DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR QUALITY OPERATING PERMIT

Permit No. AQ0245TVP05 Issue Date: Public Comment - March 10, 2022
Expiration Date: [Five Years]

The Alaska Department of Environmental Conservation, under the authority of AS 46.14 and 18 AAC 50, issues an operating permit to the Permittee, **Municipality of Anchorage - Anchorage Water & Wastewater Utility**, for the operation of the **John M. Asplund Water Pollution Control Facility**.

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

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

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.

Upon effective date of this permit, Operating Permit AQ0245TVP04 expires.

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

James R. Plosay, Manager
Air Permits Program

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Abbreviations and Acronyms

AAC.....Alaska Administrative Code
ADEC .....Alaska Department of Environmental Conservation
AOS .....Air Online Services
AS .....Alaska Statutes
ASTM .....American Society for Testing and Materials
AWWU.....Anchorage Water & Wastewater Utility
BACT .....best available control technology
Be.....beryllium
Cd .....cadmium
CDX.....Central Data Exchange
CEDRI .....Compliance and Emissions Data Reporting Interface
CEMS .....continuous emissions monitoring system
CFR .....Code of Federal Regulations
CAA or The Act .Clean Air Act
CO .....carbon monoxide
CO_2e .....CO_2-equivalent
COMS.....continuous opacity monitoring system
Department .....Alaska Department of Environmental Conservation
dscf .....dry standard cubic foot
EPA .....US Environmental Protection Agency
EU ID .....emissions unit identification number
GHG .....Greenhouse Gas
gr/dscf.....grain per dry standard cubic foot (1 pound = 7000 grains)
gph .....gallons per hour
HAP .....hazardous air pollutants [as defined in AS 46.14.990]
hp .....horsepower
kPa .....kiloPascals
LAER.....lowest achievable emission rate
MACT .....maximum achievable control technology [as defined in 40 CFR 63]
MMBtu/hr.....million British thermal units per hour
MMscf .....million standard cubic feet
MOA .....Municipality of Anchorage
MR&R.....monitoring, recordkeeping, and reporting
NAICS.....North American Industrial Classification System
NESHAP .....National Emission Standards for Hazardous Air Pollutants [as contained in 40 CFR 61 and 63]
NH_3.....ammonia
NO_x.....nitrogen oxides
N_2O.....Nitrous Oxide
NSPS .....New Source Performance Standards [as contained in 40 CFR 60]
O & M .....operation and maintenance
O_2 .....oxygen
PAL .....plantwide applicability limitation
Pb .....lead
PM.....particulate matter
PM_{10} .....particulate matter less than or equal to a nominal 10 microns in diameter
$PM_{2.5}$.....particulate matter less than or equal to a nominal 2.5 microns in diameter
ppm .....parts per million
ppmv, ppmvd .....parts per million by volume on a dry basis
psia .....pounds per square inch (absolute)
PSD .....prevention of significant deterioration
PTE .....potential to emit
SIC. .....Standard Industrial Classification
SIP.....State Implementation Plan
SPC .....Standard Permit Condition
SO_2 .....sulfur dioxide
tph .....tons per hour
tpy .....tons per year
VOC .....volatile organic compound [as defined in 40 CFR 51.100(s)]
VOL .....volatile organic liquid [as defined in 40 CFR 60.111b, Subpart Kb]
vol% .....volume percent
wt% .....weight percent
$wt\%S_{fuel}$ .....weight percent of sulfur in fuel

