AAC 50.220;
- b. material balance calculations;
- c. emission factors from EPA's publication AP-42, Vol. I, adopted by reference in 18 AAC 50.035; or
- d. other methods and calculations approved by the Department.

[18 AAC 50.040(j)(3) 7/25/08; 18 AAC 50.326(j)(1), 12/1/04; 18 AAC 50.035; 18 AAC 50.346(b)(1), 11/9/08; 18 AAC 50.410, 6/18/09; and 18 AAC 50.420, 01/29/05]
[40 C.F.R. 71.5(c)(3)(ii), 7/2/07]

- 27. Assessable Emission Estimates.** Emission fees will be assessed as follows:

27.1 no later than March 31 of each year, the Permittee may submit an estimate of the stationary source's assessable emissions to ADEC, Air Permits Program, ATTN: Assessable Emissions Estimate, 410 Willoughby Ave., Juneau, AK 99801-1795; the submittal must include all of the assumptions and calculations used to estimate the assessable emissions in sufficient detail so the Department can verify the estimates; or

27.2 if no estimate is submitted on or before March 31 of each year, emission fees for the next fiscal year will be based on the potential to emit set forth in Condition 26.1.

[18 AAC 50.040(j)(3), 7/25/08; 18 AAC 50.326(j)(1), 12/1/04; 18AAC 50.346(b)(1), 11/9/08, 18 AAC 50.410, 6/18/09; and 18 AAC 50.420, 01/29/05]
[40 C.F.R. 71.5(c)(3)(ii), 7/2/07]

28. Good Air Pollution Control Practice. The Permittee shall do the following for EU IDs 14 - 16 and 18 - 19:

- a. perform regular maintenance considering the manufacturer's or the operator's maintenance procedures;
- b. keep records of any maintenance that would have a significant effect on emissions; the records may be kept in electronic format; and
- c. keep a copy of either the manufacturer's or the operator's maintenance procedures.

[18 AAC 50.030, 7/25/08; 18 AAC 50.326(j)(3), 12/1/04 and 18 AAC 50.346(b)(5), 10/1/04]

29. Dilution. The Permittee shall not dilute emissions with air to comply with this permit. Monitoring shall consist of an annual certification that the Permittee does not dilute emissions to comply with this permit.

[18 AAC 50.045(a), 10/1/04]

30. Reasonable Precautions to Prevent Fugitive Dust. A person who causes or permits bulk materials to be handled, transported, or stored, or who engages in an industrial activity or construction project shall take reasonable precautions to prevent particulate matter from being emitted into the ambient air.

[18 AAC 50.045(d), 10/1/04; 18 AAC 50.040(e), 7/25/08; 18 AAC 50.326(j)(3), 12/1/04]
[18 AAC 50.346(c), 11/9/08]

30.1 The Permittee shall keep records of

- a. complaints received by the Permittee and complaints received by the Department and conveyed to the Permittee; and
- b. any additional precautions that are taken
 - (i) to address complaints described in Condition 30.1 or to address the results of Department inspections that found potential problems; and
 - (ii) to prevent future dust problems.

30.2 The Permittee shall report according to Condition 32.

- 31. Stack Injection.** The Permittee shall not release materials other than process emissions, products of combustion, or materials introduced to control pollutant emissions from a stack at a source constructed or modified after November 1, 1982, except as authorized by a construction permit, Title V permit, or air quality control permit issued before October 1, 2004.

[18 AAC 50.055(g), 7/25/08]

- 32. Air Pollution Prohibited.** No person may permit 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.

[18 AAC 50.110, 5/26/72; 18 AAC 50.040(e), 7/25/08; 18 AAC 50.326(j)(3), 12/1/04
and 18 AAC 50.346(a), 11/9/08]
[40 C.F.R. 71.6(a)(3), 7/2/07]

32.1 Monitoring, Record Keeping, and Reporting for Air Pollution Prohibited

- a. If emissions present a potential threat to human health or safety, the Permittee shall report any such emissions according to Condition 52.
- b. As soon as practicable after becoming aware of a complaint that is attributable to emissions from the stationary source, the Permittee shall investigate the complaint to identify emissions that the Permittee believes have caused or are causing a violation of Condition 32.

32.2 The Permittee shall initiate and complete corrective action necessary to eliminate any violation identified by a complaint or investigation as soon as practicable if

- a. after an investigation because of a complaint or other reason, the Permittee believes that emissions from the stationary source have caused or are causing a violation of Condition 32; or
- b. the Department notifies the Permittee that it has found a violation of Condition 32.

32.3 The Permittee shall keep records of

- a. the date, time, and nature of all emissions complaints received;
- b. the name of the person or persons that complained, if known;
- c. a summary of any investigation, including reasons the Permittee does or does not believe the emissions have caused a violation of Condition 32; and
- d. any corrective actions taken or planned for complaints attributable to emissions from the stationary source.

32.4 With each stationary source operating report under Condition 53, the Permittee shall include a brief summary report which must include

- a. the number of complaints received;
- b. the number of times the Permittee or the Department found corrective action necessary;
- c. the number of times action was taken on a complaint within 24 hours; and
- d. the status of corrective actions the Permittee or Department found necessary that were not taken within 24 hours.

32.5 The Permittee shall notify the Department of a complaint that is attributable to emissions from the stationary source within 24 hours after receiving the complaint, unless the Permittee has initiated corrective action within 24 hours of receiving the complaint.

