

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

AIR QUALITY CONTROL MINOR PERMIT

Minor Permit: AQ1806MSS01

Preliminary: December 5, 2023

The Alaska Department of Environmental Conservation (Department), under the authority of AS 46.14 and 18 AAC 50, issues Air Quality Control Minor Permit AQ1806MSS01 to the Permittee listed below.

Permittee: ConocoPhillips Alaska, Inc. (CPAI)
P.O. Box 100360
Anchorage, AK 99510-0360

Stationary Source: Willow Operations Center

Location: UTM: 538065.57 Easting, 7782039.06 Northing, Zone 5

Project: Willow Operations Center

Permit Contact: Brad Broker, brad.broker@conocophillips.com, 907-263-4874

The Permittee submitted an application for Minor Permit AQ1806MSS01 to construct a new stationary source with potential emissions greater than one or more thresholds listed under 18 AAC 50.502(c)(1). Permit classifications also include 18 AAC 50.508(5) for establishing owner requested limits (ORLs) to avoid one or more permit classifications under AS 46.14.130.

This permit satisfies the obligation of the Permittee to obtain a minor permit under 18 AAC 50. As required by AS 46.14.120(c), the Permittee shall comply with the terms and conditions of this permit.

The Permittee may operate under the terms and conditions of this permit upon issuance.

James R. Plosay, Manager
Air Permits Program

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Abbreviations and Acronyms

AAC	Alaska Administrative Code	N/A	not applicable
ADEC	Alaska Department of Environmental Conservation	NH ₃	ammonia
Administrator	EPA and the Department.	NO _x	nitrogen oxides
AOS	Air Online Services	N ₂ O	Nitrous Oxide
AS	Alaska Statutes	NSPS	New Source Performance Standards [as contained in 40 CFR 60]
ASTM	American Society for Testing and Materials	O & M	operation and maintenance
BACT	best available control technology	O ₂	oxygen
bhp	brake horsepower	ORL	owner requested limit
CFR	Code of Federal Regulations	Pb	lead
CAA or The Act.	Clean Air Act	PM	particulate matter
CO	carbon monoxide	PM ₁₀	particulate matter less than or equal to a nominal 10 microns in diameter
CO _{2e}	CO ₂ -equivalent	PM _{2.5}	particulate matter less than or equal to a nominal 2.5 microns in diameter
Department	Alaska Department of Environmental Conservation	ppm	parts per million
dscfm	dry standard cubic foot per minute	ppmv, ppmvd	parts per million by volume on a dry basis
EPA	US Environmental Protection Agency	psia	pounds per square inch (absolute)
EU ID	emissions unit identification number	PSD	prevention of significant deterioration
GHG	Greenhouse Gas	PTE	potential to emit
gr/dscf	grain per dry standard cubic foot (1 pound = 7000 grains)	SIP	State Implementation Plan
HAP	hazardous air pollutants [as defined in AS 46.14.990]	SPC	Standard Permit Condition
HHV	higher heating value	SO ₂	sulfur dioxide
ISO	International Organization for Standardization	TBD	to be determined
kPa	kiloPascals	tph	tons per hour
kWe	kilowatt electric	TPY	tons per year
LAER	lowest achievable emission rate	ULSD	ultra-low sulfur diesel
MACT	maximum achievable control technology [as defined in 40 CFR 63]	VOC	volatile organic compound [as defined in 40 CFR 51.100(s)]
MMBtu/hr	million British thermal units per hour	VOL	volatile organic liquid [as defined in 40 CFR 60.111b, Subpart Kb]
MMscf	million standard cubic feet	wt%	weight percent
MR&R	monitoring, recordkeeping, and reporting	wt%S _{fuel}	weight percent of sulfur in fuel

Section 1. Emissions Unit Inventory

Emissions Unit (EU) Authorization. The Permittee is authorized to install and operate the EUs listed in Table 1 in accordance with the terms and conditions of this permit. The information in Table 1 is for identification purposes only, unless otherwise noted in the permit. The specific EU descriptions do not restrict the Permittee from replacing an EU identified in Table 1.

Table 1 – Emissions Unit Inventory

EU ID	Emissions Unit Description	Make/Model	Fuel	Rating/Max Capacity	Installation Date
001	Power Generator Turbine w/ dry low NOx combustion controls	TBD	Fuel Gas/ ULSD	15,780 kWe (ISO)	TBD
201	Backup Power Generator #1	TBD	ULSD	2,250 kWe	TBD
202	Backup Power Generator #2	TBD	ULSD	2,250 kWe	TBD
203	Firewater Pump	TBD	ULSD	460 bhp	TBD
204	Temporary Firewater Pump #1	TBD	ULSD	460 bhp	TBD
205	Temporary Firewater Pump #2	TBD	ULSD	460 bhp	TBD
206	Small Temporary Power Generator #1	TBD	ULSD	50 kWe (cumulative)	TBD
207	Small Temporary Power Generator #2	TBD	ULSD	50 kWe (cumulative)	TBD
208	Large Temporary Power Generator	TBD	ULSD	13,500 kWe (cumulative)	TBD
301	Incinerator	TBD	Solid Waste/ Fuel gas	< 833 lb/hr; 9.95 MMBtu/ton	TBD
801	Bulk Cement Blending System Vent	TBD	N/A	15 dscfm	TBD
802	Small Portable Heaters and Boilers	TBD	ULSD	10 MMBtu (HHV)/hr (cumulative)	TBD
803	Small Stationary Heaters and Boilers	TBD	Fuel Gas	5 MMBtu (HHV)/hr (cumulative)	TBD
805	Fuel Gas Skid Venting	TBD	N/A	12 startups/year	TBD
901	Storage Tanks	TBD	N/A	Various	TBD
1001	Equipment Component Leaks	TBD	N/A	N/A	TBD
1002	Refueling and Spillage from tanks	TBD	N/A	N/A	TBD
1003	Pad-Generated Fugitive Dust	TBD	N/A	N/A	TBD

1. The Permittee shall comply with all applicable provisions of AS 46.14 and 18 AAC 50 when installing a replacement EU, including any applicable minor or construction permit requirements.
2. For each of EU IDs 001, 201 through 208, and 301, notify the Department of the installation date, maximum design rating, and provide a specification sheet¹ and any EPA certification within 30 days after installation.

