

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

AIR QUALITY OPERATING PERMIT

GPA

Final Date: March 17, 2022

Expiration Date: March 17, 2027

The Alaska Department of Environmental Conservation, under the authority of AS 46.03, AS 46.14, and 18 AAC 50, issues an Air Quality Operating Permit for:

Permitted Stationary Sources: Diesel Electric Generating Stations with diesel engines and auxiliary fuel burning equipment that have requested a fuel limit to avoid classification under 18 AAC 50.306.

This permit authorizes the operation of stationary sources for which the Department finds in writing:

- Emission units meets the criteria established on page 1 of this permit; and
- The Department has received a complete application. For the Department to find that the application is complete, the application must provide all of the information described in the application form issued with this permit for all emission units to be operated under this permit.

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 required by AS 46.14.120(c), the Permittee shall comply with the terms and conditions of this permit.

Citations listed herein are contained within the effective version of 18 AAC 50 at permit issuance. All federal regulation citations are from those sections adopted by reference in this version of regulation in 18 AAC 50.040 unless otherwise specified.

This becomes effective April 16, 2022.



for:

James R. Plosay, Manager
Air Permits Program

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Abbreviations and Acronyms

AAC.....	Alaska Administrative Code	NESHAPs.....	National Emission Standards for Hazardous Air Pollutants [as contained in 40 C.F.R. 61 and 63]
ADEC	Alaska Department of Environmental Conservation	NH ₃	ammonia
Administrator.....	EPA and the Department.	NO _x	nitrogen oxides
AS	Alaska Statutes	NSPS	New Source Performance Standards [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	brake horsepower	PAL	plantwide applicability limitation
CDX.....	Central Data Exchange	Pb	lead
CEDRI	Compliance and Emissions Data Reporting Interface	PM ₁₀	particulate matter less than or equal to a nominal 10 microns in diameter
C.F.R.	Code of Federal Regulations	PM _{2.5}	particulate matter less than or equal to a nominal 2.5 microns in diameter
CAA or The Act .	Clean Air Act	ppm	parts per million
CO	carbon monoxide	ppmv, ppmvd	parts per million by volume on a dry basis
CO ₂ e	CO ₂ -equivalent	psia	pounds per square inch (absolute)
Department	Alaska Department of Environmental Conservation	PSD	prevention of significant deterioration
dscf	dry standard cubic foot	PTE	potential to emit
EPA	US Environmental Protection Agency	SIC.	Standard Industrial Classification
EU.....	emissions unit	SIP.....	State Implementation Plan
GHG	Greenhouse Gas	SPC	Standard Permit Condition or Standard Operating Permit Condition
gr/dscf.....	grain per dry standard cubic foot (1 pound = 7000 grains)	SO ₂	sulfur dioxide
gph.....	gallons per hour	tph	tons per hour
HAPs	hazardous air pollutants [as defined in AS 46.14.990]	TPY	tons per year
Hp	horsepower	VOC	volatile organic compound [as defined in 40 C.F.R. 51.100(s)]
ID.....	emissions unit identification number	VOL	volatile organic liquid [as defined in 40 C.F.R. 60.111b, Subpart Kb]
kPa.....	kiloPascals	vol%	volume percent
kW	kilowatt	wt%	weight percent
kWh	kilowatt-hour	wt%S _{fuel}	weight percent of sulfur in fuel
LAER.....	lowest achievable emission rate		
MACT	maximum achievable control technology [as defined in 40 C.F.R. 63]		
MMBtu/hr.....	million British thermal units per hour		
MMscf	million standard cubic feet		
MR&R	monitoring, recordkeeping, and reporting		
NAICS	North American Industrial Classification System		

Section 1. Qualifying Requirements

- is described by SIC code 4911 or 4931 and NAICS code 221112;
- produces electricity using diesel engines;
- has the Potential to Emit (PTE) or emits 100 TPY of NO_x or more (burning more than 330,000 gallons of fuel in any 12 consecutive months);
- has PTE and actual emissions less than 250 TPY of NO_x (burning 825,000 gallons or less of fuel in any 12 consecutive months);
- requests a limit to restrict NO_x emissions to less than 250 TPY in any 12 consecutive months;
- complies with the emission standards in this permit at the time of application;
- is not subject to an existing facility-specific requirement, other than a fuel use limit, established in a construction permit or in a permit issued before January 18, 1997;
- is either not accessible by the Federal Aid Highway System (FAHS), or meets all of the following:
 - The only connection to the FAHS is through the Alaska Marine Highway System (AMHS), or the stationary RICE operation is within an isolated grid in Alaska that is not connected to the statewide electrical grid referred to as the Alaska Railbelt Grid.
 - At least 10 percent of the power generated by the stationary RICE on an annual basis is used for residential purposes.
 - The generating capacity of the area source is less than 12 megawatts, or the stationary RICE is used exclusively for backup power for renewable energy.
- contains stationary reciprocating internal combustion engines (RICE) that:
 - comply with the 40 C.F.R. 63 Subpart ZZZZ requirements for non-emergency engines for all engines subject to the requirements of 40 C.F.R. 63 Subpart ZZZZ; or
 - are non-emergency or fire pump engines subject to the requirements of 40 C.F.R. 60 Subpart III.
- contains stationary RICE that have displacements less than 30 liters/cylinder.
- was not built after January 18, 1997 in a sulfur dioxide special detection area; and
- does not contain any of the following emission units:
 - emission units subject to any federal emission standard in 40 C.F.R. 60, 61, 62, or 63 other than woodstoves for space heating, reciprocating internal combustion engines, or asbestos demolition/renovation projects, including:
 - boilers subject to 40 C.F.R. 60, Subparts D, Da, Db, or Dc;
 - fuel storage tanks subject to 40 C.F.R. 60, Subparts K, Ka, or Kb;
 - incinerators subject to any federal emission standard in 40 C.F.R. 60 or 62;
 - gas turbines; or emission units subject to any standard in 18 AAC 50.055(a)-(f) other than the general standards for fuel burning equipment in (a)(1), (b)(1), and (c).
 - heaters or boilers:
 - with a heat input rating of 1.7 MMBtu/hr or more that burn kerosene, No. 1 fuel oil, or No. 2 fuel oil;
 - with a heat input rating of 0.3 MMBtu/hr or more than burn used oil.

Section 2. State Requirements

Visible Emissions Standard

1. **Industrial Process and Fuel-Burning Equipment Visible Emissions.** The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from diesel engines to reduce visibility through the exhaust effluent by more than 20 percent averaged over any six consecutive minutes.

[18 AAC 50.040(j)(4), 50.055(a)(1), 50.326(j)(3), & 50.346(c)]
[40 C.F.R. 71.6(a)(1)]

Visible Emissions Monitoring, Recordkeeping, and Reporting (MR&R)

2. **Visible Emissions Monitoring.** The Permittee shall observe the diesel engines 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 for each unit elect to continue 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), 50.326(j), & 50.346(c)]
[40 C.F.R. 71.6(a)(3)(i)]

- 2.1. **Method 9 Plan.** For all observations in this plan, observe emissions unit exhaust, following 40 C.F.R. 60, Appendix A-4, Method 9 for 18 minutes to obtain 72 consecutive 15-second opacity observations.
 - a. **First Method 9 Observation.** For any unit, observe the exhaust for 18 minutes within 14 calendar days after changing from the Smoke/No Smoke Plan of Condition 2.2. For any unit replaced or installed during the term of this permit, observe exhaust for 18 minutes within 30 days of initial start-up.
 - b. **Monthly Method 9 Observations.** After the first Method 9 observation conducted under Condition 2.1.a, perform 18-minute observations at least once in each calendar month that the emissions unit operates.
 - c. **Semiannual Method 9 Observations.** After at least three monthly observations under Condition 2.1.b, unless a six-minute average opacity is greater than 15 percent and one or more observations are greater than 20 percent, perform observations:
 - (i) within six months after the preceding observation, or
 - (ii) for an emissions unit with intermittent operations, during the next scheduled operation immediately following six months after the preceding observation.
 - d. **Annual Method 9 Observations.** After at least two semiannual observations under Condition 2.1.c, unless a six-minute average opacity is greater than 15 percent and one or more individual observations are greater than 20 percent, perform observations:

- (i) within twelve months after the preceding observation; or
 - (ii) for an emissions unit with intermittent operations, during the next scheduled operation immediately following twelve months after the preceding observation
 - 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 observation frequency for that emissions unit to at least monthly intervals as described in Condition 2.1.b, and continue monitoring in accordance with the Method 9 Plan.
- 2.2. **Smoke/No Smoke Plan.** Observe the emissions unit exhaust for the presence or absence of visible emissions, excluding condensed water vapor.
- a. **Initial Monitoring Frequency.** Conduct observations each calendar day that the emissions unit operates.
 - b. **Reduced Monitoring Frequency.** If the emissions unit operates without visible emissions for 30 consecutive operating days, observe the emissions unit exhaust at least once in every calendar month that the emissions unit operates.
 - c. **Smoke Observed.** If visible emissions are observed, comply with Condition 2.3.
- 2.3. **Corrective Actions Based on Smoke/No Smoke Observations.** If visible emissions are present in the emissions unit exhaust during an observation performed under the Smoke/No Smoke Plan of Condition 2.2, then the Permittee shall either begin the Method 9 Plan of Condition 2.1 or
- a. initiate actions to eliminate visible emissions from the emissions unit 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 visible emissions; and
 - c. after completing the actions required under Condition 2.3.a,
 - (i) make 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 2.2.b; or

- (ii) if the actions taken under Condition 2.3.a do not eliminate the visible emissions, or if subsequent visible emissions are observed under the schedule of Condition 2.3.c(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 visible emissions and making observations under the Method 9 Plan, the Permittee may at any time take corrective action that eliminates visible emissions and restart the Smoke/No Smoke Plan under Condition 2.2.a.

3. Visible Emissions Recordkeeping. When visible emissions monitoring is conducted, the Permittee shall keep records as follows:

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 C.F.R. 71.6(a)(3)(ii)]

3.1. For all Method 9 observations,

- a. the observer shall record
 - (i) the name of the stationary source, emissions unit and location, emissions unit type, observer's name and affiliation, and the date on the Visible Emissions Observation Form in Section 10;
 - (ii) the time, estimated distance to the emissions location, sun location, approximate wind direction, estimated wind speed, description of the sky condition (presence and color of clouds), plume background, and operating mode (load or fuel consumption rate or best estimate if unknown) 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 Emission Observation Form in Section 10, 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 six- and 18-consecutive-minute average opacities 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. the diesel engine 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 emissions unit starts operation on the day of the observation, the startup time of the emissions unit;
 - f. name and title of the person making the observation; and
 - g. operating rate (load or fuel consumption rate or best estimate, if unknown).
- 3.3. The records may be kept in electronic format.
4. **Visible Emissions Reporting.** When visible emissions monitoring is conducted, the Permittee shall report as follows:
- [18 AAC 50.040(j)(4), 50.326(j)(3) & 50.346(c)]
[40 C.F.R. 71.6(a)(3)(iii)]
- 4.1. Include in each operating report required under Condition 56:
- a. which visible emissions plan of Condition 2 was used for each emissions unit; if more than one plan was used, give the time periods covered by each plan;
 - b. for each emissions unit under the Method 9 Plan,
 - (i) copies of the observation results (i.e. opacity observations) for each emissions unit 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- and 18-consecutive-minute average opacities observed; and
 - (C) dates when one or more observed six-minute average opacities were greater than 20 percent;
 - c. for each emissions unit under the Smoke/No Smoke Plan, the number of days that smoke/no smoke observations were made and which days, if any, that visible emissions were observed; and
 - d. a summary of any monitoring or recordkeeping required under Conditions 2 and 3 that was not done.

4.2. Report under Condition 55:

- a. the results of Method 9 observations that exceed 20 percent average opacity 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.

Particulate Matter Emissions Standard

5. **Industrial Process and Fuel-Burning Equipment Particulate Matter.** The Permittee shall not cause or allow particulate matter emitted from the diesel engines 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)(4), 50.055(b)(1), 50.326(j)(3), & 50.346(c)]
[40 C.F.R. 71.6(a)(1)]

5.1. Monitor, record, and report the Permittee shall comply with Condition 6.

[18 AAC 50.040(j), 50.326(j) & 50.346(c)]
[40 C.F.R. 71.6(a)(3)(i)]
[40 C.F.R. 71.6(a)(3) & (c)(6)]

Particulate Matter MR&R

6. **Particulate Matter Monitoring for Diesel Engines.** The Permittee shall conduct source tests on diesel engines to determine the concentration of particulate matter (PM) in the exhaust of an emissions unit as follows:.

[18 AAC 50.040(j)(4), 50.326(j) & 50.346(c)]
[40 C.F.R. 71.6(a)(3)(i)]

6.1. If the results of any Method 9 observation conducted under Condition 2.3 for any diesel engine is greater than the criteria of Conditions 6.2.a or 6.2.b, the Permittee shall, within six months of that Method 9 observation, either:

- a. take corrective action and observe the emissions unit exhaust under load conditions comparable to those when the criteria were exceeded, following 40 C.F.R. 60, Appendix A-4 Method 9 for 18 minutes to obtain 72 consecutive 15-second opacity observations, to show that emissions are no longer greater than the criteria of Condition 6.2; or
- b. except as exempted under Condition 6.4, conduct a PM source test according to requirements set out in Section 6.

6.2. Take corrective action or conduct a PM source test, in accordance with Condition 6.1, if any Method 9 observation under Condition 2.1 results in an 18-minute average opacity greater than:

- a. 20 percent for an emissions unit with an exhaust stack diameter that is equal to or greater than 18 inches; or
- b. 15 percent for an emissions unit with an exhaust stack diameter that is less than 18 inches, unless the Department has waived this requirement in writing.