33. Technology-Based Emission Standard. If an unavoidable emergency, malfunction, or non-routine repair, as defined in 18 AAC 50.235(d), causes emissions in excess of a technology-based emission standard⁶ listed in Conditions 19, 20, 35(refrigerants), the Permittee shall take all reasonable steps to minimize levels of emissions that exceed the standard. Excess emissions reporting under Condition 52 requires information on the steps taken to minimize emissions. Monitoring of compliance for this condition consists of the report required under Condition 52.

[18 AAC 50.235(a) & 50.326(j)(4), 10/1/04 and 18 AAC 50.040(j)(4), 7/25/08]
[40 C.F.R. 71.6(c)(6), 7/2/07]

34. Asbestos NESHAP. The Permittee shall comply with the requirements set forth in 40 C.F.R. 61.145, 61.150, and 61.152 of Subpart M, and the applicable sections set forth in 40 C.F.R. 61, Subpart A and Appendix A.

[18 AAC 50.040(b)(1) & (2)(F), 7/25/08 and 18 AAC 50.326(j), 12/1/04]
[40 C.F.R. 61, Subparts A & M, and Appendix A, 5/16/07]

35. Refrigerant Recycling and Disposal. The Permittee shall comply with the standards for recycling and emission reduction of refrigerants set forth in 40 C.F.R. 82, Subpart F.

[18 AAC 50.040(d), 7/25/08 & 18 AAC 50.326(j), 12/1/04]
[40 C.F.R. 82, Subpart F, 7/1/07]

NESHAPs Applicability Determinations

36. The Permittee shall determine rule applicability and designation of affected sources under National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Source Categories (40 C.F.R. 63) in accordance with the procedures described in 40 C.F.R.

⁶ *Technology-based emission standard* means a best available control technology standard (BACT); a lowest achievable emission rate standard (LAER); a maximum achievable control technology standard established under 40 C.F.R. 63, Subpart B, adopted by reference in 18 AAC 50.040(c); a standard adopted by reference in 18 AAC 50.040(a) or (c); and any other similar standard for which the stringency of the standard is based on determinations of what is technologically feasible, considering relevant factors.

63.1(b) and 63.10(b)(3). If a source becomes affected by an applicable subpart of 40 C.F.R. 63, the Permittee shall comply with such standard by the compliance date established by the Administrator in the applicable subpart.

36.1 The Permittee must keep a record of any applicability determination required under 40 C.F.R. 60.10(b)(3) on site for a period of 5 years after the determination or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the Permittee believes the source is unaffected. The analysis (or other information) must be sufficiently detailed to allow the Department to make a finding about the source's applicability status with regard to the relevant standard or other requirement.

[18 AAC 50.040(c)(1)(A) & (E) & 50.040(j), 7/25/08, and 18 AAC 50.326(j), 12/1/04]
[40 C.F.R. 71.6(a)(3)(ii), 7/2/07; and 40 C.F.R. 63.1(b) & 63.6(c)(1), 7/16/07]

Open Burning Requirements

37. Open Burning. If the Permittee conducts open burning at this stationary source they shall comply with the requirements of 18 AAC 50.065.

37.1 The Permittee shall keep written records to demonstrate that the Permittee complies with the limitations in this condition and the requirements of 18 AAC 50.065. Upon request by the Department, submit copies of the records.

37.2 Compliance with this condition shall be an annual certification conducted under Condition 54.

[18 AAC 50.065, 1/18/97; 18 AAC 50.040(j), 7/25/08 and 18 AAC 50.326(j), 12/1/04]
[40 C.F.R. 71.6(a)(3), 7/1/07]

Section 6. General Source Testing and Monitoring Requirements

- 38. Requested Source Tests.** In addition to any source testing explicitly required by the permit, the Permittee shall conduct source testing as requested by the Department to determine compliance with applicable permit requirements.

[18 AAC 50.220(a), 10/1/04 and 18 AAC 50.345(a) & (k), 11/9/08]

- 39. Operating Conditions.** Unless otherwise specified by an applicable requirement or test method, the Permittee shall conduct source testing

[18 AAC 50.220(b), 10/1/04]

39.1 at a point or points that characterize the actual discharge into the ambient air; and

39.2 at the maximum rated burning or operating capacity of the source or another rate determined by the Department to characterize the actual discharge into the ambient air.

- 40. Reference Test Methods.** The Permittee shall use the following as reference test methods when conducting source testing for compliance with this permit:

40.1 Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(a) must be conducted in accordance with the methods and procedures specified in 40 C.F.R. 60.

[18 AAC 50.220(c)(1)(A), 10/1/04 and 18 AAC 50.040(a), 7/25/08]
[40 C.F.R. 60, 7/1/07]

40.2 Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(b) must be conducted in accordance with the methods and procedures specified in 40 C.F.R. 61.

[18 AAC 50.040(b), 7/25/08 and 18 AAC 50.220(c)(1)(B), 10/1/04]
[40 C.F.R. 61, 5/16/07]

40.3 Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(c) must be conducted in accordance with the source test methods and procedures specified in 40 C.F.R. 63.

[18 AAC 50.040(c), 7/25/08, and 18 AAC 50.220(c)(1)(C), 10/1/04]
[40 C.F.R. 63, 7/16/07]

40.4 Source testing for the reduction in visibility through the exhaust effluent must be conducted in accordance with the procedures set out in Reference Method 9 and may use the form in Section 11 to record data.

[18 AAC 50.030, 11/9/08, and 18 AAC 50.220(c)(1)(D), 10/1/04]

40.5 Source testing for emissions of total particulate matter, sulfur compounds, nitrogen compounds, carbon monoxide, lead, volatile organic compounds, fluorides, sulfuric acid mist, municipal waste combustor organics, metals, and acid gases must be conducted in accordance with the methods and procedures specified in 40 C.F.R. 60, Appendix A.