¹ The specification sheet is a summary of the unit, including applicable emission specifications.

Section 2. Fee Requirements

3. The Permittee shall pay to the Department all assessed permit fees. Fee rates are set out in 18 AAC 50.400 – 499.
4. **Assessable Emissions.** For each period from July 1 through the following June 30, the Permittee shall pay to the Department annual emission fees based on the stationary source's assessable emissions as determined by the Department under 18 AAC 50.410. The Department will assess fees per ton of each air pollutant that the stationary source emits or has the potential to emit. The quantity for which fees will be assessed is the lesser of the stationary source's
 - 4.1. potential to emit (PTE) of 628.48 TPY
 - 4.2. projected annual rate of emissions, in TPY, based upon actual annual emissions for the most recent calendar year, or another 12-month period approved in writing by the Department, when demonstrated by credible evidence of actual emissions, based upon the most representative information available from one or more of the following methods:
 - 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, including appropriate vendor-provided emissions factors when sufficient documentation is provided.
5. **Assessable Emission Estimates.** The Permittee shall comply as follows:
 - 5.1. No later than March 31 of each year, the Permittee may submit an estimate of the stationary source's assessable emissions as determined in Condition 4.2. Submit actual emissions estimates in accordance with the submission instructions on the Department's Standard Permit Conditions web page at <http://dec.alaska.gov/air/air-permit/standard-conditions/standard-condition-i-submission-instructions/>.
 - 5.2. The Permittee shall include with the assessable emissions report all the assumptions and calculations used to estimate the assessable emissions in sufficient detail so the Department can verify the estimates.
 - 5.3. If the stationary source has not commenced construction or operation on or before March 31st, the Permittee may submit to the Department's Anchorage office a waiver letter certified under 18 AAC 50.205 that states the stationary source's actual annual emissions for the previous calendar year are zero TPY and provide estimates for when construction or operation will commence.
 - 5.4. If no estimate or waiver letter 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 out in Condition 4.1.

Section 3. State Emission Standards

- 6. Industrial Process and Fuel-Burning Equipment Visible Emissions.** The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from EU IDs 001, 201 through 208, and 801 through 803, listed in Table 1, to reduce visibility through the exhaust effluent by more than 20 percent averaged over any six consecutive minutes.
- 6.1. For EU IDs 201 through 208, perform visible emissions observations in accordance with Method 9 of 40 CFR 60, Appendix A-4 within 60 days of initial startup of each EU.
- a. Record the date of initial startup of each of EU IDs 201 through 208.
 - b. Report the results of the Method 9 observations required by Condition 6.1 and the date(s) of initial startup required by Condition 6.1.a in the first operating report due after the observations were performed, as required under Condition 29.
 - c. Report in accordance with Condition 28 if results of the Method 9 observations required by Condition 6.1 exceed the limit under Condition 6.
- 6.2. For EU ID 001, monitor, record, and report the monthly hours of operation on backup liquid fuel.
- a. Notify the Department and perform visible emissions observations in accordance with Method 9 of 40 CFR 60, Appendix A-4, no later than 15 days after the end of a calendar month in which the cumulative hours of operation for a calendar year exceeds 400 hours on backup liquid fuel; or for an emissions unit with intermittent backup fuel use, during the next scheduled operation on backup liquid fuel.
 - b. Report the results of the Method 9 observations required by Condition 6.2.a in the first operating report due after the observations were performed, as required under Condition 29.
 - c. Report in accordance with Condition 28 if results of the Method 9 observations required by Condition 6.2.a exceed the limit under Condition 6.
- 6.3. For EU ID 801, comply with Condition 13.1.
- 7. Incinerator Visible Emissions.** The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from EU ID 301, listed in Table 1, to reduce visibility through the exhaust effluent by more than 20 percent averaged over any six consecutive minutes.
- 7.1. Record the date of initial startup of EU ID 301.
- 7.2. Verify initial compliance of EU ID 301 no later than 60 days after startup by either:
- a. Obtaining a certified manufacturer's guarantee that specifies the EU will comply with Condition 7; or
 - b. Performing visible emissions observations in accordance with Method 9 of 40 CFR 60, Appendix A-4.

- 7.3. Report the information required under Conditions 7.1 and 7.2 in the first operating report(s) required under Condition 29 after initial startup and after the initial compliance demonstration is due.
 - 7.4. Report in accordance with Condition 28 if the results of the Method 9 observations required by Condition 7.2.b exceed the limit under Condition 7.
- 8. Industrial Process and Fuel-Burning Equipment Particulate Matter Emissions.** The Permittee shall not cause or allow particulate matter emitted from EU IDs 001, 201 through 208, and 801 through 803, listed in Table 1, to exceed 0.05 grains per dry standard cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.
- 8.1. Demonstrate compliance with Condition 8 by complying with Conditions 6.1 through 6.3.
- 9. Sulfur Compound Emissions.** The Permittee shall not cause or allow sulfur compound emissions, expressed as SO₂, from EU IDs 001, 201 through 208, 802, and 803, listed in Table 1, to exceed 500 ppm averaged over three hours.
- 9.1. For EU IDs 001, 201 through 208, and 802, demonstrate compliance with Condition 9 by complying with Condition 23.1.
 - 9.2. For EU IDs 001 and 803, demonstrate compliance with Condition 9 by complying with Condition 23.2.

Section 4. Operation and Maintenance Requirements

10. Equipment Maintenance. For the equipment listed in Table 1, the Permittee shall perform regular maintenance according to the manufacturer's or the operator's maintenance procedures and keep a copy of either the manufacturer's or the operator's maintenance procedures.

11. 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.

11.1. The Permittee shall keep records of:

- a. complaints received by the Permittee and complaints received by the Department and conveyed to the Permittee;
- b. any additional precautions that are taken to:
 - (i) address complaints described in Condition 11.1.a or to address the results of Department inspections that found potential problems; and
 - (ii) prevent future fugitive dust problems.