- 6.3. During each one-hour particulate matter source test run under Condition 6.1.b, observe the exhaust for 60 minutes in accordance with Method 9 and calculate the highest 18-consecutive-minute average opacity that was measured during each one-hour test run. Submit a copy of these observations with the source test report.
- 6.4. The PM source test requirements in Condition 6.1.b are waived for an emissions unit if:
 - a. a particulate matter source test on that unit has shown compliance with the particulate matter standard during this permit term; or
 - b. Corrective action was taken to reduce visible emissions and two consecutive 18-minute Method 9 visible emissions observations (as described in Condition 2.1) conducted thereafter within a six-month period show visible emissions less than the threshold in Condition 6.2.
7. **Particulate Matter Recordkeeping.** The Permittee shall comply with the following:
 - 7.1. Within 180 calendar days after the effective date of this permit, the Permittee shall record the exhaust stack diameters of the diesel engines; and
 - 7.2. Keep records of the results of any source test and visible emissions observations conducted under Condition 6.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 C.F.R. 71.6(a)(3)(ii)]
8. **Particulate Matter Reporting for Diesel Engines.** The Permittee shall report as follows:

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 C.F.R. 71.6(a)(3)(iii)]

 - 8.1. Notify the Department of any Method 9 observation results that are greater than the threshold of either Condition 6.2.a or 6.2.b within 30 days of the end of the month in which the observations occurred. Include the dates, EU ID(s), and results when an observed 18-minute average opacity was greater than an applicable threshold in Condition 6.2.
 - 8.2. In each operating report under Condition 56, include:
 - a. a summary of the results of any PM source test and visible emissions observations conducted under Condition 6; and
 - b. copies of any visible emissions observation results greater than the thresholds of Condition 6.2, if they were not already submitted.
 - 8.3. Report the stack diameter(s) of each diesel engine in the next operating report under Condition 56 following the deadline in Condition 7.1 for collecting the stack diameter records.
 - 8.4. Report in accordance with Condition 55:

- a. anytime the results of a PM source test exceed the PM emissions standard in Condition 5; or
- b. if the requirements under Condition 6.1 were triggered and the Permittee did not comply on time with either Condition 6.1.a or 6.1.b. Report the deviation within 24 hours of the date compliance with Condition 6.1 was required.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 C.F.R. 71.6(a)(3)(iii)]

Sulfur Compound Emissions Standard

- 9. Sulfur Compound Emissions.** The Permittee shall not cause or allow sulfur compound emissions, expressed as SO₂, fuel burning equipment to exceed 500 ppm averaged over three hours.

[18 AAC 50.040(j)(4), 50.055(c), 50.326(j)(3), & 50.346(c)]
[40 C.F.R. 71.6(a)(1)]

- 10. Sulfur Compound Monitoring and Recordkeeping.** The Permittee shall monitor and keep records, as follows:

10.1. Comply with either Condition 10.1.a or Condition 10.1.b:

- a. For each shipment of fuel:
 - (i) If the fuel grade requires a sulfur content 0.5 percent by weight (wt%S_{fuel}) or less, keep receipts that specify fuel grade and amount; or
 - (ii) If the fuel grade does not require a sulfur content 0.5 wt%S_{fuel} or less, keep receipts that specify fuel grade and amount and
 - (A) test the fuel for sulfur content; or
 - (B) 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; or
- b. Test the sulfur content of the fuel in each storage tank that supplies fuel to the affected facility at least monthly.

10.2. Fuel testing under Condition 10.1.a or Condition 10.1.b must follow an appropriate method listed in 18 AAC 50.035(b)-(c) or 40 C.F.R. 60.17 incorporated by reference in 18 AAC 50.040(a)(1).

10.3. If a shipment of fuel contains greater than 0.75 wt%S fuel or if the results of a fuel sulfur content test indicate that the fuel contains greater than 0.75 wt%S fuel, the Permittee shall calculate SO₂ emissions in parts per million (ppm) using either the SO₂ material balance calculation in Section 11 or Method 19 of 40 C.F.R. 60, Appendix A-7, adopted by reference in 18 AAC 50.040(a)(3).

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 C.F.R. 71.6(a)(3)(i) & (ii)]

11. Sulfur Compound Reporting. The Permittee shall report as follows:

- 11.1. If SO₂ emissions calculated under Condition 10.3 exceed 500 ppm, the Permittee shall report in accordance with Condition 55. When reporting under this condition, include the calculation under Section 11 or Method 19.
- 11.2. The Permittee shall include in the operating report required by Condition 56
 - a. a list of the fuel grades received at the stationary source during the reporting period;
 - b. for any fuel received with a maximum fuel sulfur content greater than 0.5 wt%S_{fuel}, the fuel sulfur content of the shipment;
 - c. the results of all fuel sulfur analyses conducted under Condition 10.1.a or Condition 10.1.b and documentation of the method(s) used to complete the analyses; and
 - d. for any fuel received with a sulfur content greater than 0.75 wt%S_{fuel}, the SO₂ emissions in ppm calculated under Condition 10.3.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 C.F.R. 71.6(a)(3)(iii)]

12. Used Oil in Diesel Engines. Except for emission testing purposes, the Permittee is prohibited from burning used oil blends in diesel engines until the Department approves of a source test demonstrating that burning the used oil will comply with the particulate matter emission standard of Condition 6 and the visible emission standard of Condition 1.

- 12.1. After Department approval as set out in Condition 12, the Permittee shall comply with the following¹:
- 12.2. Analyze each batch of oil used to determine the sulfur content using an approved ASTM method listed in Condition 13. Maintain records showing the results of the analysis.
- 12.3. Blend the used oil with virgin oil at a ratio that will ensure compliance with the sulfur limit of Condition 9. However, the used oil blend shall be mixed at a ratio of no more than tested as set out by Condition 12.
- 12.4. Account for the consumption of used oil blends as set out in Condition 15.2.
- 12.5. Include with the Operating Report required by Condition 56:
 - a. Results of each analysis as set out by Condition 12.2; and
 - b. For each batch of used oil blended: the amounts of virgin oil and used oil, the blend ratio, the final sulfur content, and the blend date.

¹ CAUTION! Although this condition should ensure compliance with the applicable emission standards of 18 AAC 50, this permit does not ensure compliance with other applicable state or federal laws concerning, management, use, or disposal of used oil.

- 12.6. Report as set out by Condition 55 any time the blend ratio or other requirements deviate from Condition 12.

[18 AAC 50.326(a)]
[40 C.F.R. 71.2 and 71.6(a)(1) & (3)]

13. Used Oil in Boilers or Heaters. The Permittee may burn used oil blends in the boilers and heaters as follows¹:

- 13.1. Analyze each batch of used oil to determine the sulfur content using an approved ASTM method such as ASTM D795-84, D3120-92, D2622-91 and ASTM 396-92. Maintain records showing the results of each analysis.
- 13.2. Blend the used oil with the virgin oil at a ratio that will ensure compliance with the sulfur limit of Condition 9. However, the used oil blend shall be mixed at a ratio of no more than 1 part used oil with 6 parts of virgin oil, unless the Permittee provides a Department approve demonstration that a greater ratio will comply with the limit in Condition 5.
- 13.3. Account for the consumption of the used oil blends as set out in Condition 15.2.
- 13.4. Include with the Operating Report required by Condition 56:
- a. Results of each analysis as set out by Condition 12.2; and
 - b. For each batch of used oil blended, the amounts of virgin oil and used oil; the blend ratio; the final sulfur content; and the blend date.
- 13.5. Report as set out by Condition 55 any time the blend ratio or other requirements deviate from Conditions 13.1 through 13.4.

[18 AAC 50.326(a)]
[40 C.F.R. 71.2 and 71.6(a)(1) & (3)]

Insignificant Emissions Units

14. For emissions 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:

- 14.1. **Visible Emissions Standard:** 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)]

- 14.2. **Particulate Matter Standard:** 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)]

- 14.3. **Sulfur Compound Standard:** 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)]

14.4. **General MR&R for Insignificant Emissions Units:**

- a. The Permittee shall submit the compliance certifications of Condition 57 based on reasonable inquiry;
- b. The Permittee shall comply with the requirements of Condition 39;
- c. The Permittee shall report in the operating report required by Condition 56 if an emissions unit has historically been classified as insignificant because of actual emissions less than the thresholds of 18 AAC 50.326(e) and current actual emissions become greater than any of those thresholds; and
- d. No other monitoring, recordkeeping or reporting is required.

[18 AAC 50.346(b)(4)]

Section 3. Stationary Source-Wide Requirements

15. NO_x PSD Avoidance. The Permittee shall avoid the requirement of a PSD review for NO_x by emitting less than 250 tons in any 12 consecutive months, as follows:

15.1. Limit fuel consumption from the stationary source (diesel engines and auxiliary fuel burning equipment, including any insignificant emission units) to no more than 825,000 gallons in any 12 consecutive month period.

15.2. Monitoring and Recordkeeping:

- a. At a consistent time each month, monitor and record the total monthly fuel consumption² at the stationary source using a tank leveling process, fuel delivery records, or a metering system.
- b. Calculate and record the 12 consecutive month total fuel consumption for the source each month.

15.3. Reporting:

- a. Report in the Operating Report in accordance with Condition 56, the 12 consecutive month fuel consumption for each month in the reporting period as set out by Condition 15.2.b.
- b. Report in accordance with Condition 55, whenever the limit in Condition 15.1 is exceeded and whenever the monitoring and reporting of Condition 15.2 or 15.3 are deviated.

15.4. Source Testing. Conduct a one-time NO_x emission source test when the fuel consumption of the stationary source reaches 750,000 gallons in any 12 consecutive months to confirm the worst case emission factors are equal to or less than 4.41 lb/MMBtu heat input. The source test shall be conducted as follows:

- a. Test each diesel engine rated at greater than 400 hp at no less than three loads (high, mid, and low) within the normal operating range of the units. If the Permittee demonstrates in writing to the Department that a group of units have identical configuration, the Department will allow one unit to be tested within that group;
- b. The source test shall be conducted within 90 days after reaching the amount listed in Condition 15.4;
- c. The source test shall be in accordance with the requirements set forth in Section 6 of this permit;
- d. During each test, monitor and record the units' load, electric generation rate, and fuel consumption at no less than once every five minutes;

² Fuel consumption shall include used oil consumption as set out by Conditions 12.4 and 13.3.

- e. Obtain for each fuel used during the testing, the fuel specific high heating value (gross heat value) or analyze a representative sample of the fuel using an approved ASTM method such as ASTM D 240, 4809, 2382;
- f. Determine the load specific NO_x emission factors (pounds per gallon, pounds per hour, and lb/MMBtu) expressed as NO₂, using exhaust properties determined by both Method 19 and exhaust gas measurements;
- g. Report information obtained in Conditions 15.4.a through 15.4.f in the source test report required in Section 6;
- h. Anytime source testing results in a worst case emission factor greater than 4.41 lb/MMBtu heat input:
 - (i) Report in accordance with Condition 55; and
 - (ii) Submit an analysis to show whether or not the fuel limit in Condition 15.1 continues to limit the stationary source NO_x emissions to no more than 250 tons in any 12 consecutive months.

[18 AAC 50.326(a)]
[40 C.F.R. 71.2 and 71.6(a)(1) & (3)]

Section 4. Federal Requirements

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

Subpart A – General Provisions

- 16. NSPS Subpart A Notification.** For any affected facility³ or existing facility⁴ 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 & 50.040(a)(1)]
[40 C.F.R. 60.7(a) & 60.15(d), Subpart A]

- 16.1. the date construction (or reconstruction as defined under 40 C.F.R. 60.15) of an affected facility is commenced postmarked no later than 30 days after such date.

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

- 16.2. any proposed replacement of an existing facility, 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 facility, 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), Subpart A]

- a. the name and address of owner or operator,
- b. the location of the existing facility,
- c. a brief description of the existing facility 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 facility,
- f. the estimated life of the existing facility after the replacements, and
- g. a discussion of any economic or technical limitations the facility may have in complying with the applicable standards of performance after the proposed replacements.

³ *Affected facility* means, with reference to a stationary source, any apparatus to which a standard applies, as defined in 40 C.F.R. 60.2.

⁴ *Existing facility* means, with reference to a stationary source, any apparatus of the type for which a standard is promulgated in 40 C.F.R. Part 60, and the construction or modification of which was commenced before the date of proposal of that standard; or any apparatus which could be altered in such a way as to be of that type, as defined in 40 C.F.R. 60.2.

- 17. 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 Condition X. 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)]
[40 C.F.R. 60.12, Subpart A]

Engines Subject to NSPS Subpart IIII – Compression Ignition Internal Combustion Engines

- 18. NSPS Subpart IIII Requirements.** The Permittee shall comply with any applicable requirement for stationary compression ignition (CI) internal combustion engine (ICE) whose construction⁵, modification⁶, or reconstruction⁷ commences after July 11, 2005. Conditions 18 through X apply as indicated in Tables 4 and 5 of the GPA application.

- 18.1. Operate and maintain the stationary CI ICE and control device according to the manufacturer's written instructions over the entire life of the engine. In addition, the Permittee may only change those settings that are permitted by the manufacturer.

[18 AAC 50.040(j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 60.4200(a), 60.4206, & 60.4211(a)]

- 18.2. Comply with the applicable provisions of Subpart A as specified in Table 8 to Subpart IIII.

[18 AAC 50.040(j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 60.4218 & Table 8]

- 18.3. For engines other than fire pump engines, manufactured in previous model years, the Permittee shall comply with 40 C.F.R. 60.4208(a) through (g) and (i).

[40 C.F.R. 60.4208]

- 18.4. If you own or operate an emergency fire pump stationary ICE, you must operate the emergency stationary ICE according to the requirements in 40 C.F.R. 60.4211(f)(1) through (3). In order for the engine to be considered an emergency stationary ICE under NSPS Subpart IIII, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation, nonemergency situations for 50 hours per year, as described in 40 C.F.R. 60.4211(f)(1) through (3), is prohibited. If you do not operate the engine according to the requirements in 40 C.F.R. 60.4211(f)(1) through (3), the engine will not be considered an emergency engine under NSPS Subpart IIII and must meet all requirements for non-emergency engines.

[40 C.F.R. 60.4211(f)]

⁵ For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

⁶ As defined in 18 AAC 50.990(59).

⁷ As defined in 18 AAC 50.990(88).