Section 1. Stationary Source Information

Identification

Permittee:		**Anchorage Water & Wastewater Utility** 3000 Arctic Boulevard Anchorage, AK 99503
Stationary Source Name:		**John M. Asplund Water Pollution Control Facility**
Location:		61.19656 North; 150.02193 West
Physical Address:		2300 Hutson Drive Anchorage, AK, 99502
Owner/Operator:		**Anchorage Water & Wastewater Utility** 3000 Arctic Boulevard Anchorage, AK 99503
Permittee's Responsible Official:		Mark A. Corsentino, P. E. / General Manager & Timothy H. Forbus / Director, Treatment Division 3000 Arctic Boulevard Anchorage, AK, 99503
Designated Agent:		Timothy H. Forbus / Director, Treatment Division 3000 Arctic Boulevard Anchorage, AK, 99503 (907) 550-5904
Stationary Source and Building Contact:		Jeff Axmann / Superintendent 3000 Arctic Boulevard Anchorage, AK, 99503 (907) 751-2200 jeff.axmann@awwu.biz
Fee Contact:		Timothy H. Forbus / Director, Treatment Division 3000 Arctic Boulevard Anchorage, AK, 99503 (907) 550-5904 timothy.forbus@awwu.biz
Permit Contact:		Timothy H. Forbus / Director, Treatment Division 3000 Arctic Boulevard Anchorage, AK, 99503 (907) 550-5904 timothy.forbus@awwu.biz
Process Description:	SIC Code	4952 - Sewerage Systems
	NAICS Code:	221320 - Sewage Treatment Facilities

[18 AAC 50.040(j)(3) & 50.326(a)]
[40 CFR 71.5(c)(1) & (2)]

Section 2. Emissions Unit Inventory and Description

Emissions units (EUs) listed in Table A have specific monitoring, recordkeeping, or reporting conditions in this permit. Emissions unit descriptions and ratings are given for identification purposes only, unless noted elsewhere in the permit.

Table A - Emissions Unit Inventory

EU ID	EU Name	EU Description	Rating/Size	Construction Date
1	Domestic Wastewater Solids Incinerator	Zimpro Incinerator with multiple throat venturi scrubber and multiple impingement tray wet scrubber	2,280 pounds of dry sludge/hr	May 1985
2	Generator Engine 1	Detroit Diesel Genset, with exhaust stack diameter 10", Model # K1238A36, Serial # 309572-1-10609/WA-569267-0509	750 kW (1,005 hp)	February 2009
4	Boiler	Natural Gas-fired	5.3 MMBtu/hr	October, 2016
5	Boiler	Natural Gas-fired	5.3 MMBtu/hr	October, 2016

Notes:
Domestic wastewater solids include sewage sludge and sewage scum.
EU ID 1 is a multiple hearth furnace equipped with low NOx burners.
EU ID 1 operating capacity is based on a 9/11/2007 source test that demonstrated compliance at that capacity.

[18 AAC 50.326(a)]
[40 CFR 71.5(c)(3)]

Section 3. 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 EU IDs 2, 4, and 5 listed in Table A to reduce visibility through the exhaust effluent by more than 20 percent averaged over any six consecutive minutes.

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

1.1. For EU ID 2, as long as actual emissions from the emissions unit are less than the significant emissions thresholds listed in 18 AAC 50.326(e)[1] during any consecutive 12-month period, monitoring shall consist of an annual compliance certification under Condition 85 with the visible emissions standard based on reasonable inquiry. The Permittee shall report in the operating report under Condition 84 if EU ID 2 reaches any of the significant emissions thresholds listed in 18 AAC 50.326(e) and monitor, record, and report in accordance with Conditions 3 through 5 for the remainder of the permit term.

1.2. For EU IDs 4 and 5, burn only gas as fuel. In each operating report under Condition 84 indicate whether each of these emissions units burned only gas during the period covered by the report. Report under Condition 83 if any fuel other than gas is burned in any of these emissions units.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 CFR 71.6(a)(3)]

2. Incinerator Visible Emissions. The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, through the exhaust effluent of the incinerator, EU ID 1, to reduce visibility by more than 20 percent averaged over any six consecutive minutes.

[18 AAC 50.040(j)(4) & 50.050(a)]
[40 CFR 71.6(a)(1)]

2.1. **Monitoring.** Monitor the exhaust of EU ID 1 using a continuous opacity monitoring system (COMS) as follows:

[40 CFR 71.6(a)(3)(i)]
[40 CFR 60.11 & 60.154(b)(6)]

a. The COMS must meet the performance specifications (PS) in 40 CFR 60, Appendix B, PS 1, Sections 1 through 8, adopted by reference in 18 AAC 50.040(a)(3).

b. The COMS shall be installed such that representative measurements of visible emissions from EU ID 1 are obtained. Additional procedures for location of COMS contained in 40 CFR 60, Appendix B, PS 1 shall be used.