[18 AAC 50.040(a)(3), 7/25/08, and 18 AAC 50.220(c)(1)(E), 10/1/04]

[40 C.F.R. 60, Appendix A, 7/1/07]

40.6 Source testing for emissions of PM-10 must be conducted in accordance with the procedures specified in 40 C.F.R. 51, Appendix M, Methods 201 or 201A and 202.

[18 AAC 50.035(b)(2), 11/9/08; and 50.220(c)(1)(F), 10/1/04]
[40 C.F.R. 51, Appendix M, 7/01/07]

40.7 Source testing for emissions of any pollutant may be determined using an alternative method approved by the Department in accordance with 40 C.F.R. 63 Appendix A, Method 301.

[18 AAC 50.040(c)(24), 7/25/08 and 50.220(c)(2), 10/1/04]
[40 C.F.R. 63, Appendix A, Method 301, 7/16/07]

41. Excess Air Requirements. To determine compliance with this permit, standard exhaust gas volumes must include only the volume of gases formed from the theoretical combustion of the fuel, plus the excess air volume normal for the specific source type, corrected to standard conditions (dry gas at 68° F and an absolute pressure of 760 millimeters of mercury).

[18 AAC 50.220(c)(3), 10/1/04 and 50.990(102), 7/25/08]

42. Test Exemption. The Permittee is not required to comply with Conditions 44, 45 and 46 when the exhaust is observed for visible emissions by Method 9 Plan (Condition 2.1) or Smoke/No Smoke Plan (Condition 2.2).

[18 AAC 50.345(a), 11/9/08]

43. Test Deadline Extension. The Permittee may request an extension to a source test deadline established by the Department. The Permittee may delay a source test beyond the original deadline only if the extension is approved in writing by the Department's appropriate division director or designee.

[18 AAC 50.345(a) & (l), 11/9/08]

44. Test Plans. Except as provided in Condition 42, before conducting any source tests, the Permittee shall submit a plan to the Department. The plan must include the methods and procedures to be used for sampling, testing, and quality assurance and must specify how the source will operate during the test and how the Permittee will document that operation. The Permittee shall submit a complete plan within 60 days after receiving a request under Condition 38 and at least 30 days before the scheduled date of any test unless the Department agrees in writing to some other time period. Retesting may be performed without resubmitting the plan.

[18 AAC 50.345(a) & (m), 11/9/08]

45. Test Notification. Except as provided in Condition 42, at least 10 days before conducting a source test, the Permittee shall give the Department written notice of the date and the time the source test will begin.

[18 AAC 50.345(a) & (n), 11/9/08]

46. Test Reports. Except as provided in Condition 42, within 60 days after completing a source test, the Permittee shall submit two copies of the results in the format set out in the *Source Test Report Outline*, adopted by reference in 18 AAC 50.030. The Permittee shall additionally certify the results in the manner set out in Condition 49. If requested in

writing by the Department, the Permittee must provide preliminary results in a shorter period of time specified by the Department.

[18 AAC 50.345(a) & (o), 11/9/08]

- 47. Particulate Matter Calculations.** In source testing for compliance with the particulate matter standards in Conditions 6 and 7, the three-hour average is determined using the average of three one-hour test runs.

[18 AAC 50.220(f), 10/1/04]

Section 7. General Recordkeeping and Reporting Requirements

Recordkeeping Requirements

- 48. Recordkeeping Requirements.** The Permittee shall keep all records required by this permit for at least five years after the date of collection, including:

[18 AAC 50.326(j), 12/1/04]
[40 C.F.R 60.7(f), Subpart A, 7/1/07 and 71.6(a)(3)(ii)(B), 7/2/07]

- 48.1 copies of all reports and certifications submitted pursuant to this section of the permit; and
- 48.2 records of all monitoring required by this permit, and information about the monitoring including:
- a. the date, place, and time of sampling or measurements;
 - b. the date(s) analyses were performed;
 - c. the company or entity that performed the analyses;
 - d. the analytical techniques or methods used;
 - e. the results of such analyses; and,
 - f. the operating conditions as existing at the time of sampling or measurement.

Reporting Requirements

- 49. Certification.** The Permittee shall certify any permit application, report, affirmation, or compliance certification submitted to the Department and required under the permit by including the signature of a responsible official for the permitted stationary source following the statement: “*Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.*” Excess emission reports must be certified either upon submittal or with an operating report required for the same reporting period. All other reports and other documents must be certified upon submittal.

- 49.1 The Department may accept an electronic signature on an electronic application or other electronic record required by the Department if
- a. a certifying authority registered under AS 09.25.510 verifies that the electronic signature is authentic; and
 - b. the person providing the electronic signature has made an agreement, with the certifying authority described in 49.1a, that the person accepts or agrees to be bound by an electronic record executed or adopted with that signature,

[18 AAC 50.345(a) & (j), 11/9/08; 18 AAC 50.205, 10/1/04; and 18 AAC 50.326(j), 12/1/04]
[40 C.F.R. 71.6(a)(3)(iii)(A), 7/2/07]

- 50. Submittals.** Unless otherwise directed by the Department or this permit, the Permittee shall send an original and one copy of reports, compliance certifications, and other

submittals required by this permit to **ADEC, Air Permits Program, 610 University Ave., Fairbanks, AK 99709-3643, ATTN: Compliance Technician**. The Permittee may, upon consultation with the Compliance Technician regarding software compatibility, provide electronic copies of data reports, emission source test reports, or other records under a cover letter certified in accordance with Condition 49.