18.5. **Notification.** For non-emergency stationary CI ICE that are greater than 2,237 kW (3,000 hp) or have a displacement of greater than or equal to 10 liters per cylinder or are pre-2007 model year engines that are greater than 130 kW (175 hp) and not certified engines, the Permittee must meet the following requirements:

- a. Submit an initial notification as required in Condition 16.1. The notification shall include the information in Conditions 18.5.a(i) through 18.5.a(v):
 - (i) Name and address of the owner or operator;
 - (ii) The address of the affected source;
 - (iii) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
 - (iv) Emission control equipment; and
 - (v) Fuel used.
- b. If the stationary CI ICE is an emergency stationary ICE, the Permittee is not required to submit an initial notification.

[40 C.F.R. 60.4214(a)(1)]

[40 C.F.R. 60.4214(b)]

18.6. **Performance Tests.** The Permittee shall conduct performance tests in accordance with 40 C.F.R. 60.4212 for stationary CI ICE with a displacement of less than 30 liters per cylinder; or 40 C.F.R. 60.4213 for stationary CI internal combustion engine with a displacement of greater than or equal to 30 liters per cylinder.

[40 C.F.R. 60.4212 & 60.4213]

19. **NSPS Subpart III Fuel Requirements.** The Permittee shall comply with the following:

- 19.1. Beginning October 1, 2010, for CI ICE with a displacement of less than 30 liters per cylinder that use diesel fuel, use diesel fuel that meets the requirements of 40 C.F.R. 80.510(b) for non road diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.
- 19.2. Condition 19.1 does not apply to owners and operators of pre-2014 model year stationary CI ICE that are located in remote areas of Alaska that are not accessible by the FAHS.

[18 AAC 50.040(j)(4) & 50.326(j)]

[40 C.F.R. 60.4207(b) & 60.4216(d)]

[40 C.F.R. 80.510(b)]

20. **NSPS Subpart III Emission Standards.** The Permittee shall comply with the applicable emission standards for the affected facility, as listed below.

[18 AAC 50.040(j)(4) & 50.326(j)]

[40 C.F.R. 71.6(a)(1)]

[40 C.F.R. 60.4200(a)(2)(i), Subpart III]

For Non-Emergency Engines

- 20.1. For pre-2007 model year non-emergency stationary CI ICE with a displacement of less than 10 liters per cylinder, the Permittee shall comply with the emission standards in Table 1 to NSPS Subpart IIII.

[40 C.F.R. 60.4204(a) & Table 1, Subpart IIII]

- 20.2. For pre-2007 model year non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder, the Permittee shall comply with the NO_x standards in 40 C.F.R. 94.8(a)(1), as follows:

- a. 17.0 g/kW-hr when maximum test speed is less than 130 rpm, or
- b. $45.0 \times N^{-0.20}$ when maximum test speed is at least 130 rpm but less than 2000 rpm, where N is the maximum test speed of the engine in revolutions per minute⁸, or
- c. 9.8 g/kW-hr when maximum test speed is 2000 rpm or more.

[40 C.F.R. 60.4204(a), Subpart IIII]

[40 C.F.R. 94.8(a)(1)(i) - (iii), Subpart A, 12/5/07]

- 20.3. For 2007 model year and later non-emergency CI ICE with a displacement of less than 30 liters per cylinder, the Permittee must comply with the emission standards in 40 C.F.R. 60.4201(a) through (f), as applicable, for all pollutants, for the same displacement and maximum engine power.

[40 C.F.R. 60.4204(b) & 4201(a) - (f), Subpart IIII]

[40 C.F.R. 94.8(a)(1)]

For Emergency Fire Pump Engines

- 20.4. For fire pump engines with a displacement of less than 30 liters per cylinder, the Permittee shall comply with the emission standards in Table 4 to NSPS Subpart IIII for all pollutants.

[40 C.F.R. 60.4205(c) & Table 4, Subpart IIII]

For Stationary CI ICE using Special Fuels

- 20.5. For engines that do not use diesel fuel, the Permittee may petition the Administrator for approval of alternative emission standards, if the Permittee can demonstrate that the fuel used in the affected facility is not the fuel on which the manufacturer of the engine certified the engine and that engine cannot meet the applicable standards required in 40 C.F.R. 60.4204 or 40 C.F.R. 60.4205 using such fuels and that use of such fuel is appropriate and reasonably necessary, considering cost, energy, technical feasibility, human health and environmental, and other factors, for the operation of the engine.

[40 C.F.R. 60.4217, Subpart IIII]

⁸ Round speed-dependent standards to the nearest 0.1 g/kW-hr.

21. NSPS Subpart III Monitoring and Recordkeeping. The Permittee shall meet the monitoring and recordkeeping requirements, as follows:

[18 AAC 50.040(j)(4) & 50.326(j)]

[40 C.F.R. 71.6(a)(3)(i & ii)]

[40 C.F.R. 60.4209(a) & (b), Subpart III]

21.1. For emergency fire pump stationary CI ICE that do not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine.

- a. Starting with the model years in Table 5 to NSPS Subpart III, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year,
 - (i) keep records of the time of operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter, and
 - (ii) the reason the engine was in operation during that time.

[40 C.F.R. 60.4209(a) & 60.4214(b), Subpart III]

21.2. For engines equipped with a diesel particulate filter to comply with the emission standards of 40 C.F.R. 60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.

- a. Keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.

[40 C.F.R. 60.4209(b) & 60.4214(c), Subpart III]

21.3. If you are an owner or operator of a pre-2007 model year stationary CI ICE and must comply with emission standards specified in Conditions 20.1 or 20.2, or if you are an owner or operator of a CI fire pump engine that is manufactured in the years prior to the model years in Table 3 to NSPS Subpart III and must comply with the emission standards specified in Condition 20.4, you must demonstrate compliance according to one of the methods specified in Conditions 21.3.a through 21.3.e.

- a. Purchasing an engine certified to emission standards for the same model year and maximum engine power as described in 40 CFR parts 1039 and 1042, as applicable. The engine must be installed and configured according to the manufacturer's specifications.
- b. Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in Section 6 and these methods must have been followed correctly.
- c. Keeping records of engine manufacturer data indicating compliance with the standards.

- d. Keeping records of control device vendor data indicating compliance with the standards.
- e. Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in 40 C.F.R. 60.4212, as applicable.

[40 C.F.R. 60.4211(b), Subpart III]

- 21.4. If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in Condition 20.3, or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in Table 3 to NSPS subpart III and must comply with the emission standards specified in Condition 20.4, you must comply by purchasing an engine certified to the emission standards in Condition 20.3 or 20.4, as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power.

[40 C.F.R. 60.4211(c), Subpart III]

- 21.5. If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance in accordance with 40 C.F.R. 60.4211(g)(1) through (3).

[40 C.F.R. 60.4211(g), Subpart III]

- 21.6. For non-emergency stationary CI ICE that are greater than 2,237 KW (3,000 HP), or have a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year engines that are greater than 130 KW (175 HP) and not certified, keep records of the information in Conditions 21.6.a through 21.6.d:

- a. All notifications required in Condition 18.3 and all documentation supporting any notification;
- b. Maintenance conducted on the engine;
- c. If the stationary CI ICE is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards; and
- d. If the stationary CI internal combustion is not a certified engine, documentation that the engine meets the emission standards.

[40 C.F.R. 60.4214(a)(2), Subpart III]

22. NSPS Subpart III Reporting. The Permittee shall report in the operating report required by Condition 56 the following:

- 22.1. upon initial startup, provide a copy of the records required in Conditions 21.6.c or 21.6.d in the next operating report;

- 22.2. the method of compliance used to demonstrate compliance with Condition 21.3;
and
- 22.3. the records required in Conditions 21.1, 21.2, and 21.3.

[18 AAC 50.040(j) & 50.326(j)(4)]
[40 C.F.R. 71.6(a)(3)(iii) & (c)(6)]

Engines subject to NESHAP Subpart ZZZZ⁹ – Reciprocating Internal Combustion Engines

- 23. NESHAP Subpart ZZZZ Requirements.** The Permittee shall comply with all applicable requirements of 40 C.F.R. 63 NESHAP Subpart ZZZZ for stationary reciprocating internal combustion engines (RICE) located at an area source of hazardous pollutant (HAP) emissions. Conditions 23 through 28 apply as indicated in Table 6 of the GPA application.

[18 AAC 50.040(c)(23) & (j)(4); 18 AAC 50.326(j)]
[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 63.6585 & 63.6590, Subpart ZZZZ]

- 24.** For an affected source that is a new or a reconstructed stationary reciprocating internal combustion engine (RICE) located at an area source, the Permittee must meet the requirements of Subpart ZZZZ by meeting the requirements of 40 C.F.R. 60 Subpart IIII in Conditions 18 through 22 for compression ignition engines. No further requirements apply for such engines under NESHAP Subpart ZZZZ.

[18 AAC 50.040(c)(23), (j)(4), & 18 AAC 50.326(j)]
[40 C.F.R. 63.6590(c), Subpart ZZZZ]

- 25. NESHAP Subpart ZZZZ General Requirements.** The Permittee shall comply with the applicable requirements for RICE located at an area source of HAPs as follows:

- 25.1. You must be in compliance with the operational limitations, and other requirements in NESHAP Subpart ZZZZ that apply to you at all times.

[40 C.F.R. 63.6605(a), Subpart ZZZZ]

- 25.2. At all times, operate and maintain any affected source, including any associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but not limited to monitoring results, review of operation, maintenance procedures and records, and inspection of the source.

[40 C.F.R. 63.6605(b), Subpart ZZZZ]

- 25.3. The Permittee shall comply with the applicable requirements of 40 C.F.R. 63 Subpart A with the provisions for the applicability of Subpart A in Table 8 to Subpart ZZZZ.

[40 C.F.R. 63.6665, Subpart ZZZZ]

⁹ The provisions of NESHAP Subpart ZZZZ listed in Conditions 23 through 28 are current as of February 27, 2014. Should EPA promulgate revisions to this subpart, the Permittee shall be subject to the revised final provisions as promulgated and not the superseded provisions summarized in these conditions.

26. NESHAP Subpart ZZZZ Work and Management Practices and Monitoring. The Permittee shall comply with the following work and management practices:

[18 AAC 50.040(c)(23) & (j); 18 AAC 50.326(j)]
[40 C.F.R. 71.6(a)(3)(i)]

26.1. Except during periods of startup, comply with the following:

- a. Change oil and filter every 1,000 hours of operation, or annually, whichever comes first;
- b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
- c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

26.2. During periods of startup, minimize the engine's time spent at idle during startup and minimize the engine's start up time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

[40 C.F.R. 63.6603(a) & (b), (b)(1) & (b)(2), 63.6625(h), & Table 2d Item 1, Subpart ZZZZ]
[40 C.F. R. 63, Footnotes 1 & 2 to Table 2d, Subpart ZZZZ]

26.3. Sources have the option to utilize an oil analysis program as described in Condition 26.4 in order to extend the specified oil change requirement in Condition 26.1.a.

[40 C.F.R. 63.6603(a) & (b), (b)(1) & (b)(2), 63.6625(h), & Table 2d Item 1, Subpart ZZZZ]

26.4. The Permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Condition 26.1.a. The oil analysis must be performed at the same frequency specified for changing the oil in Condition 26.1.a. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the Permittee is not required to change the oil. If any of the limits are exceeded, the Permittee must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the Permittee must change the oil within 2 business days or before commencing operation, whichever is later. The Permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

[40 C.F.R. 63.6625(i), Subpart ZZZZ]

27. NESHAP Subpart ZZZZ Recordkeeping Requirements. The Permittee shall keep records as follows:

- 27.1. Keep records of the maintenance conducted on the stationary RICE, to demonstrate that the Permittee operated and maintained the stationary RICE and after-treatment control device (if any) according to its own maintenance plan.

[40 C.F.R. 63.6655(e)(2) & (3), Subpart ZZZZ]

- 27.2. Keep records in a form suitable and readily available for expeditious inspection and review, readily accessible in hard copy or electronic form, and for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

[40 C.F.R. 63.6660, 63.6665, and Table 8, Subpart ZZZZ]

[40 C.F.R. 63.10(b)(1), Subpart A]

28. NESHAP Subpart ZZZZ Reporting Requirements. The Permittee shall report as follows:

- 28.1. Include in the operating report required by Condition 56,

- a. a report of Subpart ZZZZ deviations as defined in 40 C.F.R. 63.6675 and of each instance in which an applicable requirement in 40 C.F.R. 63, Subpart A (Table 8 of Subpart ZZZZ) was not met;

[40 C.F.R. 63.6640(e), 63.6650(f), Subpart ZZZZ]

- 28.2. Notify the Department in accordance with Condition 55 if any of the requirements in Conditions 23 through 28 were not met.

[18 AAC 50.040(j)(4) and 18 AAC 50.326(j)(4)]

[40 C.F.R. 71.6(a)(3)(iii) & (c)(6)]

Section 5. General Conditions

Standard Terms and Conditions

- 29.** 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), 50.345(a) & (e)]

- 30.** 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), 50.345(a) & (f)]

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

[18 AAC 50.326(j)(3), 50.345(a) & (g)]

- 32. Administration Fees.** The Permittee shall pay to the Department all assessed permit administration fees. Administration fee rates are set out in 18 AAC 50.400-403.

[18 AAC 50.326(j)(1), 50.400, & 50.403]
[AS 37.10.052(b) & AS 46.14.240]

- 33. Assessable Emissions.** 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 50.410.¹⁰ The assessable emission fee rate is set out in 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 in quantities 10 tons per year or greater. The quantity for which fees will be assessed is the lesser of

33.1. the stationary source's assessable potential to emit of 369.2 TPY; or

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

¹⁰ If the stationary source has not commenced construction or operation on or before March 31st, submit to the Department's Juneau office a transmittal letter certified under 18 AAC 50.205 that identifies the source's assessable emissions for the previous fiscal year to be zero tons per year and provide estimates for when construction and operation will commence.