Section 5. Ambient Air Quality Protection Requirements

12. To protect the annually averaged NO₂, annually averaged and 24-hour PM_{2.5}, and 24-hour PM₁₀ Alaska Ambient Air Quality Standards (AAAQS), the Permittee shall operate the stationary source as described below:

12.1. **Stack Configuration.** Construct and maintain vertical, uncapped exhaust stacks for EU IDs 001, 201 through 208, and 301, listed in Table 1, except as follows:

- a. EU IDs 203 through 205 may use capped or horizontal releases; and
- b. All EUs may use flapper style rain covers, or other similar designs, that do not hinder the vertical momentum of the exhaust plume.
- c. Include in the first operating report required under Condition 29 due after the installation of each EU, a statement that the exhaust stack for that EU complies with Condition 12.1.
- d. Report in accordance with Condition 28 if a requirement under Condition 12.1 is not met.

12.2. **Stack Heights.** Construct and maintain the exhaust stacks for EU IDs 001 and 301 so that the height above grade² equals or exceeds the minimum height listed for that EU.

Table 2 – Minimum Stack Height Requirements

EU ID	Description	Min. Stack Height (meters)
001	Dual Fuel Power Generation Turbine	20.0
301	Incinerator	12.0

- a. Provide as-built drawings and photographs of each exhaust stack listed in Table 2 in the first operating report required by Condition 29 due after installation of the given EU.
- b. Report in accordance with Condition 28 if a requirement under Condition 12.2 is not met.

12.3. **Fuel Sulfur Limits.** Comply with the fuel sulfur limits, monitoring, recordkeeping, and reporting under Conditions 23.1 and 23.2.

12.4. **Turbine Operations.** For EU ID 001, construct and maintain intake air heating in accordance with Condition 19 and comply with the operational limits under Conditions 17 and 18.

² or as otherwise measured from the stack base, e.g., from above a pad or platform surface.

- 12.5. **Emergency and Temporary EUs.** For EU IDs 201 through 208, demonstrate compliance with the following standards for NO_x and PM emissions using certified manufacturer's guarantees or source test results. Include the demonstration in the first operating report required by Condition 29 due after installation of the given EU.
 - a. EPA's Tier 2 emission standards for EU IDs 201 through 205, or replacement units;
 - b. EPA's Tier 4 emission standards for EU IDs 206 through 208, or replacement units.
- 12.6. **Incinerator Operations.** Include a manufacturer's guarantee in the first operating report required by Condition 29 due after installation of EU ID 301, that the unit will meet the assumed emission factors for PM_{2.5} and PM₁₀.
13. To protect the annually averaged and 24-hour PM_{2.5}, and 24-hour PM₁₀ AAAQS, the Permittee shall operate the stationary source as described below:
 - 13.1. At all times when EU ID 801 is operating, the Permittee shall control particulate matter emissions using dust cyclone and filter sock control devices with a combined 99.999 percent control efficiency.
 - 13.2. Report in accordance with Condition 28 if any material processing is not performed as required under Condition 13.1.

Section 6. Owner Requested Limits (ORLs)

Limits to Avoid New Source Performance Standards (NSPS) Under 40 CFR 60 for EU ID 301

14. NSPS Subpart Ec Exemption Requirements. The Permittee shall limit the amount of waste combusted in EU ID 301, to no more than 10 percent hospital waste and medical/infectious (HMI) waste (in aggregate), as measured on a calendar quarter basis. Monitor, record, and report as follows:

14.1. Keep quarterly records of the following and provide to the Department upon request:

- a. the weight of hospital waste and medical/infectious waste³ (W_{HMI}) combusted;
- b. the weight of all other fuels and wastes combusted;
- c. the total weight of all fuels and wastes (W_{Total}) combusted (i.e., the sum of the weights recorded under Conditions 14.1.a and 14.1.b); and
- d. the percentage by weight of hospital waste and medical/infectious waste (in aggregate) ($W_{\text{HMI}}/W_{\text{Total}} \times 100$) combusted in EU ID 301.

14.2. Keep a copy of the exemption notification submitted under 40 CFR 60.50c(c)(1).

14.3. Report in accordance with Condition 28 if the percentage calculated under Condition 14.1.d exceeds the limit under Condition 14 and comply with the applicable requirements of NSPS Subpart Ec.

15. NSPS Subpart O Exemption Requirements. The Permittee shall limit the amount of waste combusted in EU ID 301, to no more than 10 percent sewage sludge (dry basis) and no more than 1,000 kilograms (2,205 pounds) per day of sewage sludge (dry basis). Monitor, record, and report as follows:

15.1. Monitor using a weighing device with an accuracy of ± 5 percent over its operating range.

15.2. Keep daily records of the following and provide to the Department upon request:

- a. the weight of sewage sludge (dry basis) (W_{SS}) combusted;
- b. the weight of all other fuels and wastes combusted;
- c. the total weight of all fuels and wastes (W_{Total}) combusted (i.e., the sum of the weights recorded under Conditions 15.2.a and 15.2.b); and
- d. the percent by weight of sewage sludge (dry basis) ($W_{\text{SS}}/W_{\text{Total}} \times 100$) combusted in EU ID 301.

15.3. Report in accordance with Condition 28 if the dry weight of sewage sludge measured under Condition 15.2.a or the percentage calculated under Condition 15.2.d exceeds a limit under Condition 15 and comply with the applicable requirements of NSPS Subpart O.

³ Pathological waste, chemotherapeutic waste, and low-level radioactive waste are considered “other” wastes when calculating the percentage of hospital waste and medical/infectious waste combusted.

ORLs to Avoid Prevention of Significant Deterioration (PSD) Classification Under 18 AAC 50.306

16. To avoid PSD classification under 18 AAC 50.306, the Permittee shall limit stationary source-wide emissions of NO_x, CO, and SO₂ to no greater than 249 TPY, each, by complying with Conditions 17 through 23.
17. **Out of Dry Low NO_x Mode Operating Limit.** Except during source testing, the Permittee shall limit the operation of EU ID 001 out of dry low NO_x mode⁴ to no more than 120 hours per consecutive 12-month period. Monitor, record, and report as follows:
 - 17.1. Before initial startup, equip EU ID 001 with a non-resettable hour meter and fuel flow meter.
 - 17.2. Monitor and record the date, time, duration, fuel type, quantity of fuel consumed, and reason each time EU ID 001 operates out of dry low NO_x mode.
 - 17.3. By the end of each month, calculate and record the number of hours that EU ID 001 operated out of dry low NO_x mode during:
 - a. the previous month; and
 - b. the previous consecutive 12-month period.
 - 17.4. In each operating report required under Condition 29, include the records generated under Conditions 17.2 and 17.3, for each month of the reporting period.
 - 17.5. Report in accordance with Condition 28 if EU ID 001 operates out of dry low NO_x mode in excess of the limit under Condition 17.
18. **In Dry Low NO_x Mode Operating Limit for Backup Fuel.**⁵ Except during source testing, the Permittee shall limit the operation of EU ID 001 on backup fuel, in dry low NO_x mode, to no more than 500 hours per consecutive 12-month period. Monitor, record, and report as follows:
 - 18.1. When EU ID 001 is operating on backup fuel in dry low NO_x mode:
 - a. record the quantity and type of backup fuel; and
 - b. monitor and record the hours of operation using the hour meter installed under Condition 17.1.
 - 18.2. By the end of each month, calculate and record the number of hours that EU ID 001 operated on backup fuel in dry low NO_x mode during:
 - a. the previous month; and
 - b. the previous consecutive 12-month period.