[18 AAC 50.326(j), 12/1/04]
[40 C.F.R. 71.6(a)(3)(iii)(A), 7/2/07]

- 51. Information Requests.** The Permittee shall furnish to the Department, within a reasonable time, any information the Department requests in writing to determine whether cause exists to modify, revoke and reissue, or terminate the permit or to determine compliance with the permit. Upon request, the Permittee shall furnish to the Department copies of records required to be kept by the permit. The Department may require the Permittee to furnish copies of those records directly to the federal administrator.

[18 AAC 50.345(a) & (i), 11/9/08; 18 AAC 50.200, 10/1/04; and 18 AAC 50.326(a) & (j), 12/1/04]
[40 C.F.R. 71.5(a)(2) & 71.6(a)(3), 7/2/07]

- 52. Excess Emissions and Permit Deviation Reports.**

[18 AAC 50.235(a)(2), & 50.240(c), 10/1/04; 18 AAC 50.326(j)(3), 12/1/04
and 18 AAC 50.346(b)(2) & (3), 11/9/08]

52.1 Except as provided in Condition 32, the Permittee shall report all emissions or operations that exceed or deviate from the requirements of this permit as follows:

- a. in accordance with 18 AAC 50.240(c), as soon as possible after the event commenced or is discovered, report
 - (i) emissions that present a potential threat to human health or safety; and
 - (ii) excess emissions that the Permittee believes to be unavoidable;
- b. in accordance with 18 AAC 50.235(a), within two working days after the event commenced or was discovered, report an unavoidable emergency, malfunction, or non-routine repair that causes emissions in excess of a technology based emission standard;
- c. report all other excess emissions and permit deviations
 - (i) within 30 days of the end of the month in which the emissions or deviation occurs, except as provided in Conditions 52.1c(ii) and 52.1c(iii);
 - (ii) if a continuous or recurring excess emissions is not corrected within 48 hours of discovery, within 72 hours of discovery unless the Department provides written permission to report under Condition 52.1c(i); and
 - (iii) for failure to monitor, as required in other applicable conditions of this permit.

52.2 When reporting excess emissions or permit deviations, the Permittee must report using either the Department's on-line form, which can be found at <http://www.dec.state.ak.us/air/ap/site.htm> or

<https://myalaska.state.ak.us/deca/air/airtoolsweb/>, or if the Permittee prefers, the form contained in Section 13 of this permit. The Permittee must provide all information called for by the form that is used.

52.3 If requested by the Department, the Permittee shall provide a more detailed written report as requested to follow up an excess emissions report.

53. Operating Reports. During the life of this permit⁷, the Permittee shall submit to the Department an original and one copy of an operating report by August 1 for the period January 1 to June 30 of the current year and by February 1 for the period July 1 to December 31 of the previous year.

[18 AAC 50.346(a), 11/9/08 and 18 AAC 50.326(j), 12/1/04]
[40 C.F.R. 71.6(a)(3)(iii)(A), 7/2/07]

53.1 The operating report must include all information required to be in operating reports by other conditions of this permit. The Permittee may, upon consultation with the Compliance Technician regarding software compatibility, provide electronic copies of data reports, emission source test reports, or other records under a cover letter certified in accordance with Departmental submission requirements.

53.2 If excess emissions or permit deviations that occurred during the reporting period are not reported under Condition 53.1, either

- a. The Permittee shall identify
 - (i) the date of the deviation;
 - (ii) the equipment involved;
 - (iii) the permit condition affected;
 - (iv) a description of the excess emissions or permit deviation; and
 - (v) any corrective action or preventive measures taken and the date of such actions; or
- b. When excess emissions or permit deviations have already been reported under Condition 52 the Permittee shall cite the date or dates of those reports.

53.3 The operating report must include a listing of emissions monitored under Conditions 2.1e, 2.2c and 19.2a(ii), which trigger additional testing or monitoring, whether or not the emissions monitored exceed an emission standard. The Permittee shall include in the report

- a. the date of the emissions;
- b. the equipment involved;
- c. the permit condition affected; and

⁷ "Life of this permit" is defined as the permit effective dates, including any periods of reporting obligations that extend beyond the permit effective dates. For example if a permit expires prior to the end of a calendar year, there is still a reporting obligation to provide operating reports for the periods when the permit was in effect.

d. the monitoring result which triggered the additional monitoring.

53.4 **Transition from expired to renewed permit.** For the first period of this renewed operating permit, also provide the previous permit's source operating report elements covering that partial period immediately preceding the effective date of this renewed permit.

54. Annual Compliance Certification. Each year by March 31, the Permittee shall compile and submit to the Department one original⁸ and one copy of an annual compliance certification report. The Permittee, at their discretion, may submit one copy in electronic format (PDF or other Department compatible image format).

54.1 Certify the compliance status of the stationary source over the preceding calendar year consistent with the monitoring required by this permit, as follows:

- a. identify each term or condition set forth in Section 3 through Section 9, that is the basis of the certification;
- b. briefly describe each method used to determine the compliance status;
- c. state whether compliance is intermittent or continuous; and
- d. identify each deviation and take it into account in the compliance certification;

54.2 **Transition from expired to renewed permit.** For the first period of this renewed operating permit, also provide the previous permit's annual compliance certification report elements covering that partial period immediately preceding the effective date of this renewed permit

54.3 In addition, submit a copy of the report directly to the EPA-Region 10, Office of Air Quality, M/S OAQ-107, 1200 Sixth Avenue, Seattle, WA 98101.