[18 AAC 50.040(j)(3), 50.035, 50.326(j)(1), 50.346(b)(1), 50.410, & 50.420]
[40 C.F.R. 71.5(c)(3)(ii)]

34. Assessable Emission Estimates. Emission fees will be assessed as follows:

- 34.1. no later than March 31 of each year, the Permittee may submit an estimate of the stationary source's assessable emissions via the Department's Air Online Services (AOS) System at <http://dec.alaska.gov/applications/air/airtoolsweb> using the Permittee Portal option and filling out the Emission Fee Estimate form. Alternatively, the report may be submitted by:
 - a. E-mail under a cover letter using dec.aq.airreports@alaska.gov; or
 - b. hard copy to the following address: ADEC Division of Air Quality, ATTN: Assessable Emissions Estimate, 555 Cordova Street, Anchorage, Alaska 99501.
- 34.2. The Permittee shall include with the assessable emissions report all of the assumptions and calculations used to estimate the assessable emissions in sufficient detail so the Department can verify the estimates.
- 34.3. 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 out in Condition 33.1.

[18 AAC 50.040(j)(3), 50.326(j)(1), 50.346(b)(1), 50.410, & 50.420]
[40 C.F.R. 71.5(c)(3)(ii)]

35. Good Air Pollution Control Practice. The Permittee shall do the following for diesel engines:

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

[18 AAC 50.326(j)(3) & 50.346(b)(5)]

36. 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)]

37. 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), 50.326(j)(3), & 50.346(c)]

37.1. 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 37.1.a or to address the results of Department inspections that found potential problems; and
 - (ii) to prevent future dust problems.

37.2. The Permittee shall report according to Conditions 39.1.e and 39.1.f.

38. 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 stationary 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)]

39. 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, 50.040(e), 50.326(j)(3) & 50.346(a)]
[40 C.F.R. 71.6(a)(3)]

39.1. Monitoring, Recordkeeping, and Reporting:

- a. If emissions present a potential threat to human health or safety, the Permittee shall report any such emissions according to Condition 55.
- 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 39.
- c. 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 39; or
 - (ii) the Department notifies the Permittee that it has found a violation of Condition 39.
- d. The Permittee shall keep records of
 - (i) the date, time, and nature of all emissions complaints received;

- (ii) the name of the person or persons that complained, if known;
 - (iii) a summary of any investigation, including reasons the Permittee does or does not believe the emissions have caused a violation of Condition 39; and
 - (iv) any corrective actions taken or planned for complaints attributable to emissions from the stationary source.
 - e. With each stationary source operating report under Condition 56, the Permittee shall include a brief summary report which must include
 - (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.
 - f. 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.
- 40. 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), & 50.326(j)]
[40 C.F.R. 61, Subparts A & M, and Appendix A]
[40 C.F.R. 71.6(c)(6)]

Open Burning Requirements

- 41. Open Burning.** If the Permittee conducts open burning at this stationary source, the Permittee shall comply with the requirements of 18 AAC 50.065. The Permittee shall comply as follows:
- 41.1. 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; and
 - 41.2. Include this condition in the annual certification required under Condition 57.

[18 AAC 50.065, 50.040(j), & 50.326(j)]
[40 C.F.R. 71.6(a)(3)]

Section 6. General Source Testing and Monitoring Requirements

- 42. 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) & 50.345(a) & (k)]

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

[18 AAC 50.220(b)]

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

43.2. 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.

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

44.1. 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) & 50.040(a)]
[40 C.F.R. 60]

44.2. 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) & 50.220(c)(1)(B)]
[40 C.F.R. 61]

44.3. 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) & 50.220(c)(1)(C)]
[40 C.F.R. 63]

44.4. 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. The Permittee may use the form in Section 10 to record data.

[18 AAC 50.030 & 50.220(c)(1)(D)]

44.5. 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) & 50.220(c)(1)(E)]
[40 C.F.R. 60, Appendix A]

- 44.6. Source testing for emissions of PM_{2.5} and PM₁₀ 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) & 50.220(c)(1)(F)]
[40 C.F.R. 51, Appendix M]

- 44.7. 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)(32) & 50.220(c)(2)]
[40 C.F.R. 63, Appendix A, Method 301]

- 45. 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).

[18 AAC 50.220(c)(3) & 50.990(102)]

- 46. Test Exemption.** The Permittee is not required to comply with Conditions 48, 49 and 50 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)]

- 47. 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)]

- 48. Test Plans.** Except as provided in Condition 46, 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 42 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.

[18 AAC 50.345(a) & (m)]

- 49. Test Notification.** Except as provided in Condition 46, 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)]

- 50. Test Reports.** Except as provided in Condition 46, 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 52. 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)]

Section 7. General Recordkeeping and Reporting Requirements

Recordkeeping Requirements

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

[18 AAC 50.040(a)(1) & 50.326(j)]
[40 C.F.R 60.7(f), Subpart A, 40 C.F.R 71.6(a)(3)(ii)(B)]

- 51.1. Copies of all reports and certifications submitted pursuant to this section of the permit; and
- 51.2. 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

- 52. 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.

- 52.1. 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 09.80.020 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 Condition 52.1.a, 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), 50.205, & 50.326(j)]

53. Submittals. Unless otherwise directed by the Department or this permit, the Permittee shall submit reports, compliance certifications, and/or other submittals required by this permit, via the Department's AOS System at <http://dec.alaska.gov/applications/air/airtoolsweb> using the Permittee Portal option.

53.1. Alternatively, documents certified in accordance with Condition 52 may be submitted either by:

- a. Email under a cover letter using dec.aq.airreports@alaska.gov; or
- b. Certified mail to the following address: ADEC Air Permits Program, ATTN: Compliance Technician, 610 University Ave., Fairbanks, AK 99709-3643.

[18 AAC 50.326(j)]
[40 C.F.R. 71.6(a)(3)(iii)(A)]

54. 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), 50.200, & 50.326(a) & (j)]
[40 C.F.R. 71.5(a)(2) & 71.6(a)(3)]

55. Excess Emissions and Permit Deviation Reports.

55.1. Except as provided in Condition 39, 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 commences 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 nonroutine repair that causes emissions in excess of a technology-based emission standard; and
- c. Report all other excess emissions and permit deviations
 - (i) within 30 days after the end of the month during which the excess emissions or deviation occurred, except as provided in Condition 55.1.c(iii); or
 - (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 55.1.c(i); and

- (iii) for failure to monitor, as required in other applicable conditions of this permit.

55.2. When reporting either excess emissions or permit deviations, the Permittee shall report using either the Department's online form, which can be found at <http://dec.alaska.gov/applications/air/airtoolsweb> or <http://dec.alaska.gov/media/6687/sciv-notform-rev-9-27-10.pdf>, or if the Permittee prefers, the form contained in Section 12 of this permit. The Permittee must provide all information called for by the form that is used.

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

[18 AAC 50.235(a)(2), 50.240(c), 50.326(j)(3), & 50.346(b)(2) & (3)]

56. Operating Reports. During the life of this permit¹¹, the Permittee shall submit to the Department 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.

56.1. 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.

56.2. When excess emissions or permit deviations that occurred during the reporting period are not included with the operating report under Condition 56.1, the Permittee shall identify

- a. the date of the 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; or

56.3. when excess emissions or permit deviations have already been reported under Condition 55 the Permittee shall cite the date or dates of those reports.

56.4. The operating report must include, for the period covered by the report, a listing of emissions monitored under Conditions 2.1.e, 2.2.c, 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;

¹¹ *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.

- c. the permit condition affected; and
- d. the monitoring result which triggered the additional monitoring.

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

[18 AAC 50.346(b)(6) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)(iii)(A)]

57. **Annual Compliance Certification.** Each year by March 31, the Permittee shall compile and submit to the Department an annual compliance certification report. The Permittee may use the form in Section 9.

57.1. 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 2 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.

57.2. **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.

57.3. In addition, submit a copy of the report directly to the Clean Air Act Compliance Manager, US EPA Region 10, ATTN: Air Toxics and Enforcement Section, Mail Stop: 20-C04, 1200 Sixth Avenue, Suite 155, Seattle, WA 98101-3188.

[18 AAC 50.205, 50.345(a) & (j), & 50.326(j)]
[40 C.F.R. 71.6(c)(5)]

58. **Emission Inventory Reporting.** 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:

58.1. **Every-year inventory.** Each year by April 30, if the stationary source's potential to emit for the previous calendar year equals or exceeds:

- a. 250 TPY of NH₃, PM₁₀, PM_{2.5} or VOC; or
- b. 2,500 TPY of CO, NO_x, or SO₂.

58.2. **Triennial inventory.** Every third year by April 30, if the stationary source's potential to emit (except actual emissions for Pb) for the previous calendar year equals or exceeds:

- a. For stationary sources located in Attainment and Unclassifiable Areas:
 - (i) 0.5 TPY of actual Pb, or
 - (ii) 1,000 TPY of CO; or
 - (iii) 100 TPY of SO₂, NH₃, PM₁₀, PM_{2.5}, NO_x or VOC.
 - b. For stationary sources located in Nonattainment Areas:
 - (i) 0.5 TPY of actual Pb, or
 - (ii) 1,000 TPY of CO or, when located in a CO nonattainment area, 100 TPY of CO; or
 - (iii) 100 TPY of SO₂, NH₃, PM₁₀, PM_{2.5}, NO_x, or VOC; or as specified in Conditions 58.2.b(iv) through 58.2.b(viii):
 - (iv) 70 TPY of SO₂, NH₃, PM_{2.5}, NO_x, or VOC in PM_{2.5} serious nonattainment; or
 - (v) 70 TPY of PM₁₀ in PM₁₀ serious nonattainment areas; or
 - (vi) 50 TPY of NO_x or VOC in O₃ serious nonattainment areas; or
 - (vii) 25 TPY of NO_x or VOC in O₃ severe nonattainment areas; or
 - (viii) 10 TPY of NO_x or VOC in O₃ extreme nonattainment areas.
- 58.3. For reporting under Condition 58.2, the Permittee shall report the annual emissions and the required data elements under Condition 58.4 every third year for the previous calendar year as scheduled by the EPA.¹²
- 58.4. For each emissions unit and the stationary source, include in the report the required data elements¹³ 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>.
- 58.5. Submit the report 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-conditions-xv-and-xvi-submission-instructions/>.

[18 AAC 50.040(j)(4), 50.200, 50.326(j)(3), & 50.346(b)(8)]
[40 C.F.R. 51.15, 51.30(a)(1) & (b)(1), and Appendix A to 40 C.F.R. 51 Subpart A]

¹² The calendar years for which reports are required are based on the triennial reporting schedule in 40 C.F.R. 51.30(b)(1), which requires states to report emissions data to the EPA for inventory years 2023, 2026, 2029, 2031, and every 3rd year thereafter. Therefore, the Department requires Permittees to report emissions data for the same inventory years 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.).

¹³ The required data elements to be reported to the EPA are outlined in 40 C.F.R. 51.15 and Tables 2a and 2b to Appendix A of 40 C.F.R. 51 Subpart A.

59. NSPS and NESHAP Reports. The Permittee shall comply with the following:

- 59.1. **Reports:** Except for previously submitted reports and federal reports and notices submitted through EPA's Central Data Exchange (CDX) and Compliance and Emissions Data Reporting Interface (CEDRI) online reporting system, attach to the operating report required by Condition 56 for the period covered by the report, a copy of any NSPS and NESHAPs reports submitted to the U.S. Environmental Protection Agency (EPA) Region 10. For reports previously submitted to ADEC or submitted through CDX/CEDRI, state in the operating report the date and a brief description of each of the reports submitted during the reporting period; and
- 59.2. **Waivers:** Upon request by the Department, provide a written copy of any EPA-granted alternative monitoring requirement, custom monitoring schedule or waiver of the federal emission standards, recordkeeping, monitoring, performance testing, or reporting requirements. The Permittee shall keep a copy of each U.S. EPA-issued monitoring waiver or custom monitoring schedule with the permit.

[18 AAC 50.326(j)(4) & 50.040(j)]

[40 C.F.R. 60.13, Subpart A; 63.10(d) & (f) Subpart A; & 40 C.F.R. 71.6(c)(6)]

Section 8. Permit Changes and Renewal

- 60. 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) & 50.326(j)]
[40 C.F.R. 71.6(a)(8)]

- 61. 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 C.F.R. Parts 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:

- 61.1. Each such change shall meet all applicable requirements and shall not violate any existing permit term or condition;
- 61.2. 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;
- 61.3. The change shall not qualify for the shield under 40 C.F.R. 71.6(f);
- 61.4. The Permittee shall keep a record describing changes made at the stationary 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.

[18 AAC 50.040(j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(12)]

- 62. Operational Flexibility.** The Permittee may make CAA Section 502(b)(10)¹⁴ 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):

- 62.1. The Permittee shall provide EPA and the Department with a written notification no less than seven days in advance of the proposed change.
- 62.2. For each such change, the notification required by Condition 62.1 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.

¹⁴ As defined in 40 C.F.R. 71.2, CAA Section 502(b)(10) changes are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

- 62.3. The permit shield described in 40 C.F.R. 71.6(f) shall not apply to any change made pursuant to Condition 62.

[18 AAC 50.040(j)(4) & 50.326(j)]

[40 C.F.R. 71.6(a)(13)]

- 63. Permit Renewal.** To renew this permit, the Permittee shall submit to the Department¹⁵ an application under 18 AAC 50.326 no sooner than [18 months before the expiration date of this permit] 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 stationary source's right to operate unless a timely and complete renewal application has been submitted consistent with 40 C.F.R. 71.7(b) and 71.5(a)(1)(iii).

[18 AAC 50.040(j)(3), 50.326(c) & (j)(2)]

[40 C.F.R. 71.5(a)(1)(iii) & 71.7(b) & (c)(1)(ii)]

¹⁵ Submit permit applications to the Department's Anchorage office. The current address is: Air Permit Intake Clerk, ADEC, 555 Cordova Street, Anchorage, AK 99501.