⁴ The dry low NO_x combustion control system is guaranteed at turbine intake temperatures of at least negative four degrees Fahrenheit (-4 °F) and turbine operation at 50% load or above when burning fuel gas and 65% load or above when burning liquid fuel. Records of operating load, fuel type, and intake temperature may be used to demonstrate when the turbine operates out of dry low NO_x mode.

⁵ CPAI indicated that backup fuel for EU ID 001 will be either ULSD or unprocessed fuel gas.

- 18.3. In each operating report required under Condition 29, indicate whether EU ID 001 operated on backup fuel in dry low NOx mode and if applicable, include the records generated under Conditions 18.1 and 18.2, for each month of the reporting period.
- 18.4. Report in accordance with Condition 28 if EU ID 001 does not operate in accordance with the limit under Condition 18.
- 19. Intake Temperature Limit.** Except during cold startup, EU ID 001 shall be operated with an intake air temperature of negative four degrees Fahrenheit (-4 °F) or above. Monitor, record, and report as follows:
 - 19.1. Install, calibrate, and operate a temperature measuring device according to manufacturer’s instructions to monitor the intake air temperature of EU ID 001.
 - 19.2. Monitor and record the intake air temperature of EU ID 001 at least hourly.
 - 19.3. Report in accordance with Condition 28 if the intake air temperature recorded under Condition 19.2 falls below -4 °F, except during cold startup.
- 20. NOx Emissions Limit.** The Permittee shall limit NOx emissions from EU ID 001 to no more than 51.9 tons per year (TPY) and demonstrate PSD avoidance, as follows:
 - 20.1. By the end of each month, calculate and record the quantity of fuel consumed and the number of hours that EU ID 001 operated in dry low NOx mode, when burning fuel gas,⁶ during:
 - a. the previous month; and
 - b. the previous consecutive 12-month period.
 - 20.2. By the end of each month, using the information recorded under Conditions 17.2, 17.3, 18.1, 18.2, 20.1, and NOx emission factors from Table 3,⁷ calculate and record NOx emissions in TPY from EU ID 001 during:
 - a. the previous month; and
 - b. the previous consecutive 12-month period.

Table 3 – NOx Emission Factors for EU ID 001

Fuel ¹	Operating Mode	Emission Factor (EF) Source	EF Concentration	EF Rate ²
Fuel Gas	In Dry Low NOx Mode	Provided by Permittee and based on vendor data	12 ppmvd @ 15% O ₂	8.7 lb/hr
Fuel Gas	Out of Dry Low NOx Mode		150 ppmvd @ 15% O ₂	69.4 lb/hr

⁶ This includes processed and unprocessed fuel gas.

⁷ If a Department accepted source test result is available, use the emission factor for the operating load that corresponds to normal operations, in lieu of the EF in Table 3. NOx source testing is required under NSPS Subpart KKKK.

Fuel ¹	Operating Mode	Emission Factor (EF) Source	EF Concentration	EF Rate ²
Backup Liquid Fuel	In Dry Low NOx Mode	Provided by Permittee and based on vendor data	65 ppmvd @ 15% O ₂	47.0 lb/hr
Backup Liquid Fuel	Out of Dry Low NOx Mode		150 ppmvd @ 15% O ₂	81.0 lb/hr

Notes:

1. Fuel Gas includes processed and unprocessed fuel gas.
2. EFs are based on expected performance parameters for Solar T130 or similar and converted from units of ppmv to lb/hr. (The NOx EF of 8.7 lb/hr is more conservative than the vendor data.)

20.3. In each operating report required under Condition 29, include the records generated under Condition 20.2 for each month of the reporting period.

20.4. Report in accordance with Condition 28 if NOx emissions recorded under Condition 20.2.b exceed the NOx limit under Condition 20.

21. CO Emissions Limit. The Permittee shall limit CO emissions from EU ID 001 to no more than 165.3 TPY and demonstrate PSD avoidance, as follows:

21.1. By the end of each month, using the information recorded under Conditions 17.2, 17.3, 18.1, 18.2, 20.1, and CO emission factors from Table 4,⁸ calculate and record CO emissions in TPY from EU ID 001 during:

- a. the previous month; and
- b. the previous consecutive 12-month period.

Table 4 – CO Emission Factors for EU ID 001

Fuel ¹	Operating Mode	EF Source	EF Concentration	EF Rate ²
Fuel Gas	In Dry Low NOx Mode	Provided by Permittee and based on vendor data	15 ppmvd @ 15% O ₂	6.6 lb/hr
Fuel Gas	Out of Dry Low NOx Mode		8,000 ppmvd @ 15% O ₂	2254.4 lb/hr
Backup Liquid Fuel	In Dry Low NOx Mode		25 ppmvd @ 15% O ₂	11.0 lb/hr
Backup Liquid Fuel	Out of Dry Low NOx Mode		1,000 ppmvd @ 15% O ₂	328.6 lb/hr

Notes:

1. Fuel Gas includes processed and unprocessed fuel gas.
2. EFs are based on expected performance parameters for Solar T130 or similar and converted from units of ppmv to lb/hr.

21.2. In each operating report required under Condition 29, include the records generated under Conditions 21.1.a and 21.1.b for each month of the reporting period.

21.3. Report in accordance with Condition 28 if the CO emissions recorded under Condition 21.1.b exceed the CO limit under Condition 21.