[40 CFR 60.13(f), Subpart A]

[1] 400 hours per consecutive 12-month period is equivalent to the worst-case significant emissions threshold in 18 AAC 50.326(e) for EU ID 2.

2.2. Operate and maintain the COMS in accordance with the manufacturer's written requirements and recommendations, and in accordance with a Quality Assurance (QA) Plan for the COMS that incorporates the requirements of 40 CFR 60, Appendix B, PS-1. Record activities undertaken pursuant to this paragraph in a maintenance log or on forms contained in the QA Plan.

a. Except during COMS breakdowns, repairs, calibration checks, and zero and span adjustments, complete a minimum of one cycle of sampling and analyzing for each successive 10-second period of source operation. From this data, calculate and record the average opacity for successive one-minute periods.

b. You must check the zero and upscale (span) calibration drifts at least once daily, in accordance with the QA Plan and 40 CFR 60.13(d), adopted by reference in 18 AAC 50.040(a)(1). Adjust zero and span whenever the zero or span drift exceeds four percent opacity in a 24-hour period. If the COMS has auto calibration and zero features, monitor the results of the auto calibrations and record instances when the zero or span drift exceeds four percent in a 24-hour period.

[40 CFR 60.13(d)(1), Subpart A]

c. At least every two years from the date of the last PS test, conduct a PS Verification test of the COMS and report the results in accordance with 40 CFR 60, Appendix B, PS-1, Section 8.1, and Section 6 of this permit.

d. Ensure that the supervisory control and data acquisition system alarms when opacity exceeds 20 percent, at a minimum. When the opacity alarm sounds, promptly initiate corrective actions. Corrective measures include but are not limited to:

(i) Adjustment of incinerator and control device operational parameters;

(ii) Adjustment of the loading rate and, or the composition of the waste streams charged into the incinerator; and

(iii) Adjustment of the airflow rate to the incinerator.

2.3. Operate the incinerator in accordance with the standard operating procedures manual on-file with the Department. Any changes in operation, which would potentially increase emissions above that determined by the most recent source test, must be documented and available for Department review upon request.

2.4. If the COMS on EU ID 1 is out of service or has failed the performance audit under 40 CFR 60, Appendix B, PS-1, Section 8.1, then the Permittee shall, upon discovery and until the COMS is in good working condition, monitor as follows:

a. Conduct visible emissions observation daily using 40 CFR 60, Method 9 of Appendix A–4 to demonstrate compliance with Condition 2. Except as provided in Condition 2.4.b, the minimum total time of observations shall be 3 hours (30 six-minute averages).

b. If during the initial 60 minutes of observation all six-minute averages are less than 10 percent and all individual 15-second observations are less than or equal to 20 percent, the observation period may be reduced from 3 hours to 60 minutes.

[18 AAC 50.040(j)(4) & 50.326(j)(3) & (4)]
[40 CFR 71.6(a)(3) & (c)(6)]

2.5. **Recordkeeping and Reporting**. Comply with the following:

a. Each operating day, record and report the information in Conditions 2.5.a(i) and 2.5.a(ii).

(i) the time periods when the opacity exceeds 20 percent averaged over any six consecutive minutes; and

(ii) the time periods when the COMS is offline during incinerator operation and the reason the COMS is offline.

b. Report in accordance with Condition 83 whenever:

(i) opacity exceeds 20% averaged over any six consecutive minutes;

(ii) the COMS is offline for more than 72 hours. In the report, provide:

(A) the anticipated time to repair or replace the COMS;

(B) the cause for the malfunction; and

(C) time periods the incinerator operated while the COMS was offline.