Section 9. Compliance Requirements

General Compliance Requirements

- 64.** Compliance with permit terms and conditions is considered to be compliance with those requirements that are
- 64.1. included and specifically identified in the permit; or
 - 64.2. determined in writing in the permit to be inapplicable.
- [18 AAC 50.326(j)(3) & 50.345(a) & (b)]
- 65.** 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
- 65.1. an enforcement action;
 - 65.2. permit termination, revocation and reissuance, or modification in accordance with AS 46.14.280; or
 - 65.3. denial of an operating permit renewal application.
- [18 AAC 50.040(j), 50.326(j) & 50.345(a) & (c)]
- 66.** For applicable requirements with which the stationary source is in compliance, the Permittee shall continue to comply with such requirements.
- [18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(c)(3) & 71.5(c)(8)(iii)(A)]
- 67.** 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) & 50.345(a) & (d)]
- 68.** 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
- 68.1. enter upon the premises where a source subject to the permit is located or where records required by the permit are kept;
 - 68.2. have access to and copy any records required by the permit;
 - 68.3. inspect any stationary source, equipment, practices, or operations regulated by or referenced in the permit; and
 - 68.4. sample or monitor substances or parameters to assure compliance with the permit or other applicable requirements.
- [18 AAC 50.326(j)(3) & 50.345(a) & (h)]

Compliance Schedule

- 69.** For applicable requirements that will become effective during the permit term, the Permittee shall meet such requirements on a timely basis.

[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(c)(3) & 71.5(c)(8)(iii)(B)]

Section 10. 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				Sec Min	0	15	30	45	Comments
City	State	Zip		1					
Phone # (Key Contact)		Stationary Source ID Number		2					
Process Equipment		Operating Mode		3					
Control Equipment		Operating Mode		4					
Describe Emission Point/Location				5					
Height above ground level		Height relative to observer		Cinometer Reading		6			
Distance From Observer		Direction From Observer		7					
Start		End		8					
Describe Emissions & Color				9					
Start		End		10					
Visible Water Vapor Present? If yes, determine approximate distance from the stack exit to where the plume was read				11					
No	Yes			12					
Point in Plume at Which Opacity Was Determined				13					
Describe Plume Background		Background Color		14					
Start		Start		15					
End		End		16					
Sky Conditions:				17					
Start		End		18					
Wind Speed		Wind Direction From		19					
Start		End		20					
Ambient Temperature		Wet Bulb Temp		21					
		RH percent		22					
SOURCE LAYOUT SKETCH: 1 Stack or Point Being Read 2 Wind Direction From				23					
3 Observer Location 4 Sun Location 5 North Arrow 6 Other Stacks				24					
				25					
				26					
				27					
				28					
				29					
				30					
				31					
				32					
				33					
				34					
Additional Information:				35					
				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:				Date	
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 11. SO₂ Material Balance Calculation

If a fuel shipment contains more than 0.75 percent sulfur by weight, calculate the three-hour exhaust concentration of SO₂ using the following equations:

$$\begin{aligned}
 \text{A. } &= 31,200 \times (\text{wt}\% \text{S}_{\text{fuel}}) = 31,200 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \\
 \text{B. } &= 0.148 \times (\text{wt}\% \text{S}_{\text{fuel}}) = 0.148 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \\
 \text{C. } &= 0.396 \times (\text{wt}\% \text{C}_{\text{fuel}}) = 0.396 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \\
 \text{D. } &= 0.933 \times (\text{wt}\% \text{H}_{\text{fuel}}) = 0.933 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \\
 \text{E. } &= \text{B} + \text{C} + \text{D} = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \\
 \text{F. } &= 20.9 - (\text{vol}\%_{\text{dry}} \text{O}_{2, \text{exhaust}}) = 20.9 - \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \\
 \text{G. } &= (\text{vol}\%_{\text{dry}} \text{O}_{2, \text{exhaust}}) \div \text{F} = \underline{\hspace{2cm}} \div \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \\
 \text{H. } &= 1 + \text{G} = 1 + \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \\
 \text{I. } &= \text{E} \times \text{H} = \underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \\
 \text{SO}_2 \text{ concentration} &= \text{A} \div \text{I} = \underline{\hspace{2cm}} \div \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \text{ ppm}
 \end{aligned}$$

The **wt%S_{fuel}**, **wt%C_{fuel}**, and **wt%H_{fuel}** are equal to the weight percents of sulfur, carbon, and hydrogen, respectively, in the fuel. These percentages should total 100%.

The fuel weight percent of sulfur (**wt%S_{fuel}**) is obtained pursuant to Condition 10.1.a(ii) or Condition 10.1.b. 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 analysis under 40 C.F.R. 60, Appendix A-2, Method 3, adopted by reference in 18 AAC 50.040(a), at the same emissions unit 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)]

Section 12. Notification Form¹⁶

Stationary Source Name

Air Quality Permit Number.

Company Name

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
- ☐ 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 ☐ Schedule 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.

¹⁶ Revised as of September 27, 2010.

(d) **Emissions Units Involved:**

Identify the emissions 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.

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

(e) **Type of Incident** (please check only one):

- ☐ Opacity _____ % ☐ Venting _____ gas/scf ☐ Control Equipment Down
☐ Fugitive Emissions ☐ Emission Limit Exceeded ☐ Recordkeeping Failure
☐ Marine Vessel Opacity ☐ Flaring ☐ Other _____

(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 only one box corresponding with the section in the permit):

- | | |
|---|--|
| <input type="checkbox"/> Emissions Unit-Specific | <input type="checkbox"/> Generally Applicable Requirements |
| <input type="checkbox"/> Failure to Monitor/Report | <input type="checkbox"/> Reporting/Monitoring for Diesel Engines |
| <input type="checkbox"/> General Source Test/Monitoring Requirements | <input type="checkbox"/> Insignificant Emissions Unit |
| <input type="checkbox"/> Recordkeeping/Reporting/Compliance Certification | <input type="checkbox"/> Stationary Source Wide |
| <input type="checkbox"/> Standard Conditions Not Included in the Permit | |
| <input type="checkbox"/> Other Section: _____ | |

(Title of section and section number of your permit).

(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 conditions 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.

(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. Department's Air Online Services using the Permittee Portal option:

<http://dec.alaska.gov/applications/air/airtoolsweb>

If submitted online, report must be submitted by an authorized E-Signer for the stationary source.

Or

2. Fax to: 907-451-2187

Or

3. Email to: DEC.AQ.Airreports@alaska.gov

Or

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

Or

5. Phone Notifications: 907-451-5173

Phone notifications require a written follow-up report.

[18 AAC 50.346(b)(3)]

Section 13. Semiannual Operating Report Form

Stationary Source Name _____

Air Quality Permit Number _____

Company Name _____

Operating Report for:

- ☐ 1/1/____ - 6/30/____ Due on **August 1**, or
☐ 7/1/____ - 12/31/____ Due on **February 1** to ADEC.

NSPS Subpart IIII Requirements: Complete the following tables for each emission unit as set out by Condition 21. Attach the following documentation:

- For any engine >3,000 hp or 10 liters/cylinder, documentation showing that each engine meets the emission standards under Conditions 21.6.c or 21.6.d that apply to it;
- For engines equipped with a diesel particulate filter (dpf), records of corrective action taken after the backpressure monitor shows the engine is approaching its backpressure limit under Condition 21.2.a, if applicable.
- Compliance for each engine using one of the methods described in Condition 21.3.

EU ID	Model Year	Emergency Engine?		Non-Resettable Hour Meter Installed?		Backpressure Monitor Installed?		No. of times backpressure limit has been approached
		Yes	No	Yes	No	Yes	No	

EU ID	Compliance Method (Choose one)				
	Purchased a certified engine (Cond. 21.3.a)	Kept Records of performance tests (Cond 21.3.b)	Kept Records of Vendor Data (Cond 21.3.c)	Kept Records of Control Device Data (Cond. 21.3.d)	Initial Performance Test (Cond. 21.3.e)

NESHAP Subpart ZZZZ Requirements: As applicable, use the checkboxes below or complete the following table for each emission unit as set out by Condition 28.1.a28.1 If NESHAP Subpart ZZZZ is applicable, attach reports of each instance in which you did not meet the requirements of Table 8 to NESHAP Subpart ZZZZ that apply to you.

☐ No engines at the stationary source are subject to the requirements of 40 C.F.R. 63 Subpart ZZZZ.

EU ID	Deviations as defined in NESHAP Subpart ZZZZ

☐ No NESHAP Subpart ZZZZ Deviations occurred at the stationary source during the reporting period.

Sulfur Content: As applicable, use the checkbox below or complete the following table for each fuel delivery as set out by Condition 10.

☐ No fuel delivers were received at the stationary source during the reporting period.

Date of Delivery	Fuel Grade	Tested Fuel Sulfur Content or Maximum Fuel Sulfur for that Fuel Grade	SO ₂ emissions in ppm (for fuel with sulfur content greater than 0.75%)

Blending with Used Oil: Complete the following table when used oil is burned as set out by Conditions 12 and 13. Attach results of each used oil analysis.

☐ No used oil was burned at the stationary source during the reporting period.

Date Blended	Used Oil Quantity	Fuel Oil Quantity	Equipment used for the Burn	Calculated Sulfur Content of Blend

Fuel Consumption: Complete the following table to track fuel (e.g., fuel oil and used oil) consumption for the stationary source per Condition 15.1.

12 Month Period	Fuel Consumption, gallons per 12 month period

Emission Complaints: Complete the following table to track complaints received at the stationary source per Condition 39.1.f.

Number of Complaints Received	Number of Times Corrective Action Necessary	Number of Times Action Taken within 24 hours	Status on Corrective Actions Found Necessary that were not Taken within 24 hours

Excess Emission or Permit Deviations: Complete the following table to track excess emissions or permit deviations within the reporting period per Conditions 55 and 55.2 or attach copies of all ADEC Notification Forms pursuant to Section 12.

☐ No excess emissions or permit deviations occurred at the stationary source during the reporting period.

Not Yet Reported per Condition 55		Previously Reported per Condition 55	
Date of Deviations or Excess Emissions		Dates of Reported Excess Emission or Permit Deviations	
Equipment Involved			
Permit Conditions Affected			
Description of Excess Emissions or Permit Deviations			
Corrective Actions Taken and Dates of such Actions			
Date of anticipated submittal of the notification form pursuant to Condition 55			

Visible Emissions: Complete the following table to track visible emissions per Condition 4.1 Attach copies of all Method 9 readings.

Emission Unit Identification	Visible Emission Plan (list either Method 9 or smoke/no-smoke)	For Method 9 Readings		For Smoke/No-Smoke	
		Dates of Reading	Highest 6 Minute Averages	Dates of Readings	Smoke or No-Smoke

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: _____

Responsible Official Signature: _____ Date: _____

Section 14. Annual Compliance Certification Form

Stationary Source Name _____

Air Quality Permit Number _____

Company Name _____

Annual Compliance Certification for:

☐ 1/1/____ - 12/31/____ Due on **March 31 to ADEC and EPA.**

Condition	Compliance Status	Continuous/ Intermittent	Method Used to Determine Compliance
1-4, VE	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Smoke/No-smoke monitoring plan <input type="checkbox"/> Method 9 visual observation <input type="checkbox"/> Other (attach description & documentation)
5-8, PM	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Smoke/No-smoke monitoring plan <input type="checkbox"/> Method 5 source test <input type="checkbox"/> Other (attach description & documentation)
9-10, SO ₂	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Fuel grade/sulfur content records <input type="checkbox"/> Other (attach description & documentation)
12, used oil	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Method 5 source test & fuel sulfur content records <input type="checkbox"/> Other (attach description & documentation)
13, used oil	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Fuel grade/sulfur content records <input type="checkbox"/> Other (attach description & documentation)
1414, insignificant units	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Records kept & reported <input type="checkbox"/> Other (attach description & documentation)
15, NO _x	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Fuel Records kept <input type="checkbox"/> Other (attach description & documentation)
16-28, NSPS/ MACT	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Records kept & reported <input type="checkbox"/> Other (attach description & documentation)
33, Fees	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Fees paid upon billing <input type="checkbox"/> Fees not paid <input type="checkbox"/> Other (attach description & documentation)
34, Fees	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Fee Form Submitted ____/____/____ <input type="checkbox"/> Form Not Submitted <input type="checkbox"/> Other (attach description & documentation)
35, control practices	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Records kept <input type="checkbox"/> Other (attach description & documentation)
36, dilution	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> units do not allow for dilution of exhaust <input type="checkbox"/> units allow for dilution, but dilution not used during compliance tests <input type="checkbox"/> Other (attach description & documentation)
37, fugitive dust	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Records kept <input type="checkbox"/> Other (attach description & documentation)

Condition	Compliance Status	Continuous/ Intermittent	Method Used to Determine Compliance
38, stack injection	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Records kept <input type="checkbox"/> Other (attach description & documentation)
39, air pollution	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Records kept & reported <input type="checkbox"/> Other (attach description & documentation)
40, asbestos	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Records kept and Reported <input type="checkbox"/> No asbestos demolition/renovation done <input type="checkbox"/> Other (attach description & documentation)
41, open burning	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> No burning conducted <input type="checkbox"/> Other (attach description & documentation)
42, requested tests	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Test not requested <input type="checkbox"/> Test requested and conducted <input type="checkbox"/> Other (attach description & documentation)
43-45, source tests	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Test not conducted <input type="checkbox"/> Test conducted and records kept <input type="checkbox"/> Other (attach description & documentation)
46-50, source tests	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Test not conducted <input type="checkbox"/> Test conducted and reported <input type="checkbox"/> Other (attach description & documentation)
51, records kept	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Records kept <input type="checkbox"/> Records not kept <input type="checkbox"/> Other (attach description & documentation)
52, certification	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> reports are certified <input type="checkbox"/> reports are not certified <input type="checkbox"/> Other (attach description & documentation)
53, submittals	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> reports are submitted as directed <input type="checkbox"/> reports are not submitted as directed <input type="checkbox"/> Other (attach description & documentation)
54, information requests	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> No information requests <input type="checkbox"/> Information provided timely <input type="checkbox"/> Other (attach description & documentation)
55, excess emissions	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> No excess emissions or deviations generated <input type="checkbox"/> Excess emissions and deviation reports filed
56, operating reports	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> January through June Report submitted timely <input type="checkbox"/> July through December Report submitted timely
57, annual compliance	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Compliance Certification submitted to EPA and ADEC timely <input type="checkbox"/> Compliance Certification not submitted to EPA and ADEC timely
59 NSPS and NESHAP Reports	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Compliance Certification submitted to EPA and ADEC timely <input type="checkbox"/> Compliance Certification not submitted to EPA and ADEC timely
63, permit renewal	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Renewal submitted <input type="checkbox"/> Other (attach description & documentation)

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: _____

Responsible Official Signature: _____ Date: _____

Section 15. Emission Calculations for Emission Fees

Stationary Source Name _____

Air Quality Permit Number _____

Company Name _____

Emission Fees Assessment Estimated from:

☐ 1/1/____ - 12/31/____ Due on **March 31** to ADEC.