⁸ If a Department accepted source test result is available, use the emission factor for the operating load that corresponds to normal operations, in lieu of the EF in Table 4.

22. CO Source Test Requirements. The Permittee shall conduct source tests on EU ID 001 in accordance with Section 9, to verify the CO emission factors listed in Table 4.

- 22.1. Within 60 days after achieving the maximum production rate at which EU ID 001 will be operated, but not later than 180 days after initial startup of the turbine, conduct each source test at three loads (low, mid, and high) within the normal operating range of EU ID 001 for the following operating modes and fuel types:
 - a. In dry low NOx mode while operating on fuel gas; and
 - b. Out of dry low NOx mode⁹ while operating on fuel gas.
- 22.2. Within 60 days after the end of a calendar month in which the cumulative hours of operation for a calendar year exceeds 400 hours on backup liquid fuel, conduct a source test at three loads (low, mid, and high) within the normal operating range of EU ID 001 for the following operating modes and fuel type:
 - a. In dry low NOx mode while operating on backup liquid fuel; and
 - b. Out of dry low NOx mode¹⁰ while operating on backup liquid fuel.
- 22.3. Notify the Department if any of the emission rates determined by the source tests are higher than the emission factors in Table 4 and report in accordance with Condition 28 if the resulting CO emissions exceed the limit under Condition 21.

ORL to Avoid Classification Under 18 AAC 50.306 and 18 AAC 50.502(c)(1) for SO₂

23. The Permittee shall limit SO₂ emissions from EU IDs 001, 201 through 208, 802, and 803 to no more than 24.27 TPY by complying with Conditions 23.1 and 23.2.

- 23.1. Combust only liquid fuel with a sulfur content not to exceed 0.0015 percent by weight (ULSD) in EU IDs 001, 201 through 208. Monitor, record, and report as follows:
 - a. Obtain and keep certified receipts from fuel suppliers that confirm liquid fuel combusted in EU IDs 001, 201 through 208 meets the fuel sulfur limit under Condition 23.1; or
 - b. Test the fuel to determine the sulfur content no less than once per month using an appropriate method listed in 18 AAC 50.035(b)-(c) and 40 CFR 60.17 incorporated by reference in 18 AAC 50.040(a)(1) and keep records of the results.
 - c. In the operating report required by Condition 29, include a statement indicating whether all fuel combusted in EU IDs 001, 201 through 208 during the reporting period was ULSD. Include the fuel sulfur test results, if applicable.
 - d. Report in accordance with Condition 28 if:

⁹ The hours out of dry low NOx mode, when burning fuel gas for source testing, do not count towards the operating limit of Condition 17.

¹⁰ The hours out of dry low NOx mode, when burning ULSD for source testing, do not count towards the operating limits of Condition 18.

- (i) any liquid fuel combusted in EU IDs 001, 201 through 208 exceeds the fuel sulfur content limit required by Condition 23.1; or
 - (ii) Conditions 23.1.a through 23.1.c are not met.
- 23.2. Limit the hydrogen sulfide (H₂S) content of the fuel gas fired in EU IDs 001 and 803 to no more than 200 ppmv at any time.
 - a. Determine compliance with the fuel gas H₂S content limit as follows:
 - (i) Obtain a semiannual statement from the fuel supplier of the H₂S content in ppmv; or
 - (ii) Determine the H₂S content of the fuel gas no less than once a month using ASTM D4084, D5504, D4810, D4913, D6228, Gas Producer's Association Standard 2377, or other listed method approved in 18 AAC 50.035(b)-(c) or 40 CFR 60.17 incorporated by reference in 18 AAC 50.040(a)(1).
 - (A) The fuel gas H₂S analysis required under this condition may be performed by the owner or operator, a service contractor retained by the owner or operator, or the fuel vendor.
 - b. Keep records of the statement from the fuel supplier or the H₂S analysis conducted as required under Condition 23.2.a.
 - c. Include in each operating report required under Condition 29, copies of the records required under Condition 23.2.a.
 - d. Report in accordance with Condition 28 if the fuel gas H₂S concentration exceeds the limit under Condition 23.2, or if Conditions 23.2.a through 23.2.c are not met.

Section 7. Recordkeeping, Reporting, and Certification Requirements

- 24. Recordkeeping Requirements.** The Permittee shall keep all records required by this permit for at least five years after the date of collection, including:
- 24.1. Copies of all reports and certifications submitted pursuant to this section of the permit; and
 - 24.2. 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 sampling and analyses;
 - d. the analytical techniques or methods used in the analyses;
 - e. the results of the analyses; and
 - f. the operating conditions that existed at the time of sampling or measurement.
- 25. 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 emissions 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.
- 25.1. The Department may accept an electronic signature on an electronic application or other electronic record required by the Department if the person providing the electronic signature
 - a. uses a security procedure, as defined in AS 09.80.190, that the Department has approved; and
 - b. accepts or agrees to be bound by an electronic record executed or adopted with that signature.
- 26. Submittals.** Unless otherwise directed by the Department or this permit, the Permittee shall submit to the Department one certified copy of reports, compliance certifications, and/or other submittals required by this permit. The Permittee may submit the documents electronically or by hard copy.
- 26.1. Submit the certified copy of reports, compliance certifications, and/or other submittals in accordance with the submission instructions on the Department’s Standard Permit Conditions webpage at <http://dec.alaska.gov/air/air-permit/standard-conditions/standard-condition-xvii-submission-instructions/>.

27. 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, 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.

28. Excess Emissions and Permit Deviation Reports. The Permittee shall report excess emissions and permit deviations as follows:

28.1. Excess Emissions Reporting. Except as provided in Condition 31, the Permittee shall report all emissions or operations that exceed emissions standards or limits 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) excess 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 nonroutine repair that causes emissions in excess of a technology-based emissions standard.
- c. If a continuous or recurring excess emissions is not corrected within 48 hours of discovery, report within 72 hours of discovery unless the Department provides written permission to report under Condition 28.1.d.
- d. Report all other excess emissions not described in Conditions 28.1.a, 28.1.b, and 28.1.c within 30 days after the end of the month during which the excess emissions occurred or as part of the next routine operating report in Condition 29 for excess emissions that occurred during the period covered by the report, whichever is sooner.
- e. If requested by the Department, the Permittee shall provide a more detailed written report to follow up on an excess emissions report.