[18 AAC 50.040(a)(3), (j)(4), & 50.326(j)(4)]
[40 CFR 71.6(a)(3) & (c)(6)]

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

Liquid Fuel-Burning Equipment (EU ID 2)

3. Visible Emissions Monitoring. When required by Condition 1.1, or in the event of replacement[2] during the permit term, the Permittee shall observe the exhaust of EU ID 2 for visible emissions using either the Method 9 Plan under Condition 3.3 or the Smoke/No-Smoke Plan under Condition 3.4.

3.1. The Permittee may change the visible emissions monitoring plan for an emissions unit at any time unless prohibited from doing so by Condition 3.5.

3.2. The Permittee may elect to continue the visible emissions monitoring schedule specified in Conditions 3.3.b through 3.3.e or Conditions 3.4.b through 3.5 that remains in effect from a previous permit.

[2] *"Replacement,"* as defined in 40 CFR 51.166(b)(32).

3.3. **Method 9 Plan.** For all observations in this plan, observe emissions unit exhaust, following 40 CFR 60, Appendix A-4, Method 9 for 18 minutes to obtain 72 consecutive 15-second opacity observations.[3]

a. First Method 9 Observation. Except as provided in Condition 3.2 or Condition 3.5.c(ii), observe the exhausts of EU ID 2 according to the following criteria:

(i) Observe emissions unit exhaust within 14 calendar days after changing from the Smoke/No-Smoke Plan of Condition 3.4.

(ii) If EU ID 2 is replaced, observe exhaust within 60 days of the newly installed emissions unit becoming fully operational.[4] Except as provided in Condition 3.3.e, after the First Method 9 observation comply with Condition 1.1.

(iii) For EU ID 2, observe the exhaust of the emissions unit within 30 days after the end of the calendar month during which monitoring was triggered under Condition 1.1; or for an emissions unit with intermittent operations, within the first 30 days during the unit's next scheduled operation.

b. Monthly Method 9 Observations. After the first Method 9 observation conducted under Condition 3.3.a, perform 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 3.3.b, unless a six-consecutive-minute average opacity is greater than 15 percent and one or more individual observations are greater than 20 percent, perform semiannual observations

(i) no later than seven months, but not earlier than five months, after the preceding observation; or

(ii) for an emissions unit with intermittent operations, during the next scheduled operation immediately following seven months after the preceding observation.

d. Annual Method 9 Observations. After at least two semiannual observations under Condition 3.3.c, unless a six-consecutive-minute average opacity is greater than 15 percent and one or more individual observations are greater than 20 percent, perform annual observations

(i) no later than 12 months, but not earlier than 10 months, after the preceding observation; or

[3] Visible emissions observations are not required during emergency operations.
[4] "*Fully operational*" means upon completion of all functionality checks and commissioning after unit installation. "*Installation*" is complete when the unit is ready for functionality checks to begin.

(ii) for an emissions unit with intermittent operations, during the next scheduled operation immediately following 14 months after the preceding observation.

e. Increased Method 9 Frequency. If a six-consecutive-minute average opacity is observed during the most recent set of observations to be greater than 15 percent and one or more individual 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 3.3.b, and continue monitoring in accordance with the Method 9 Plan.

3.4. **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. Observe the emissions unit exhaust during each calendar day that the emissions unit operates for a minimum of 30 days.

b. Reduced Monitoring Frequency. If the emissions unit operates without visible emissions for 30 consecutive operating days as required in Condition 3.4.a, 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 3.5.

3.5. **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 3.4, then the Permittee shall either begin the Method 9 Plan of Condition 3.3 or

a. initiate actions to eliminate visible emissions from the emissions unit exhaust 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 3.5.a,

(i) conduct smoke/no smoke observations in accordance with Condition 3.4

(A) at least once per day for the next seven operating days and, if applicable, until the initial 30-day observation period of Condition 3.4.a is completed; and

(B) continue as described in Condition 3.4.b; or

(ii) if the actions taken under Condition 3.5.a do not eliminate the visible emissions, or if subsequent visible emissions are observed under the schedule of Condition 3.5.c(i)(A), then observe the emissions unit 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 3.4.a.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 CFR 71.6(a)(3)(i)]