Step 1: Use the following table to identify your emission factor, based on your yearly fuel consumption.

Fuel Consumption Range, gal/yr	Emission Factor, tons/gal
0 to 33,061	Zero
33,062 to 153,473	0.000302
153,474 to 288,712	0.000368
288,713 to 416,571	0.000402
416,572 to 470,322	0.000426
Over 470,322	0.000448

Step 2: Use the following table to calculate your emission fees.

Actual Fuel Consumption, gal/yr		Emission Factor, tons/gal		Emissions Estimate, tons/yr		Emission Fee Rate, \$/ton		Emission Fee, \$/yr
	x		=		x	\$33.37	=	

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: _____

Responsible Official Signature: _____ Date: _____

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

March 17, 2022

**STATEMENT OF BASIS
for the terms and conditions for
GPA**

**Prepared by Grace Petersen
ADEC AQ/APP Juneau**

**Reviewed by Aaron Simpson
ADEC AQ/APP Juneau**

INTRODUCTION

This document sets forth the legal and factual basis for the terms and conditions of the General Permit A (GP-A) for diesel electric generating stations with diesel engines and auxiliary fuel burning equipment.

STATIONARY SOURCE IDENTIFICATION

The GPA regulates emissions from diesel-electric generating stations that have requested a fuel limit to avoid classification as Prevention of Significant Deterioration (PSD) major under 18 AAC 50.306. The stationary sources are described under SIC Codes 4911 and 4931.

Diesel-engine powered electric generators provide electric power for many communities in rural Alaska. These stationary sources have primary backup generator sets to accommodate peak power demands, and to provide uninterrupted service during scheduled and unscheduled maintenance. Emission sources include diesel engines and auxiliary fuel burning equipment.

QUALIFYING CRITERIA

1. Described by SIC codes 4911 or 4931 and NAICS code 221112 and produces electricity this defines the group of stationary source.
2. The stationary source is classified under 18 AAC 50.326 - restricts the permit to those stationary sources that have the potential to emit at least 100 TPY.
3. Will not consume more than 825,000 gallons of fuel oil in any consecutive twelve months at the entire stationary source - ensures that emissions of NO_x remain less than 250 TPY, and that the stationary source can comply with the permit.
4. Not subject to an existing stationary source-specific requirement, other than a fuel use limit - permit does not provide for compliance with these types of limits; ensures that stationary sources subject to BACT or LAER limits cannot use the permit.
5. Not subject to a fuel-use limit that ensures compliance with ambient air quality standards - permit does not ensure compliance with ambient air quality standards; ensures that stationary sources that need a limit to comply with the AAQS cannot use the permit.
6. The stationary source is either not accessible by the Federal Aid Highway System (FAHS), or meets all of the requirements under 40 C.F.R. 63.6603(b)(2); the displacement of each engine is less than 30 liters/cylinder; and all engines, other than fire pump engines subject to NSPS Subpart IIII, comply with NSPS/NESHAP requirements for non-emergency engines. GPA does not include all the applicable NSPS/NESHAP requirements for other engine categories. Therefore, stationary sources containing other engines may not use the permit.
7. Was not built in a sulfur dioxide special protection area after January 18, 1997 - the permit does not protect ambient air quality from a new stationary source in an SO₂ special-protection area; this criterion prevents new stationary sources in an SO₂ special-protection area from using the permit.
8. As GPA does not contain the applicable requirements for the following list of devices, the power plant must not contain any:

- boiler subject to 40 C.F.R. 60, Subparts D, Da, Db, or Dc;
 - heaters or boilers rated at 1.7 MMBtu/hour heat input or more that burn kerosene, No. 1 fuel oil, or No.2 fuel oil;
 - heaters or boilers rated at 0.3 MMBtu/hour heat input or more that burn used oil;
 - gas turbine;
 - fuel storage tank subject to 40 C.F.R. 60, Subparts K, Ka, or Kb;
 - unit subject to any other federal emission standard in 40 C.F.R. 60, 61, 62, or 63 other than a reciprocating internal combustion engine, woodstove for space heating or an asbestos demolition /renovation project;
 - incinerator; or
 - unit subject to any standard in 18 AAC 50.055(a) – (f) other than the general standards for fuel burning equipment in (a)(1), (b)(1), and (c).
9. The stationary source obtained all required air quality permits when the stationary source was built or modified - if a stationary source had not obtained required preconstruction/pre-modification permits, the stationary source would be in violation of these requirements. The operating permit would have to include a plan to bring the stationary source into compliance. Because this general permit does not include such a plan, stationary sources that require the compliance plan may not use this general permit.

EMISSIONS

A summary of the potential to emit (PTE)¹⁷ and assessable PTE as indicated in the application as calculated by the Department is shown in the table below.

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

Emissions	NO _x	CO	PM ₁₀	SO ₂	VOC	HAPs	CO ₂ e ¹	Total ²
PTE	249.5	53.8	17.5	28.6	19.8	0.2	9,090	369.4
Assessable PTE	249.5	53.8	17.5	28.6	19.8	0	N/A	369.2

Notes:

1. CO₂e emissions are defined as the sum of the mass emissions of each individual GHG adjusted for its global warming potential.
2. Total PTE and total assessable PTE shown in the table do not include CO₂e and HAPs.

The assessable PTE listed under Condition 33.1 is the sum of the PTE of each individual air pollutant, other than greenhouse gases (GHGs), for which the stationary source has PTE of 10 TPY or greater. The emissions listed in Table A are estimates that are for informational use only. The Department used emission factors from EPA's AP-42, Section 3.3, Table 3.3-1 for diesel engines smaller than 600 hp. This is the more conservative of the two available sets of emission

¹⁷ *Potential to Emit* or *PTE* means the maximum capacity of a stationary source to emit a pollutant under its physical or operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source, as defined in AS 46.14.990(22).

factors for diesel-fired reciprocating internal combustion engines. The listing of the emissions does not create an enforceable limit for the stationary source.

BASIS FOR REQUIRING AN OPERATING PERMIT

Stationary sources operating under the GPA require an operating permit because they have the potential to emit 100 TPY or more of a regulated air pollutant as set out by 18 AAC 50.326(a) and 40 C.F.R. 71.3(a)(5).

These stationary sources avoid classification as PSD major as defined in 18 AAC 50.306 because potential to emit is limited to less than 250 TPY of a regulated air pollutant in an area classified as attainment or unclassifiable.

Alaska regulations require operating permit applications to include identification of “regulated emission units.” As it applies to this stationary source, the state regulations require a description of:

- ✓ Each emission unit regulated by a standard in 18 AAC 50.055, Industrial Processes and Fuel Burning Equipment, under 18 AAC 50.326(a);
- ✓ Each emission unit regulated by a standard incorporated by reference in 18 AAC 50.040(a)-(d); and
- ✓ Emission units subject to requirements in an existing Department permit 18 AAC 50.326(a).

STATEMENT OF BASIS FOR THE PERMIT CONDITIONS

The state and federal regulations for each permit condition are cited in the permit.

Conditions 1, 2 & Section 10, Visible Emissions Standard and MR&R

Legal Basis: These conditions require compliance with the visible emissions standards in 18 AAC 50.055(a).

- 18 AAC 50.055(a) applies to the operation of fuel-burning equipment and industrial processes. Diesel engines are fuel-burning equipment.

U.S. EPA approved the addition of these standards to the SIP, as noted in 40 C.F.R. 52.70. The Department included permit conditions for MR&R as required by 40 C.F.R. 71.6(a)(3) and 71.6(c)(1).

Factual Basis: Condition 1 prohibits the Permittee from causing or allowing visible emissions in excess of the applicable standard in 18 AAC 50.055(a)(1). MR&R requirements are listed in Conditions 2 through 4 of the permit. These conditions have been adopted into regulation as Standard Permit Condition (SPC) IX. The Department has determined that the standard conditions adequately meet the requirements of 40 C.F.R. 71.6(a)(3). No additional emissions unit or stationary source operational or compliance factors indicate that unit-specific or stationary-source-specific conditions would better meet the requirements. Therefore, the Department concludes that the standard conditions, as modified, meet the requirements of 40 C.F.R. 71.6(a)(3).

Except for gas fuel-burning equipment, the Permittee must establish by visual observations, which may be supplemented by other means, such as a defined Stationary Source Operation

and Maintenance Program, that the stationary source is in continuous compliance with the state's emission standards for visible emissions.

These conditions detail a stepwise monitoring program to determine compliance with the state's visible emissions standards for liquid fuel-burning emissions units. Equipment types covered by these conditions are internal combustion engines, turbines, heaters, boilers, and flares. Initial monitoring frequency schedules are established along with subsequent reductions or increases in frequency depending on the results of the self-monitoring program.

Reasonable action thresholds are established in these conditions that require the Permittee to progressively address potential visible emission problems from emissions units either through maintenance programs and/or more rigorous tests that will quantify whether a specific emission standard has been exceeded.

Liquid Fuel- Burning Equipment:

Monitoring – The emissions units must be observed by either the Method 9 or the Smoke/No Smoke Plans as detailed in Condition 2. Corrective actions such as maintenance procedures or more frequent observations may be required depending on the results of the observations.

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

Reporting - The Permittee is required to report emissions in excess of the state visible emissions standard and deviations from permit conditions. The Permittee is also required to include copies of the results of all visible emission observations in the operating report.

Conditions 5 through 8, Particulate Matter Standard and MR&R

Legal Basis: These conditions require compliance with the applicable requirement in 18 AAC 50.055(b).

- 18 AAC 50.055(b)(1) applies to the operation of fuel-burning equipment and industrial processes. Diesel engines are fuel-burning equipment.

This particulate matter standard applies because it is contained in the federally-approved SIP. The Department included permit conditions for MR&R as required by 40 C.F.R. 71.6(a)(3) and 71.6(c)(1).

Factual Basis: Condition 5 prohibits emissions in excess of the applicable state particulate matter standard. MR&R requirements are listed in Condition 6 of the permit. These conditions have been adopted into regulation as SPC IX. The Department has modified these conditions as follows:

- Added gap-fill recordkeeping requirements in Condition 7.

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

Except for gas fuel-burning equipment, the Permittee must establish by visual observations, which may be supplemented by other means, such as a defined Stationary Source Operation and Maintenance Program, that the stationary source is in continuous compliance with the state's emission standards for particulate matter.

Liquid Fuel-Burning Equipment:

Monitoring – The Permittee is required to conduct particulate matter source testing if threshold values for opacity are exceeded.

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

Reporting - The Permittee is required to report incidents when emissions in excess of the opacity threshold are observed and results of particulate matter source tests. The Permittee is also required to include copies of the results of all visible emission observations taken during particulate matter source testing in the operating report.

Condition 9 through 10, Sulfur Compound Emissions Standard and MR&R

Legal Basis: This condition requires compliance with the sulfur compound emissions standard under 18 AAC 50.055(c).

- 18 AAC 50.055(c) applies to the operation of fuel-burning equipment and industrial processes. Diesel engines are fuel-burning equipment.

The sulfur compound standard applies because it is contained in the federally-approved SIP. The Department included permit conditions for MR&R as required by 40 C.F.R. 71.6(a)(3) and 71.6(c)(1).

Factual Basis: The Permittee may not cause or allow the affected equipment to violate the applicable sulfur compound standard. Sulfur dioxide comes from the sulfur in the fuel (e.g. coal, natural gas, fuel oils).

Liquid Fuels:

For oil fired fuel burning equipment, the MR&R conditions are SPCs XI and XII adopted into regulation pursuant to AS 46.14.010(e). These conditions have been modified in this permit as follows. The Department corrected Condition 10.2 to replace the text “...method listed in 18 AAC 50.035 or an alternative method approved by the Department” with “...method listed in 18 AAC 50.035(b)-(c) and 40 C.F.R. 60.17 incorporated by reference in 18 AAC 50.040(a)(1)”. The text “...or an alternative method approved by the Department” was discarded during the Revised Action Plan submitted to EPA on July 15, 2007, as a result of the EPA Audit of the September 2006 Title V Program Review. This text is not to be used in subsequent permits since it allows a Permittee to bypass the public process for changing monitoring requirements by submitting off-record requests to change monitoring methods.

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

Condition 12, Used Oil in Diesel Engines

Legal Basis: If the Permittee burns used oil in engines, then these requirements apply.

Factual Basis: These conditions set out the requirements for burning used oil in engines.

The Permittee is prohibited from burning used oil blends in the engines until the Department approves of a source test demonstrating that burning the used oil will comply with the particulate matter emission standard of Condition 5 and the visible emission standard of Condition 1. Because of various metal pollutants, used oil may have higher particulate emissions and sulfur emissions than virgin fuel oil. Staff experience indicates that burning used oil by itself may violate 18 AAC 50.055(b)(1) and (c).

The Permittee shall remember that used oil is fuel that is limited and monitored as set out by Condition 12. In addition, although this condition should ensure compliance with the applicable emission standards of 18 AAC 50, this permit does NOT ensure compliance with other applicable state or federal laws concerning management, use, or disposal of used oil

The permit lists blending, testing, recording, and reporting requirements. The Department added a requirement to blend at a ratio of no more than in the particulate matter source test, unless Department approved to mix at a greater ratio. However, the Permittee must still test for sulfur and ensure that the ratio of used oil with comply with the sulfur limit.

Condition 13, Plant-Wide Applicability Limitation (PAL)

Legal Basis: If the Permittee burns used oil in boilers and heaters, then these requirements may apply.