28.2. Permit Deviations Reporting. For permit deviations that are not “excess emissions,” as defined under 18 AAC 50.990:

- a. Report permit deviations within 30 days after the end of the month during which the deviation occurred or as part of the next routine operating report in Condition 29 for permit deviations that occurred during the period covered by the report, whichever is sooner.

28.3. Reporting Instructions. When reporting either excess emissions or permit deviations, the Permittee shall report using the Department’s online form for all such submittals, beginning no later than September 7, 2023. The form can be found at the Division of Air Quality’s Air Online Services (AOS) system webpage Permittee Portal option,

<http://dec.alaska.gov/applications/air/airtoolsweb>. Alternatively, upon written Department approval, the Permittee may submit the form contained in Section 13 of this permit. The Permittee must provide all information called for by the form that is used. Submit the report in accordance with the submission instructions on the Department's Standard Permit Conditions webpage found at <http://dec.alaska.gov/air/air-permit/standard-conditions/standard-conditions-iii-and-iv-submission-instructions/>.

- 29. Operating Reports.** The Permittee shall submit to the Department an operating report in accordance with Conditions 25 and 26 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.
- 29.1. The operating report must include all information required to be in operating reports by other conditions of this permit, for the period covered by the report.
- 29.2. When excess emissions or permit deviations that occurred during the reporting period are not included with the operating report under Condition 29, the Permittee shall identify
- a. the date of the excess emissions or permit deviation;
 - b. the equipment involved;
 - c. the permit condition affected;
 - d. a description of the excess emissions or permit deviation; and
 - e. any corrective action or preventive measures taken and the date(s) of such actions.
- 29.3. When excess emissions or permit deviation reports have already been reported under Condition 28 during the period covered by the operating report, the Permittee shall either
- a. include a copy of those excess emissions or permit deviation reports with the operating report; or
 - b. cite the date(s) of those reports.
- 30. Title V Major Source Requirements.** The Permittee shall submit a complete application to obtain an initial Title V Operating Permit within 12 months after the source becomes subject to the part 70 permit program.
- 30.1. Notify the Department of the date that the stationary source has commenced operation of any combination of emissions units with the potential to emit 100 TPY or more of any air pollutant subject to regulation.
- 30.2. If the stationary source has not triggered the part 70 permit program threshold within 12 months of the issued date of this permit, the Permittee shall include in the operating report required under Condition 29:
- a. A list of operating EUs; and
 - b. The combined potential to emit of the operating EUs.

31. 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.

31.1. Monitoring. The Permittee shall monitor as follows:

- a. 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 31.
- b. The Permittee shall initiate and complete corrective action necessary to eliminate any violation identified by a complaint or investigation as soon as practicable if
 - (i) 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 31; or
 - (ii) the Department notifies the Permittee that it has found a violation of Condition 31.

31.2. Recordkeeping. 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 31; and
- d. any corrective actions taken or planned for complaints attributable to emissions from the stationary source.

31.3. Reporting. The Permittee shall report as follows:

- a. With each stationary source operating report under Condition 29, the Permittee shall include a brief summary report which must include the following for the period covered by the report:
 - (i) the number of complaints received;
 - (ii) the number of times the Permittee or the Department found corrective action necessary;
 - (iii) the number of times action was taken on a complaint within 24 hours; and
 - (iv) the status of corrective actions the Permittee or Department found necessary that were not taken within 24 hours.
- b. 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.

- c. If emissions present a potential threat to human health or safety, the Permittee shall report any such emissions according to Condition 28.

32. Triennial Emission Inventory Reporting. Every third year by April 30, the Permittee shall submit to the Department reports of actual emissions for the previous calendar year, by emissions unit, of CO, NH₃, NO_x, PM₁₀, PM_{2.5}, SO₂, VOC and lead (Pb) and lead compounds, as follows:

32.1. The Permittee shall report the annual emissions and the required data elements under Condition 32.2 every third year for the previous calendar year as scheduled by the EPA.¹¹

32.2. For each emissions unit and the stationary source, include in the report the required data elements¹² contained within the form included in the Emission Inventory Instructions available at the Department's AOS system on the Point Source Emission Inventory webpage at <http://dec.alaska.gov/Applications/Air/airtoolsweb/PointSourceEmissionInventory>.

32.3. Submit the report in accordance with the submission instructions on the Department's Standard Permit Conditions webpage at <https://dec.alaska.gov/air/air-permit/standard-conditions/standard-conditions-xv-and-xvi-submission-instructions/>.

33. Consistency of Reporting Methodologies. Regardless of permit classification, as of September 7, 2022, all stationary sources operating in the state shall report actual emissions to the Department, either upon request or to meet individual permit requirements, in order for the state to meet federal reporting requirements under 40 CFR Part 51, Subpart A.

33.1. For the purposes of reporting actual or assessable emissions required under Condition 32 and Condition 5.1, the Permittee shall use consistent pollutant-specific emission factors and calculation methods for all reporting requirements for the stationary source.

¹¹ The triennial reporting schedule is in 40 CFR 51.30(b)(1), which requires states to report emissions data to the EPA every 3rd year. The Department requires Permittees to report emissions data by April 30 of the following year (e.g., triennial emission inventory report for 2023 is due April 30, 2024, triennial emission inventory report for 2026 is due April 30, 2027, etc.).

¹² The required data elements are outlined in 40 CFR 51.15 and Tables 2a and 2b to Appendix A of 40 CFR 51 Subpart A.

Section 8. Standard Permit Conditions

- 34.** The Permittee must comply with each permit term and condition. Noncompliance with a permit term or condition constitutes a violation of AS 46.14, 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
- 34.1. an enforcement action;
 - 34.2. permit termination, revocation and reissuance, or modification in accordance with AS 46.14.280; or
- 35.** 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.
- 36.** 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.
- 37.** The permit may be modified, reopened, revoked and reissued, or terminated for cause. A request by the Permittee for modification, revocation and reissuance, or termination or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- 38.** The permit does not convey any property rights of any sort, nor any exclusive privilege.
- 39.** 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
- 39.1. enter upon the premises where a source subject to the permit is located or where records required by the permit are kept;
 - 39.2. have access to and copy any records required by the permit;
 - 39.3. inspect any stationary source, equipment, practices, or operations regulated by or referenced in the permit; and
 - 39.4. sample or monitor substances or parameters to assure compliance with the permit or other applicable requirements.