[18 AAC 50.205, 10/1/04; 18 AAC 50.345(a) & (j), 11/9/08; and 50.326(j), 12/1/04]
[40 C.F.R. 71.6(c)(5), 7/2/07]

55. NSPS and NESHAP Reports. The Permittee shall:

55.1 attach to the source operating report required by Condition 53, a copy of any NSPS and NESHAPs reports submitted to the U.S. Environmental Protection Agency (EPA) Region 10; and

55.2 upon request by the Department, notify and provide a written copy of any EPA-granted alternative monitoring requirement, custom monitoring schedule or waiver of the federal emission standards, record keeping, monitoring, performance testing, or reporting requirements.

[18 AAC 50.326(j)(4), 12/1/04 and 18 AAC 50.040(j), 7/25/08]
[40 CFR 60.13, 7/1/07 and 40 CFR 71.6(c)(6), 7/2/07]

⁸ See Condition 54.2 for clarification on number of copies required.

Section 8. Permit Changes and Renewal

56. Permit Applications and Submittals: The Permittee shall comply with the following requirements for submitting application information to the EPA Region 10:

- 56.1 The Permittee shall provide a copy of each application for modification or renewal of this permit, including any compliance plan, or application addenda, at the time the application or addendum is submitted to the Department;
- 56.2 The information shall be submitted to the same address as in Condition 54.3.
- 56.3 To the extent practicable, the Permittee shall provide to EPA applications in portable document format (PDF); MS Word format (.doc); or other computer-readable format compatible with EPA's national database management system; and
- 56.4 The Permittee shall maintain records as necessary to demonstrate compliance with this condition.

[18 AAC 50.040(j)(7), 18 AAC 50.326(b), 12/1/04]
[40 CFR 71.10(d)(1), 7/2/07]

57. Emissions Trading: No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in the permit.

[18 AAC 50.040(j)(4), 7/25/08 and 18 AAC 50.326(j), 12/1/04]
[40 C.F.R. 71.6(a)(8), 7/2/07]

58. Off Permit Changes. The Permittee may make changes that are not addressed or prohibited by this permit other than those subject to the requirements of 40 CFR Part 72 through 78 or those that are modifications under any provision of Title I of the Act to be made without a permit revision, provided that the following requirements are met:

[18 AAC 50.040(j)(4), 7/25/08 and 18 AAC 50.326(j), 12/1/04]
[40 C.F.R. 71.6(a)(12), 7/2/07]

- 58.1 Each such change shall meet all applicable requirements and shall not violate any existing permit term or condition;
- 58.2 Provide contemporaneous written notice to EPA and the Department of each such change, except for changes that qualify as insignificant under 18 AAC 50.326(d) – (i). Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change;
- 58.3 The change shall not qualify for the shield under 40 CFR 71.6(f);
- 58.4 The Permittee shall keep a record describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

59. Operational Flexibility. The Permittee may make changes within the permitted stationary source without requiring a permit revision if the changes are not modifications under any provision of Title I of the Act and the changes do not exceed the emissions allowable

under this permit (whether expressed therein as a rate of emissions or in terms of total emissions):

- 59.1 The Permittee shall provide EPA and the Department with a notification no less than 7 days in advance of the proposed change.
- 59.2 For each such change, the written notification required above shall include a brief description of the change within the permitted stationary source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.
- 59.3 The permit shield described in 40 C.F.R. 71.6(f) shall not apply to any change made pursuant to Condition 59.

[18 AAC 50.040(j)(4), 7/25/08 and 18 AAC 50.326(j), 12/1/04]
[40 C.F.R. 71.6(a)(13), 7/2/07]

60. **Permit Renewal.** To renew this permit, the Permittee shall submit an application under 18 AAC 50.326 no sooner than [18 months before] and no later than [6 months before the expiration date of this permit]. **The renewal application shall be complete before the permit expiration date listed on the cover page of this permit.** Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 40 CFR 71.7(b) and 71.5(a)(1)(iii).

[18 AAC 50.040(j)(3), 7/25/08 and 18 AAC 50.326(c)(2) & (j)(2), 12/1/04]
[40 CFR 71.5(a)(1)(iii) and 71.7(b) & (c)(1)(ii), 7/2/07]

61. **Permit Applications.** The Permittee shall send original applications for modification, or renewal of this permit and application addenda to the Department's Anchorage office⁹. In addition, the Permittee may provide electronic copies of application documents; portable document format (PDF) or MS Word are acceptable formats.

[18 AAC 50.326(j), 12/1/04]
[40 C.F.R. 71.7(a)(1)(i), 7/2/07]

62. The Permittee shall submit to the US Environmental Protection Agency (EPA) to the same address as in Condition 54.3:

- 62.1 a copy of any application for modification, or renewal of this permit and application addenda, at the time the application or addendum is submitted to the Department;
- 62.2 to the extent practicable, the Permittee shall provide to EPA applications in computer-readable format compatible with EPA's national database management system. In the interim until EPA implements such system, portable document format (PDF) or MS Word are acceptable formats.

[18 AAC 50.040(j)(7), 7/25/08; and 18 AAC 50.326(b), 12/1/04]
[40 CFR 70.10(d)(1)), 7/2/07]

⁹ The current address for the Anchorage office is: ADEC, 619 East Ship Creek, Suite 249, Anchorage, AK 99501

Section 9. Compliance Requirements

General Compliance Requirements

63. Compliance with permit terms and conditions is considered to be compliance with those requirements that are

63.1 included and specifically identified in the permit; or

63.2 determined in writing in the permit to be inapplicable.