Factual Basis: This condition specifies requirements for burning used oil at the stationary source in only boilers and heaters.

The Permittee shall remember that used oil is fuel that is limited and monitored as set out by Condition 13. In addition, although this condition should ensure compliance with the applicable emission standards of 18 AAC 50, this permit does NOT ensure compliance with other applicable state or federal laws concerning management, use, or disposal of used oil.

The permit lists blending, testing, recording, and reporting requirements. The Department added a requirement to blend at a ratio of no more than 1 part used oil with 6 parts virgin oil to comply with the particulate matter standard, unless Department approved to mix at a greater ratio. However, the Permittee must still test for sulfur and ensure that the ratio of used oil with comply with the sulfur limit.

Condition 14, Insignificant Emission Units

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

Factual Basis: The conditions re-iterate the emission standards and require compliance for insignificant emission units. The Permittee may not cause or allow their equipment to violate these standards. Insignificant emission units are not listed in the permit unless specific monitoring, recordkeeping and reporting are necessary to ensure compliance.

The Department finds that the insignificant units at this stationary source do not require specific monitoring, recordkeeping and reporting to ensure compliance under these conditions.

Condition 14.4.a requires certification that the units did not exceed state emission standards during the previous year and did not emit any prohibited air pollution. As long as they do not exceed the thresholds, they are considered insignificant units and no monitoring is required in accordance with Department Policy and Procedure No. AWQ 04.02.103, Topic # 3, 10/8/04 for standby emission units.

Condition 15, NO_x PSD Avoidance

Legal Basis: These conditions are owner requested limits to avoid a PSD review for NO_x.

Factual basis: Condition 15 limits emission of NO_x to less than 250 TPY to avoid classification as PSD major. The limit is applicable to all emission units at the stationary source, including auxiliary equipment and insignificant emission units. If the stationary source were permitted to emit 250 TPY or more, it would be subject to PSD review which entails the imposition of best available control technology.

The Permittee shall monitor compliance with the TPY limit by limiting fuel consumption to 825,000 gallons in any 12 consecutive month period. Total fuel consumption must be tracked to ensure compliance with this limit. To simplify the monitoring process, the stationary source does not track diesel engines fuel consumption separate from boilers or heater fuel consumption. Instead, all fuel is assumed to be consumed in the diesel engines, a conservative approach.

The Department calculated the amount of fuel that would result in the production of just under 250 tons of NO_x based on AP-42 emission factors for a diesel engines. The Department used Table 3.3-1 for diesel engines up to 600 hp, because these factors were greater (worst-case) than using Table 3.4-1 for diesel engines greater than 600 hp. See calculations as follows:

Diesel fuel density assumed at 7.1 lbs/gallon
Diesel fuel heating value assumed at 19,300 Btu/lb
 $19300 \text{ Btu/lb} \times 7.1 \text{ lb/gal} = 137,030 \text{ Btu/gal}$
 $1000000 \text{ Btu} / 137030 \text{ Btu/gal} = 7.29 \text{ gal/MMBtu}$
AP-42 Emission Factor for NO_x = 4.41 lb/MMBtu = 4.41 lb NO_x / 7.29 gal
 $4.41 \text{ lb NO}_x / 7.29 \text{ gal} = 250 \text{ ton} \times 2000 \text{ lb/ton} / X$
 $X = 826,530 \text{ gal/year}$
the fuel limit was set at 825,000 gallons per year.

The emission factors used to set this limit are inexact and may vary by more than 10%. Therefore, Condition 15 has the requirement to source test diesel engines rated greater than 400 hp to determine equipment specific emission factors when the stationary source annual fuel consumption exceeds 750,000 gallons per 12 months.

A fuel limit analysis is required if testing shows an emission factor greater than 4.41 lb/MMBtu to evaluate whether or not the 825,000 gallon/yr fuel limit still limits the stationary source NO_x emissions to less than 250 tons per 12 consecutive month period.

Since engines greater than 600 hp have a lower NO_x emission factor than engines 600 hp or less, the fuel limit may continue to limit NO_x emissions to 250 tons per 12 consecutive month period.

Conditions 16 through 17, NSPS Subpart A Requirements

Legal Basis: The EPA approved Alaska's Part 70 Program granted on November 30, 2001 (40 CFR 70 Appendix A). The Department is the permitting authority for the Part 70 program. As the permitting authority, the Department requires compliance with all permit conditions. Although the EPA has not delegated to the Department the authority to administer the New Source Performance Standard (NSPS) program, NSPS requirements are included in the definition for "applicable requirement" under 40 C.F.R. 71.2, which has been adopted by the Department under 18 AAC 50.040(j)(1).

The NSPS provisions under Subparts A and IIII apply to the stationary source. Therefore, the Department requires compliance with those standards in a Part 70 permit issued under the approved program. However, the Department is unable to change the actual wording of the relevant standard to substitute "the Department" for "the Administrator" in those standards. Since the Department expects access to any permit-related information provided by the Permittee to the EPA, the Department will act on its responsibility as the permitting authority to determine compliance with the standard. To reflect this relationship and for the purposes of this permit, the Department has defined "the Administrator" to mean the "EPA and the Department" for conditions implementing the federal emission standards under Section 4.

Most affected facilities (with the exception of some storage tanks) subject to an NSPS are subject to Subpart A. At this stationary source, the affected facility is subject to NSPS Subpart IIII and therefore subject to Subpart A.

Condition 16.1 - The Permittee has already complied with the notification requirements in 40 C.F.R. 60.7 (a)(1) - (4) for the affected facility. However, the Permittee is still subject to these requirements in the event of a new NSPS affected facility¹⁸.

Condition 16.2 - The requirements to notify the EPA and the Department of any proposed replacement of components of an existing facility (40 C.F.R. 60.15) apply in the event that the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility.

Condition 17 - Concealment of emissions prohibitions in 40 C.F.R. 60.12 are applicable to the affected facility.

Recordkeeping requirements in 40 C.F.R. 60(f) are applicable to all NSPS affected facilities. (Satisfied by Condition 51.)

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

¹⁸ *Affected facility* means, with reference to a stationary source, any apparatus to which a standard applies, as defined in 40 C.F.R. 60.2.

Conditions 18 through 22, NSPS Subpart IIII Requirements

Legal Basis: NSPS Subpart IIII applies to stationary compression ignition internal combustion engines (CI ICE) that commence construction, modification, or reconstruction after July 11, 2005 where the stationary CI ICE are manufactured after April 1, 2006 for non-fire pump engines and after July 1, 2006 for certified fire pump engines. Diesel engines are subject to Subpart IIII under 40 C.F.R. 60.4200 because < >.

Factual Basis: These conditions incorporate the Subpart IIII emissions standards applicable to the affected facility. The Permittee may not cause or allow the affected facility to violate these standards. These conditions also provide MR&R specifically called out for within the Subpart. The Permittee is required to operate and maintain the stationary CI ICE according to the manufacturer's written instructions or procedures developed by the Permittee that are approved by the engine manufacturer. The Permittee is required to monitor and record the monthly engine hours of operation and the rolling 12-month hours of operation on each affected CI ICE. Each affected pre-2007 model year stationary CI ICE must comply with the emission standards in Table 2 to Subpart IIII. Upon initial startup the Permittee shall provide a copy of the Manufacturer's Engine Certification in the next operating report required by Condition 56. The requirement in Condition 22 is added to fill gap in the reporting requirement under this Subpart.

Conditions 23 through 28, NESHAPs Subpart ZZZZ Requirements

Legal Basis: The Department has incorporated by reference the NESHAP requirements for specific industrial activities, as listed in 18 AAC 50.040(c). NESHAP Subpart ZZZZ applies to owners and operators of any existing, new, or reconstructed stationary reciprocating internal combustion engines (RICE), whose construction commenced before June 12, 2006, located at major and area sources of HAP emissions, excluding stationary RICE units being tested at a stationary RICE test cell/stand. The affected facility is an area source that owns and operates RICE units subject to NESHAP Subpart ZZZZ.

Factual Basis: NESHAP Subpart ZZZZ applies to any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE units being tested at a stationary RICE test cell/stand. As indicated in Table A, the stationary source is not a major source of HAP emissions and is therefore subject to the requirements for area sources of HAPs. The affected facility is subject to NESHAP Subpart ZZZZ based on its construction, manufacturer, or reconstruction date. Per 40 C.F.R.63.6590(c), affected new or reconstructed stationary reciprocating internal combustion engines (RICE) located at an area source must meet the requirements of Subpart ZZZZ by meeting the requirements of NSPS Subpart IIII and no further requirements apply for such engines under 40 C.F.R. 63.

For affected existing RICE located at an area source, the Permittee is required to perform inspections and maintenance at intervals specified by the subpart and operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The area source is located in an area of Alaska that is either not accessible by the Federal Aid Highway System (FAHS), or meets all of the requirements under 40 C.F.R. 63.6603(b)(2). Therefore, under 40 C.F.R. 63.6603(b), existing RICE greater than 300 hp do not have to comply with the numerical CO limits specified in Table

2d. Also, existing RICE are exempt from the fuel requirements of 40 C.F.R. 63.6604 under 40 C.F.R. 63.6604(d).

Additionally, existing RICE are exempt from the notification requirements of 40 C.F.R. 63.6645(a) under 40 C.F.R. 63.6645(a)(5) since none of the emission units are subject to numerical emission standards.

Conditions 29 through 31, Standard Terms and Conditions

Legal Basis: These are standard conditions required for all operating permits under 18 AAC 50.345(a) and (e)-(g). As stated in 18 AAC 50.326(j)(3), the standard permit conditions of 18 AAC 50.345 replace the provisions of 40 C.F.R. 71.6(a)(5) – (7).

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

Condition 32, Administration Fees

Legal Basis: This condition requires compliance with the applicable fee requirements in 18 AAC 50.400-403. As stated in 18 AAC 50.326(j)(1), the provisions of 18 AAC 50.400 through 50.430 are applicable and 40 C.F.R. 71.9 is not applicable.

Factual Basis: Paying administration fees is required as part of obtaining and holding a permit with the Department or as a fee for a Department action. The regulations in 18 AAC 50.400-403 specify the amount, payment period, and the frequency of fees applicable to a permit action.

Conditions 33 and 34, Emission Fees

Legal Basis: These conditions require compliance with the applicable fee requirements in 18 AAC 50.410-420. The regulations specify the time period for the assessable emissions and the methods the Permittee may use to calculate assessable emissions. As stated in 18 AAC 50.326(j)(1), the provisions of 18 AAC 50.400 through 50.430 are applicable and 40 C.F.R. 71.9 is not applicable.

Factual Basis: The Department used the language in SPC I, adopted by reference under 18 AAC 50.346(b), for the permit. SPC I requires the Permittee to pay fees in accordance with the Department's billing regulations. The billing regulations set the due dates for payment of fees based on the billing date. The assessable emissions are the lesser of the stationary source's potential or projected emissions of each air pollutant at 10 tons per year or greater (AS 46.14.250(h)(1)).

SPC I also allows the Permittee to recalculate the stationary source's assessable emissions based on previous actual annual emissions. According to AS 46.14.250(h)(1), assessable emissions are based on each air pollutant. Therefore, fees shall be paid on any pollutant emitted whether or not the permit contains any limitation for that pollutant.

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

SPC I language has been modified as follows:

- In Condition 34.1, electronic submittal options were added and the Department's address for hardcopy submittal was updated; and
- In Condition 33, Footnote 10 was added to clarify a payment exemption for a stationary source that has not commenced construction or operation on or before March 31st of the current reporting year, provided that the Permittee submits a certified letter indicating that the assessable emissions for the source is zero for the previous fiscal year.

Condition 35, Good Air Pollution Control Practice

Legal Basis: This condition requires compliance with the requirements in 18 AAC 50.346(b)(5) and applies to all emissions units, **except** those subject to an emission standard in 40 C.F.R. 60, 61, or 63, those subject to continuous emission or parametric monitoring requirements, and insignificant emissions units.

Factual Basis: The condition requires the Permittee to comply with good air pollution control practices for all units.

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

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

The Permittee is required to keep maintenance records to show that proper maintenance procedures were followed, and to make the records available to the Department. The Department may use these records as a trigger for requesting source testing if the records show that an adequate maintenance schedule is not maintained.

Condition 36, Dilution

Legal Basis: This condition reiterates 18 AAC 50.045(a), which prohibits the Permittee from using dilution as an emission control strategy. 18 AAC 50.045 is included in the SIP approved by EPA and, therefore, is an applicable requirement, per 40 C.F.R. 71.2.

Factual Basis: The condition prohibits the Permittee from diluting emissions as a means of compliance with any standard in 18 AAC 50.

Condition 37, Reasonable Precautions to Prevent Fugitive Dust

Legal Basis: This condition reiterates 18 AAC 50.045(d), which requires a person to use reasonable precautions when handling, storing or transporting bulk materials or

engaging in an industrial activity. 18 AAC 50.045 is included in the SIP approved by EPA and, therefore, is an applicable requirement, per 40 C.F.R. 71.2.

This requirement applies because the Permittee has an emission unit or activity listed under Table 7 of 18 AAC 50.346(c). The listed emission units and activities in Table 7 are: coal-fired boilers; coal handling facilities; construction of gravel pads or roads that are part of a permitted stationary source or other construction that has the potential to generate fugitive dust that reaches ambient air; commercial/industrial/municipal solid waste, air curtain, and medical waste incinerators; sewage sludge incinerators not using wet methods to handle that ash; mines; urea manufacturing; soil remediation units; or dirt roads under the control of the operator with frequent vehicle traffic.

Factual Basis: The Department used the language in SPC X for the permit. The condition requires the Permittee to take reasonable action to prevent particulate matter from being emitted into the ambient air in accordance with 18 AAC 50.045(d).

Condition 38, Stack Injection

Legal Basis: This condition reiterates 18 AAC 50.055(g), which prohibits the Permittee from releasing materials other than process emissions, products of combustion, or materials introduced to control pollutant emissions from a stack (i.e. disposing of material by injecting it into a stack). 18 AAC 50.055 is included in the SIP approved by EPA and, therefore, is an applicable requirement, per 40 C.F.R. 71.2.