Section 9. General Source Test Requirements

40. **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.
41. **Operating Conditions.** Unless otherwise specified by an applicable requirement or test method, the Permittee shall conduct source testing
 - 41.1. at a point or points that characterize the actual discharge into the ambient air; and
 - 41.2. at the maximum rated burning or operating capacity of the emissions unit or another rate determined by the Department to characterize the actual discharge into the ambient air.
42. **Reference Test Methods.** The Permittee shall use the following test methods when conducting source testing for compliance with this permit:
 - 42.1. Source testing for the reduction in visibility through the exhaust effluent must be conducted in accordance with the procedures set out in 40 CFR 60, Appendix A, Reference Method 9. The Permittee may use the form in Section 11 to record data.
 - 42.2. 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 CFR 60, Appendix A.
 - 42.3. Source testing for emissions of PM₁₀ and PM_{2.5} must be conducted in accordance with the procedures specified in 40 CFR 51, Appendix M, Methods 201 or 201A and 202.
 - 42.4. Source testing for emissions of any pollutant may be determined using an alternative method approved by the Department in accordance with 40 CFR 63 Appendix A, Method 301.
43. **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 emissions unit type, corrected to standard conditions (dry gas at 68° F and an absolute pressure of 760 millimeters of mercury).
44. **Test Exemption.** The Permittee is not required to comply with Conditions 46, 47 and 48 when the exhaust is observed for visible emissions by Method 9 Plan (Conditions 6.1 and 7.3)
45. **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.
46. **Test Plans.** Except as provided in Condition 44, 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 emissions unit 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 40 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 done without resubmitting the plan.

47. **Test Notification.** Except as provided in Condition 44, 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.
48. **Test Reports.** Except as provided in Condition 44, within 60 days after completing a source test, the Permittee shall submit one certified copy 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 certify the results in the manner set out in Condition 25. If requested in writing by the Department, the Permittee must provide preliminary results in a shorter period of time specified by the Department.

Section 10. Permit Documentation

<u>Date</u>	<u>Document Details</u>
June 20, 2023	Department receives application for Minor Permit AQ1806MSS01.
August 3, 2023	Department receives response to information request.
August 16, 2023	Department receives updated emissions spreadsheet, as requested.
September 13, 2023	Department meets with CPAI to discuss permit status.
October 30, 2023	Department receives updated emissions spreadsheet, changes to ORLs, and supplemental information regarding the emissions units.
November 27, 2023	Department receives application amendment in the form of a certified letter describing the changes to the original application.

Section 11. Visible Emissions Forms

VISIBLE EMISSIONS OBSERVATION FORM

This form is designed to be used in conjunction with EPA Method 9, “Visual Determination of the Opacity of Emissions from Stationary Sources.” Temporal changes in emission color, plume water droplet content, background color, sky conditions, observer position, etc. should be noted in the comments section adjacent to each minute of readings. Any information not dealt with elsewhere on the form should be noted under Additional Information. Following are brief descriptions of the type of information that needs to be entered on the form. For a more detailed discussion of each part of the form, refer to “Instructions for Use of Visible Emission Observation Form” (a copy is available in <https://www3.epa.gov/ttnemc01/methods/webinar8.pdf>).

- Source Name: full company name, parent company or division or subsidiary information, if necessary.
- Address: street (not mailing or home office) address of facility where visible emissions observation is being made.
- Phone (Key Contact): number for appropriate contact.
- Stationary Source ID Number: number from NEDS, agency file, etc.
- Process Equipment, Operating Mode: brief description of process equipment (include type of facility) and operating rate, % capacity, and/or mode (e.g., charging, tapping, shutdown).
- Control Equipment, Operating Mode: specify type of control device(s) and % utilization, control efficiency.
- Describe Emission Point: for identification purposes, stack or emission point appearance, location, and geometry; and whether emissions are confined (have a specifically designed outlet) or unconfined (fugitive).
- Height Above Ground Level: stack or emission point height relative to ground level; can use engineering drawings, Abney level, or clinometer.
- Height Relative to Observer: indicate height of emission point relative to the observation point.
- Distance from Observer: distance to emission point; can use rangefinder or map.
- Direction from Observer: direction plume is traveling from observer.
- Describe Emissions and Color: include physical characteristics, plume behavior (e.g., looping, lacy, condensing, fumigating, secondary particle formation, distance plume visible, etc.), and color of emissions (gray, brown, white, red, black, etc.). Note color changes in comments section.
- Visible Water Vapor Present?: check “yes” if visible water vapor is present.
- If Present, note in the Comments column whether the Plume is “attached” if water droplet plume forms prior to exiting stack, and “detached” if water droplet plume forms after exiting stack.
- Point in Plume at Which Opacity was Determined: describe physical location in plume where readings were made (e.g., 1 ft above stack exit or 10 ft. after dissipation of water plume).
- Describe Plume Background: object plume is read against, include texture and atmospheric conditions (e.g., hazy).
- Background Color: sky blue, gray-white, new leaf green, etc.
- Sky Conditions: indicate color of clouds and cloud cover by percentage or by description (clear, scattered, broken, overcast).
- Wind Speed: record wind speed; can use Beaufort wind scale or hand-held anemometer to estimate.
- Wind Direction From: direction from which wind is blowing; can use compass to estimate to eight points.
- Ambient Temperature: in degrees Fahrenheit or Celsius.
- Wet Bulb Temperature: can be measured using a sling psychrometer
- RH Percent: relative humidity measured using a sling psychrometer; use local US Weather Bureau measurements only if nearby.
- Source Layout Sketch: include wind direction, sun position, associated stacks, roads, and other landmarks to fully identify location of emission point and observer position.
- Draw North Arrow: to determine, point line of sight in direction of emission point, place compass beside circle, and draw in arrow parallel to compass needle.
- Sun’s Location: point line of sight in direction of emission point, move pen upright along sun location line, mark location of sun when pen’s shadow crosses the observer’s position.
- Observation Date: date observations conducted.
- Start Time, End Time: beginning and end times of observation period (e.g., 1635 or 4:35 p.m.).
- Data Set: percent opacity to nearest 5%; enter from left to right starting in left column. Use a second (third, etc.) form, if readings continue beyond 30 minutes. Use dash (-) for readings not made; explain in adjacent comments section.
- Comments: note changing observation conditions, plume characteristics, and/or reasons for missed readings.
- Range of Opacity: note highest and lowest opacity number.
- Observer’s Name: print in full.
- Observer’s Signature, Date: sign and date after performing VE observation.
- Observer’s Affiliation: observer’s employer.
- Certifying Organization, Certified By, Date: name of “smoke school,” certifying observer, and date of most recent certification.