[18 AAC 50.326(j)(3), 12/1/04; and 18 AAC 50.345(a) & (b), 11/9/08]

64. The Permittee must comply with each permit term and condition. Noncompliance with a permit term or condition constitutes a violation of AS 46.14.120(c), 18 AAC 50, and, except for those terms or conditions designated in the permit as not federally enforceable, the Clean Air Act, and is grounds for

64.1 an enforcement action;

64.2 permit termination, revocation and reissuance, or modification in accordance with AS 46.14.280; or

64.3 denial of an operating permit renewal application.

[18 AAC 50.326(j)(3), 12/1/04; and 18 AAC 50.345(a) & (c), 11/9/08]

65. It is not a defense in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with a permit term or condition.

[18 AAC 50.326(j)(3), 10/1/04; and 18 AAC 50.345(a) & (d), 11/9/08]

66. The Permittee shall allow the Department or an inspector authorized by the Department, upon presentation of credentials and at reasonable times with the consent of the owner or operator to

66.1 enter upon the premises where a source subject to the permit is located or where records required by the permit are kept;

66.2 have access to and copy any records required by the permit;

66.3 inspect any stationary source, equipment, practices, or operations regulated by or referenced in the permit; and

66.4 sample or monitor substances or parameters to assure compliance with the permit or other applicable requirements.

[18 AAC 50.326(j)(3), 12/1/04 and 18 AAC 50.345(a) & (h), 11/9/08]

Compliance Schedule

67. For applicable requirements with which the Kenai Gas Field Pad 34-31 is in compliance, the Permittee will continue to comply with such requirements.

[18 AAC 50.040(j), 7/25/08 & 18 AAC 50.326(j), 12/1/04]
[40 CFR 71.6(c)(3) & 71.5(c)(8)(iii)(A), 7/2/07]

Section 10. Permit As Shield from Inapplicable Requirements

In accordance with AS 46.14.290, and based on information supplied in the stationary source application, this section of the permit contains the requirements determined by the Department not to be applicable to the Kenai Gas Field Pad 34-31.

68. Nothing in this permit shall alter or affect the following:

68.1 The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section; or

68.2 The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance.

[18 AAC 50.326(j), 12/1/04]
 [40 C.F.R. 71.6(f)(3)(i) and (ii), 7/2/07]

69. Table C identifies the emission units that are not subject to the specified requirements at the time of permit issuance. If any of the requirements listed in Table C becomes applicable during the permit term, the Permittee shall comply with such requirements on a timely basis including, but not limited to, providing appropriate notification to EPA, obtaining a construction permit and/or an operating permit revision.

[18 AAC 50.326(j), 12/1/04]
 [40 C.F.R. 71.6(f)(1)(ii), 7/2/07]

Table C- Permit Shields Granted.

EU ID	Non-Applicable Requirements	Reason for non-applicability
1 & 2	40 C.F.R. 60 Subpart GG 60.332(a)(2)	EU IDs 1 and 2 are >10 MMBtu/hr rated stationary gas turbines and are fired on natural gas, therefore they are not required to comply with this paragraph under 40 C.F.R. 60 Subpart GG 60.332(k).
1 & 2	40 C.F.R. 60 Subpart GG 60.334(a)-(g), (h)(1), and (h)(2)	60.334(a) and (b) apply only to stationary combustion turbines that use water injection for NOx control. 60.334(c)-(g) are optional monitoring methods that Marathon does not conduct. 60.334(h)(1) The natural gas fired by EU ID's 1 and 2 meets the definition of natural gas as defined by 40 CFR 60.331(u), therefore sulfur monitoring is not required. 60.334(h)(2) Marathon does not claim an allowance for bound nitrogen, therefore nitrogen monitoring is not required.

EU ID	Non-Applicable Requirements	Reason for non-applicability
Stationary Source	40 C.F.R. 60 Subparts B, C, Ca, Cb, Cc, Cd, Ce, F, G, H, I, J, M, N, Na, O, S, T, U, V, W, X, Y, Z, AA, AAa, BB, CC, EE, HH, KK, LL, MM, NN, PP, QQ, RR, SS, TT, UU, VV, WW, XX, BBB, DDD, FFF, GGG, HHH, III, JJJ, KKK, LLL, NNN, OOO, PPP, QQQ, RRR, SSS, TTT, UUU, VVV and WWW	Not an affected source, operation, or industry.
Stationary Source	40 C.F.R. 60 Subparts D, Da, Db, Dc, E, Ea, Eb, Ec, K, Ka, Kb, L, P, Q, R, DD, BBBB, DDDD, FFFF, and HHHH	No affected sources within permitted stationary source.
Stationary Source	40 C.F.R. 61 Subparts B, C, D, E, F, H, I, K, L, N, O, P, Q, R, T, W, Y, BB, and FF	Not an affected source, operation, or industry
Stationary Source	40 C.F.R. 61 Subpart J	Source does not contain any equipment in benzene service
Stationary Source	40 C.F.R. 61 Subparts A and V	Per 40 CFR 61.01(c) and 61.240(b), a source must be subject to a specific subpart of 40 CFR 61 to be subject to these subparts
Stationary Source	40 C.F.R. 63 Subparts F, G, M, O, R, T, W, X, and EE	Not an affected source, operation, or industry
Stationary Source	40 C.F.R. 63 Subpart L, N, and Q	No affected sources within permitted stationary source
Stationary Source	40 C.F.R. 63 Subparts A and H, and HHH	Source must be subject to a specific subpart of 40 CFR 63 to be subject to these subparts