Stack injection requirements apply to stacks of emissions units at a stationary source constructed or modified after November 1, 1982.

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

Condition 39, Air Pollution Prohibited

Legal Basis: This condition requires compliance with 18 AAC 50.110. 18 AAC 50.110 is included in the SIP approved by EPA and, therefore, is an applicable requirement, per 40 C.F.R. 71.2. The condition prohibits the Permittee from causing any emission which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property. The Department also included permit conditions for MR&R as required by 40 C.F.R. 71.6(a)(3) and 71.6(c)(1).

Factual Basis: The Department used the language in SPC II for the permit. This condition spells out how to monitor, record, and report prohibited air pollution. While the other permit conditions and emissions limitations should ensure compliance with this condition, unforeseen emission impacts can cause violations of this standard. These violations would go undetected except for complaints from affected persons. Therefore, to monitor compliance, the Permittee must monitor and respond to complaints.

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

Condition 40, Asbestos NESHAP

Legal Basis: The condition requires the Permittee to comply with asbestos demolition or renovation requirements in 40 C.F.R. 61, Subpart M. This condition ensures compliance with the applicable requirement in 18 AAC 50.040(b)(1) and (2)(F). The asbestos demolition and renovation requirements apply if the Permittee engages in asbestos demolition or renovation.

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

Condition 41, Open Burning

Legal Basis: The condition requires the Permittee to comply with the regulatory requirements in 18 AAC 50.065 when conducting open burning at the stationary source. 18 AAC 50.065 is included in the SIP approved by EPA and, therefore, is an applicable requirement, per 40 C.F.R. 71.2. The state open burning regulation in 18 AAC 50.065 applies to the Permittee if the Permittee conducts open burning at the stationary source.

Factual Basis: The Permittee may conduct open burning by following the provisions of 18 AAC 50.065 and by following the Department guidelines posted at the website <http://dec.alaska.gov/air/air-permit/open-burn-info>. Condition 41.1 requires the Permittee to keep records to demonstrate compliance with the standards for conducting open burning.

More extensive monitoring and recordkeeping is not warranted because the Permittee does not conduct open burning as a routine part of their business. Also, most of the requirements are prohibitions, which are not easily monitored. Compliance is demonstrated through annual certification required under Condition 57.

Condition 42, Requested Source Tests

Legal Basis: The Permittee is required to conduct source tests as requested by the Department. This requirement is under 18 AAC 50.220(a) and 50.345(k), which are included in the SIP approved by EPA.

Factual Basis: This condition applies because this is a standard condition to be included in all operating permits, as specified in 18 AAC 50.345(a). Compliance is demonstrated through the submission of the required source test plan and report.

Conditions 43 through 45, Operating Conditions, Reference Test Methods, Excess Air Requirements

Legal Basis: Conditions 43 and 45 require compliance with the applicable requirements in 18 AAC 50.220(b) and (c)(3), which are included in the SIP approved by EPA. Condition 44 specifies source test methods, as required by 40 C.F.R. 71.6(a)(3)(i) and 71.6(c)(1). These requirements apply because the Permittee is required by the permit to conduct source tests or a source test may be requested by the Department. The Permittee is required to conduct source tests in the manner set out in Conditions 43 through 45.

Factual Basis: These conditions supplement the specific monitoring requirements stated elsewhere in this permit.

Condition 46, Test Exemption

Legal Basis: This condition incorporates the source test exemption in 18 AAC 50.345(a) regarding visible emissions observations. 18 AAC 50.345(a) is included in the SIP approved by EPA.

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

Conditions 47 through 50, Test Deadline Extension, Test Plans, Notifications and Reports

Legal Basis: Conditions 48 through 50 require compliance with the applicable requirements in 18 AAC 50.345(m) through (o), which are included in the SIP approved by EPA. Condition 47 contains the requirement in 18 AAC 50.345(l). The requirements in 18 AAC 50.345(l) through (o) constitute standard conditions that must be included in each operating permit, as specified in 18 AAC 345(a). These requirements apply because the Permittee is required to conduct source tests as set out by this permit or as requested by the Department.

Factual Basis: These standard conditions supplement specific monitoring requirements stated elsewhere in this permit.

Condition 51, Recordkeeping Requirements

Legal Basis: This condition requires the Permittee to keep records in accordance with 40 C.F.R. 71.6(a)(3)(ii), which the Department adopted by reference under 18 AAC 50.040(j)(4). It also incorporates the general NSPS recordkeeping requirement under 40 C. F. R. 60.7(f), which the Department adopted by reference under 18 AAC 50.040(a)(1).

Factual Basis: The condition restates the regulatory requirements for recordkeeping, and supplements the recordkeeping defined for specific conditions in the permit. The records being kept provide evidence of compliance with this requirement.

40 C.F.R. 60.7(f) requires records retention for at least two years of the measurements required to be maintained by this Part while 40 C.F.R. 71.6(a)(3)(ii) requires at least five years of records retention. The five-year records retention requirement in Condition 51 satisfies both 40 C.F.R. 60.7(f) and 40 C.F.R. 71.6(a)(3)(ii).

Condition 52, Certification

Legal Basis: All operating permits must contain a requirement to certify any permit application, report, affirmation, or compliance certification, per 18 AAC 50.345(j) and with the certification requirement in 18 AAC 50.205. Both requirements are part of the SIP approved by EPA.

Factual Basis: The requirement in 18 AAC 50.345(j) is a standard condition that must be included in each operating permit, as specified in 18 AAC 50.345(a). This condition requires the Permittee to certify any permit application, report, affirmation, or compliance certification submitted to the Department. To ease the certification burden on the Permittee, the condition allows the excess emission reports to be certified with the operating report,

even though it must still be submitted more frequently than the stationary source operating report. This condition supplements the reporting requirements of this permit.

Condition 53, Submittals

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

Factual Basis: This condition lists the Department's appropriate address for reports and written notices. The Permittee is required to submit reports, compliance certifications, and other submittals required by this permit, either electronically or by hard copy. This condition supplements the standard reporting and notification requirements of this permit.

Condition 54, Information Requests

Legal Basis: All operating permits must include a condition that requires the Permittee to furnish certain information upon request, per 18 AAC 50.345(i). The requirement is part of the SIP approved by EPA.

Factual Basis: The requirement in 18 AAC 50.345(i) is a standard condition that must be included in each operating permit, as specified in 18 AAC 345(a). This condition requires the Permittee to submit information requested by the Department.

Condition 55 and Section 12, Excess Emission and Permit Deviation Reports

Legal Basis: This condition requires the Permittee to comply with the requirements in 18 AAC 50.235(a)(2) and 18 AAC 50.240(c). Also, the Permittee is required to notify the Department when emissions or operations deviate from the requirements of the permit.

Factual Basis: This condition satisfies two state regulations related to excess emissions: the technology-based emission standard regulation and the excess emission regulation. Although there are some differences between the regulations, the condition satisfies the requirements of each regulation.

The Department used the language in SPC III for the permit condition. The Department used the notification form in SPC IV (see Section 12) for the notification requirements.

Condition 56, Operating Reports

Legal Basis: This condition requires compliance with the applicable requirement in 18 AAC 50.346(b)(6). The condition specifies reporting requirements as required by 40 C.F.R. 71.6(a)(3)(iii)(A) and 71.6(c)(1).

Factual Basis: The Department used the language in Standard Permit Condition VII for the permit condition. The condition restates the requirements for reports listed in regulation. The condition supplements the specific reporting requirements elsewhere in the permit.

The condition specifies that for the transition periods between an expiring permit and a renewal permit, the Permittee shall ensure that there is date-to-date continuity between the expired permit and the renewal permit such that the Permittee reports against the permit terms and conditions of the permit that was in effect during those partial date periods of the transition. No format is specified. The Permittee may provide one report accounting for each permit term or condition and the effective permit at that time. Alternatively, the Permittee

may choose to provide two reports: one accounting for reporting elements of permit terms and conditions from the end date of the previous operating report until the date of expiration of the old permit, and a second operating report accounting for reporting elements of terms and conditions in effect from the effective date of the renewal permit until the end of the reporting period.

Condition 57, Annual Compliance Certification

Legal Basis: This condition requires compliance with the requirements in 40 C.F.R. 71.6(c)(5), which the Department adopted by reference under 18 AAC 50.040(j).

Factual Basis: This condition specifies the periodic compliance certification requirements, and specifies a due date for the annual compliance certification.

Condition 57.2 provides clarification of transition periods between an expiring permit and a renewal permit to ensure that the Permittee certifies compliance with the permit terms and conditions of the permit that was in effect during those partial date periods involved in the transition. No format is specified: the Permittee may provide one report certifying compliance with each permit term or condition for each of the effective permits during the certification period, or may choose to provide two reports – one certifying compliance with permit terms and conditions from January 1 until the date of expiration of the old permit, and a second report certifying compliance with terms and conditions in effect from the effective date of the renewal permit until December 31.

The Permittee is required to submit to the Department an annual compliance certification report. The Permittee may submit the required report electronically at its discretion.

Condition 58, Emission Inventory Reporting

Legal Basis: This condition requires the Permittee to submit emissions data to the state so the state is able to satisfy the federal requirement to submit emission inventory data from point sources as required under 40 C.F.R. 51.321. The emission inventory requirement applies to sources defined as point sources in 40 C.F.R. 51.50. The state must report all data elements in Tables 2a and 2b of Appendix A to Subpart A of 40 C.F.R. 51 to EPA.

Factual Basis: The Department used the language in SPC XV, as adopted by reference under 18 AAC 50.346(b)(8), for the permit condition. To increase governmental efficiency and reduce costs associated with information requests that occur on a routine basis, it has been determined that a standard permit condition best fulfills the need to gather the information needed to satisfy the requirements of Subpart A of 40 C.F.R. 51.

The emission inventory data is due to EPA 12 months after the end of the reporting year (40 C.F.R. 51.30(a)(1) and (b)(1)). Permittees have four months to compile and submit the data to the Department, but the April 30th due date provides scant time for the Department to transfer the data into EPA's electronic reporting system. To expedite the process, the Department, therefore, encourages Permittees to submit the emission inventory through the Department's electronic emission inventory submission system found in the Point Source Emission Inventory under Air Online Services (<http://dec.alaska.gov/applications/air/airtoolsweb>). This website provides the instructions and emission inventory report forms required by this condition. A detailed instruction on development and submission of the Emission Inventory is available at the following address

<http://dec.alaska.gov/Applications/Air/airtoolsweb/PointSourceEmissionInventory> by clicking Emission Inventory Instructions button.

Actual measurement with continuous emissions monitoring systems (CEMS) is the preferred method of calculating emissions from a source. If CEMS data is not available, other means for determining actual emissions may be utilized, such as an enforceable test method described in 18 AAC 50.220, material balance calculations, emission factors from EPA's AP-42, or other methods and calculations approved by the Department, including appropriate vendor-provided emissions factors when sufficient documentation is provided. If necessary, detailed sample calculations representative of the processes may be submitted with the emission inventory, thus, providing verifiable reported emissions and eliminating the need for additional information requests.

To ensure that the Department's electronic system reports complete information to the National Emissions Inventory, Title V stationary sources classified as Type A in Table 1 of Appendix A to Subpart A of 40 C.F.R. 51 are required to submit with each annual report all the data elements required for the Type B source triennial reports (see also Tables 2a and 2b of Appendix A to Subpart A of 40 C.F.R. Part 51). All Type A sources are also classified as Type B sources. However, the Department has streamlined the reporting requirements so Type A sources only need to submit a single type of report every year instead of both an annual report and a separate triennial report every third year.

Based upon the potential emission estimates shown in Table A, the stationary source is a Type B source, so the inventory is due only once every three years.

The Department used the language in SPC XV for the permit condition, but corrected the emissions threshold amount for Pb in Condition 58.2.a(i), from 5 TPY to 0.5 TPY actual emissions. The Department has also added Conditions 58.3 and 58.4 to clarify the requirements for report submittal using the Department's Air Online Services (AOS) system, or using email or mailing out hard copy if the AOS system is not available.

Condition 59, NSPS and NESHAP Reports

Legal Basis: The Permittee is required to provide the Federal Administrator and Department a copy of each emissions unit report for units subject to NSPS or NESHAP federal regulations under 18 AAC 50.326(j)(4). 40 C.F.R. 70 Appendix A documents that EPA fully approved the Alaska operating permit program effective November 30, 2001.

Factual Basis: The condition supplements the specific reporting requirements in 40 C.F.R. 60, 40 C.F.R. 61, and 40 C.F.R. 63. The reports themselves provide monitoring for compliance with this condition.

Conditions 60 through 62, Permit Changes and Revisions Requirements

Legal Basis: 40 C.F.R. 71.6(a)(8), (12), and (13), incorporated by reference under 18 AAC 50.040(j), require that these provisions be included in operating permits.

Factual Basis: 40 C.F.R. 71.6(a)(12) and (13), as reflected in Conditions 61 and 62, respectively, specify changes that may be made without a permit revision, and 40 C.F.R. 71.6(a)(8) (Condition 60) states permit revisions are not required for some emissions trading and similar programs.

The Permittee did not request trading of emission increases and decreases as described in 40 C.F.R. 71.6(a)(13)(iii); therefore, language addressing these provisions has not been included in this permit as part of Condition 60.

Condition 63, Permit Renewal

Legal Basis: The Permittee must submit a timely and complete operating permit renewal application if the Permittee intends to continue source operations in accordance with the operating permit program. The obligations for a timely and complete operating permit application are in 40 C.F.R. 71.5(a) – (c), adopted by reference in 18 AAC 50.040(j)(3), and 18 AAC 50.326(c).

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

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

Conditions 64 through 69, General Compliance Requirements and Schedule

Legal Basis: These conditions require compliance with the applicable requirements in 18 AAC 50.345(b) through (d) and (h) and 40 C.F.R. 71.6(c)(3). As stated in 18 AAC 50.345(a), the requirements in 18 AAC 50.345(b) through (d) and (h) are standard conditions that must be included in all operating permits issued by the Department.

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