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION AIR PERMITS PROGRAM - VISIBLE EMISSIONS OBSERVATION FORM							Page No.	
Stationary Source Name		Type of Emission Unit		Observation Date		Start Time	End Time	
Emission Unit Location		City		State		Zip	Comments	
Phone # (Key Contact)		Stationary Source ID Number		Sec	0	15		30
Process Equipment		Operating Mode		Min	1			
Control Equipment		Operating Mode						
Describe Emission Point/Location								
Height above ground level		Height relative to observer		Clinometer Reading				
Distance From Observer		Direction From Observer						
Start		End						
Describe Emissions & Color								
Start		End						
Visible Water Vapor Present? If yes, determine approximate distance from the stack exit to where the plume was read								
No		Yes						
Point in Plume at Which Opacity Was Determined								
Describe Plume Background		Background Color						
Start		Start						
End		End						
Sky Conditions:								
Start		End						
Wind Speed		Wind Direction From						
Start		Start						
End		End						
Ambient Temperature		Wet Bulb Temp		RH percent				
SOURCE LAYOUT SKETCH: 1 Stack or Point Being Read 2 Wind Direction From 3 Observer Location 4 Sun Location 5 North Arrow 6 Other Stacks								
Additional Information:								
				Range of Opacity:				
				Minimum		Maximum		
I have received a copy of these opacity observations				Print Observer's Name				
Print Name:				Observer's Signature		Date		
Signature:				Observer's Affiliation:				
Title		Date		Certifying Organization:		Date		
				Certified By:				
Data Reduction:								
Duration of Observation Period (minutes):				Duration Required by Permit (minutes):				
Number of Observations:				Highest Six-Minute Average Opacity (%):				
Number of Observations exceeding 20%:				Highest 18-Consecutive -Minute Average Opacity (%)(engines and turbines only)				
In compliance with six-minute opacity limit? (Yes or No)								
Average Opacity Summary:								
Set Number	Time			Opacity		Comments		
	Start	End		Sum	Average			

Section 12. Complaint Form

Complaint Form

Date Time:

Activities Involved:

Provide a description of reported complaint. Attach sheets as necessary.

If applicable, operational conditions which contributed to the complaint:

If applicable, ambient conditions which contributed to the complaint:

If applicable, describe measures taken to immediately address the complaint.

If applicable, describe measures taken to prevent the condition which generated the complaint.

If applicable, describe any reason that you feel the complaint may not be a violation:

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

Signature

Date

Section 13. Notification Form¹³

Willow Operations Center
Stationary Source Name
ConocoPhillips Alaska, Inc.
Company Name

AQ1806MSS01
Air Quality Permit Number.

When did you discover the Excess Emissions/Permit Deviation?

Date: ____ / ____ / ____ Time: ____ : ____

When did the event/deviation occur?

Begin: Date: ____ / ____ / ____ Time: ____ : ____ (please use 24-hr clock)
End: Date: ____ / ____ / ____ Time: ____ : ____ (please use 24-hr 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
Note: All “excess emissions” are also “permit deviations.” However, use only Section 1 for events that involve excess emissions.
- Deviation from Permit Conditions - Complete Section 2 and Certify
Note: Use only Section 2 for permit deviations that do not involve excess emissions.
- Deviation from COBC¹⁴, CO¹⁵, or Settlement Agreement - Complete Section 2 and Certify

¹³ Revised as of July 22, 2020.

¹⁴ Compliance Order By Consent

¹⁵ Compliance Order

Section 1. Excess Emissions

(a) **Was the exceedance** Intermittent or Continuous

(b) **Cause of Event** (Check one that applies. Complete a separate form for each event, as applicable.):

- Start Up/Shut Down
- Control Equipment Failure
- Bad fuel/coal/gas
- Other _____
- Natural Cause (weather/earthquake/flood)
- Scheduled Maintenance/Equipment Adjustments
- Upset Condition

(c) **Description**

Describe briefly what happened and the cause. Include the parameters/operating conditions exceeded, limits, monitoring data and exceedance. Attach supporting information if necessary.

(d) **Emissions Units (EU) Involved:**

Identify the emissions units 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.

EU ID	EU Name	Permit Condition Exceeded/Limit/Potential Exceedance

(e) **Type of Incident:** (Please check all that apply and provide the value requested, if any):

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

(f) Corrective Actions:

Describe actions taken to restore the system to normal operation and to minimize or eliminate chances of a recurrence. Attach supporting information if necessary.

(g) 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 all boxes that apply per event. Complete a separate form for each event, as applicable.)

- Emissions Unit-Specific Requirements
- Stationary Source-Wide Specific Requirements
- Monitoring/Recordkeeping/Reporting Requirements
- General Source Test Requirements
- Compliance Certification Requirements
- Standard/Generally Applicable Requirements
- Insignificant Emissions Unit Requirements
- Other: _____

(b) **Emissions Units (EU) Involved:**

Identify the emissions units involved in the event, using the same identification number and name as in the permit. List the corresponding permit condition and the deviation.

EU ID	EU 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. Attach supporting information if necessary.

(d) **Corrective Actions:**

Describe actions taken to correct the deviation or potential deviation and to prevent future recurrence. Attach supporting information if necessary.

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). Read and sign the certification at the bottom of the form above.*

Beginning September 7, 2023, Excess Emissions and Permit Deviations must be submitted through the AOS Permittee Portal at <http://dec.alaska.gov/applications/air/airtoolsweb/>.

This Notification Form may only be used to satisfy the reporting requirements if the Department has approved alternative reporting options in writing prior to submittal. Submit this report in accordance with the submission instructions on the Department's Standard Permit Conditions web page: <http://dec.alaska.gov/air/air-permit/standard-conditions/standard-conditions-iii-and-iv-submission-instructions/>