EU ID	Non-Applicable Requirements	Reason for non-applicability
Stationary Source	<p>40 C.F.R. 63 Following Subparts to Subpart HH</p> <p>63.762 Startups, shutdowns, and malfunctions</p> <p>63.764 General Standards [(all except 63.764(e)(1)(i))]</p> <p>63.765 Glycol dehydration unit process vent standards</p> <p>63.766 Storage vessel standards</p> <p>63.769 Equipment leak standards</p> <p>63.771 Control equipment requirements</p> <p>63.772 Test methods and compliance demonstrations [all except 63.772(b)(1)(ii)]</p> <p>63.773 Inspections and monitoring requirements</p> <p>63.774 Recordkeeping requirements [all except 63.774(d)(1)(i)]</p> <p>63.775 Reporting requirements</p>	<p>Source is not a major source of HAPs as defined under any Subpart of 40 CFR 63. Source is not subject to the Subpart HH area source control requirements or ongoing MR&R because source is not located within an urban area as defined in Subpart HH and per-dehydrator actual annual average natural gas flow rates are less than 3.0 MMscfd.</p> <p>Section III.C of the rule preamble indicates the non applicability of 63.762. The non applicability of 63.764 is indicated under 63.764(e)(1). The non applicability of 63.765 is indicated under 63.765(a). 63.766 and 63.773 are not applicable because no control of emissions is required by Subpart HH. The non applicability of 63.774 is indicated under 63.774(b) and 63.774(d)(1). 63.775(b) only applies to major sources. The non applicability of 63.775(c) and 63.775(d) are indicated under 63.775(c)(8). 63.775(e) applies only to major sources or area sources within urban areas as defined under subpart HH.</p>
Stationary Source	40 C.F.R. 68 Subpart G	Not an affected source, operation, or industry
Stationary Source	40 C.F.R. 82 Subparts B	Stationary source does not contain any commercial or household appliances. Motor vehicles are not serviced at the source.
Stationary Source	18 AAC 50.050, Incinerator particulate standards	No affected emission units within Stationary Source
Stationary Source	18 AAC 50.055(a)(2), Fuel Burning equipment standards, opacity emission limit of 30%, 3-minute average	No affected emission units within Stationary Source
Stationary Source	18 AAC 50.055(a)(4), (5) and (8), Fuel burning equipment standards, opacity emission limit of 20%, 6-minute average	No affected emission units within Stationary Source

EU ID	Non-Applicable Requirements	Reason for non-applicability
Stationary Source	18 AAC 50.055(a)(6) and (7), Fuel burning equipment standards, opacity emission limit of 10%, 6-minute average	No affected emission units within Stationary Source
Stationary Source	18 AAC 50.055(b)(2) and (3), Fuel burning equipment standards, PM emission limit of 0.1 grains	No affected emission units within Stationary Source
Stationary Source	18 AAC 50.055(b)(4), Fuel burning equipment standards, PM emission limit of 0.15 grains	No affected emission units within Stationary Source
Stationary Source	18 AAC 50.055(b)(5) and (6), Fuel burning equipment standards, PM emission limit of 0.04 grains	No affected emission units within Stationary Source
Stationary Source	18 AAC 50.055(d) and (e), Fuel burning equipment standards	No affected emission units within Stationary Source
Stationary Source	18 AAC 50.060, Pulp Mills	Not an affected stationary source, operation or industry
Stationary Source	18 AAC 50.070 Marine Vessels, visible emission standards	No marine vessels at this stationary source
Stationary Source	18 AAC 50.075, Wood fired heating device emission standards	No affected emission units within stationary source
Stationary Source	18 AAC 50.085, Volatile liquid storage tank emission standards	Regulations only apply to tanks within the Port of Anchorage
Stationary Source	18 AAC 50.090 Volatile liquid loading racks and delivery emission standards	Regulations only apply to stationary sources within the Port of Anchorage

Section 11. Visible Emissions Forms

Visible Emissions Field Data Sheet

Certified Observer: _____

Company &
 Stationary
 Source: _____

Location: _____

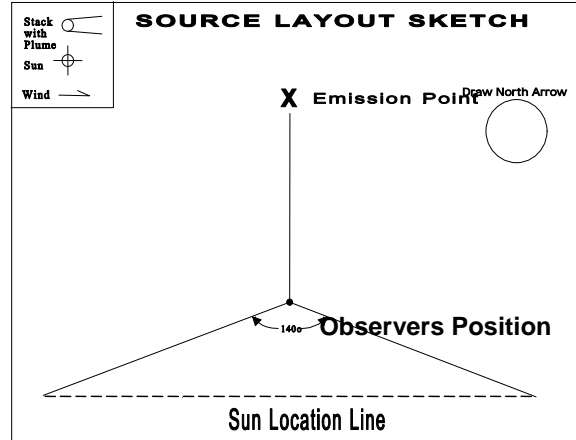
Test No.: _____ Date: _____

Emission Unit: _____

Production Rate/Operating
 Rate: _____

Unit Operating Hours: _____

Hrs. of observation: _____



Clock Time	Initial				Final
Observer location					
Distance to discharge					
Direction from discharge					
Height of observer point					
Background description					
Weather conditions					
Wind Direction					
Wind speed					
Ambient Temperature					
Relative humidity					
Sky conditions: (clear, overcast, % clouds, etc.)					
Plume description:					
Color					
Distance visible					
Water droplet plume? (Attached or detached?)					
Other information					

Section 12. Material Balance Calculation

If the sulfur content of a fuel shipment is greater than 0.75% by weight, calculate the three-hour exhaust concentration of SO₂ using the following equations:

A. = 31,200 x [wt%**S**_{fuel}] = 31,200 x _____ = _____

B. = 0.148 x [wt%**S**_{fuel}] = 0.148 x _____ = _____

C. = 0.396 x [wt%**C**_{fuel}] = 0.396 x _____ = _____

D. = 0.933 x [wt%**H**_{fuel}] = 0.933 x _____ = _____

E. = B + C + D = _____ + _____ + _____ = _____

F. = 21 - [vol%**dry O**_{2, exhaust}] = 21 - _____ = _____

G. = [vol%**dry O**_{2, exhaust}] ÷ F = _____ ÷ _____ = _____

H. = 1 + G = 1 + _____ = _____

I. = E x H = _____ x _____ = _____

SO₂ concentration = A ÷ I = _____ ÷ _____ = _____ ppm

The **wt%*S*_{fuel}**, **wt%*C*_{fuel}**, and **wt%*H*_{fuel}** are equal to the weight percents of sulfur, carbon, and hydrogen in the fuel. These percentages should total 100%.

The fuel weight percent (wt%) of sulfur is obtained pursuant to Condition 10.1. The fuel weight percents of carbon and hydrogen are obtained from the fuel refiner.

The volume percent of oxygen in the exhaust (**vol%*dry O*_{2, exhaust}**) is obtained from oxygen meters, manufacturer's data, or from the most recent ORSAT analysis at the same engine load used in the calculation.

Enter all of the data in percentages without dividing the percentages by 100. For example, if **wt%*S*_{fuel}** = 1.0%, then enter 1.0 into the equations not 0.01 and if **vol%*dry O*_{2, exhaust}** = 3.00%, then enter 3.00, not 0.03.

[18 AAC 50.346(c), 11/9/08]

Section 13. ADEC Notification Form¹⁰

Kenai Gas Field Pad 34-31

AQ0087TVP02

Stationary Source (Source) Name

Air Quality Permit Number

Marathon Oil Company

Company Name

When did you discover the Excess Emissions/Permit Deviation?

Date: _____ / _____ / _____ Time: _____ : _____

When did the event/deviation occur?

Begin Date: _____ / _____ / _____ Time: _____ : _____ (please use 24hr clock)

End Date: _____ / _____ / _____ Time: _____ : _____ (please use 24hr clock)

What was the duration of the event/deviation?: _____ : _____ (hrs:min) or _____ days

(total # of hrs, min, or days, if intermittent then include only the duration of the actual emissions/deviation)

Reason for Notification: (please check only 1 box and go to the corresponding section)

Excess Emissions - Complete Section 1 and Certify.

Deviation from Permit Condition - Complete Section 2 and Certify

Deviations from COBC, CO, or Settlement Agreement - Complete Section 2 and Certify

Section 1. Excess Emissions

(a) Was the exceedance: Intermittent or Continuous

(b) Cause of Event (Check one that applies):

Start Up /Shut Down

Natural Cause (weather/earthquake/flood)

Control Equipment Failure

Scheduled Maintenance/Equipment Adjustment

Bad fuel/coal/gas

Upset Condition

Other _____

(c) **Description**

Describe briefly, what happened and the cause. Include the parameters/operating conditions exceeded, limits, monitoring data and exceedance.

(d) Emissions Units Involved:

Identify the emission unit involved in the event, using the same identification number and name as in the permit. Identify each emission standard potentially exceeded during the event and the exceedance.

Unit ID	Emission Unit Name	Permit Condition Exceeded/Limit/Potential Exceedance

(e) Type of Incident (Please Check only one).

¹⁰ Revised as of August 20, 2008.

- Opacity _____ %
 Venting _____ (gas/scf)
 Control Equipment Down
 Fugitive Emissions
 Emission Limit Exceeded
 Other: _____
 Marine Vessel Opacity
 Flaring

(f) Unavoidable Emissions:

Do you intend to assert that these excess emissions were unavoidable? Yes No

Do you intend to assert the affirmative defense of 18 AAC 50.235? Yes No

Certify Report (go to end of form)

Section 2 Permit Deviations

(a) Permit Deviation Type (check one only box, corresponding with the section in the permit).

- Source Specific
 Failure to monitor/report
 General Source Test/Monitoring Requirements
 Recordkeeping/Reporting/Compliance Certification
 Standard Conditions Not Included in Permit
 Generally Applicable Requirements
 Reporting/Monitoring for Diesel Engines
 Record Keeping Failure
 Insignificant Source
 Facility Wide
 Other Section _____ (title of section and section number of your permit).

(b) Emission Unit Involved.

Identify the emission unit involved in the event, using the same identification number and name as in the permit. List the corresponding permit conditions and the deviation.

Unit ID	Unit Name	Permit Condition / Potential Deviation

(c) Description of Potential Deviation:

Describe briefly what happened and the cause. Include the parameters/operating conditions and the potential deviation.

(d) Corrective Actions:

Describe actions taken to correct the deviation or potential deviation and to prevent future recurrence.

Certification:

Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.

Printed Name: _____ Title: _____ Date: _____

Signature: _____ Phone Number: _____

NOTE: *This document must be certified in accordance with 18 AAC 50.345(j)*

To Submit this Report:

1. Fax to: 907-451-2187;

Or

2. Email to: DEC.AQ.Airreports@alaska.gov - *if faxed or emailed,*

Or

3. Mail to: ADEC
 Air Permits Program
 610 University Avenue
 Fairbanks, AK 99709-3643

Or

4. Phone Notification: 907-451-5173

Phone notifications require a written follow-up report.

Or

5. Submission of information contained in this report can be made electronically at the following website:

<https://myalaska.state.ak.us/deca/air/airtoolsweb/>

if submitted online, report must be submitted by an authorized E-Signer for the Stationary Source.