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

4.1. For all Method 9 observations,

a. the observer shall record the following:

(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 11;

(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 rate (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 11; and

(v) the minimum number of observations required by the permit; each momentary observation recorded shall be deemed to represent the average opacity of emissions for a 15-second period.

b. To determine the six-consecutive-minute average opacity,

(i) divide the observations recorded on the record sheet into sets of 24 consecutive observations;

(ii) sets need not be consecutive in time and in no case shall two sets overlap;

(iii) for each set of 24 observations, calculate the average by summing the opacity of the 24 observations and dividing this sum by 24; and

(iv) record the average opacity on the sheet.

c. Calculate and record the highest six-consecutive and 18-consecutive-minute average opacities observed.

4.2. If using the Smoke/No Smoke Plan of Condition 3.4, 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 EU ID of the emissions unit observed;

c. whether visible emissions are present or absent in the emissions unit 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).

4.3. The records required by Conditions 4.1 and 4.2 may be kept in electronic format.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 CFR 71.6(a)(3)(ii)]

5. Visible Emissions Reporting. The Permittee shall report as follows:

5.1. In the first operating report required in Condition 84 under this permit term, the Permittee shall state the intention to either continue the visible emissions monitoring schedule in effect from the previous permit or reset the visible emissions monitoring schedule.

5.2. Include in each operating report required under Condition 84 for the period covered by the report:

a. which visible emissions plan of Condition 3 was used for each emissions unit; if more than one plan was used, give the time periods covered by each plan;

b. for all Method 9 Plan observations:

(i) copies of the observation results (i.e., opacity observations) for each emissions unit, 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-consecutive- and 18-consecutive-minute average opacities observed; and

(C) dates when one or more observed six-consecutive-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 3 and 4 that was not done.

5.3. Report under Condition 83:

a. the results of Method 9 observations that exceed 20 percent average opacity for any six-consecutive-minute period; and

b. if any monitoring under Condition 3 was not performed when required, report within three days of the date that the monitoring was required.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 CFR 71.6(a)(3)(iii)]

Particulate Matter (PM) Emissions Standard

6. Industrial Process and Fuel-Burning Equipment PM Emissions. The Permittee shall not cause or allow PM emitted from EU IDs 2, 4, and 5 listed in Table A to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.

[18 AAC 50.040(j)(4), 50.055(b)(1), 50.326(j)(3), & 50.346(c)]
[40 CFR 71.6(a)(1)]

6.1. For EU ID 2, as long as actual emissions from the emissions unit are less than the significant emissions thresholds listed in 18 AAC 50.326(e)[5] during any consecutive 12-month period, monitoring shall consist of an annual compliance certification under Condition 85 for the PM emissions standard based on reasonable inquiry. The Permittee shall report in the operating report under Condition 84 if EU ID 2 reaches any of the significant emissions thresholds and monitor, record, and report in accordance with Conditions 8 through 10 for the remainder of the permit term.

6.2. For EU IDs 4 and 5, the Permittee shall comply with Condition 1.2.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 CFR 71.6(a)(3)]

7. Incinerator Particulate Matter Emissions. PM emissions from EU ID 1 may not exceed 0.65 grams per kilogram (g/kg) of dry sludge input.

[18 AAC 50.040(j), 50.050(b) & 50.326(j)]
[40 CFR 71.6(a)(1)]

[5] 400 hours per consecutive 12-month period is equivalent to the worst-case significant emissions threshold in 18 AAC 50.326(e) for EU ID 2.

7.1. Demonstrate compliance with the PM standard of Condition 7 by conducting source tests in accordance with Condition 44.1 and Section 6.

7.2. During PM source tests, continuously monitor and record opacity using the COMS.

7.3. Monitor and report in accordance with Conditions 14 and 27.3 through 27.5.

7.4. The Permittee shall keep records of the results of PM testing required by Condition 7.1 and parameters monitored under Condition 7.2.

[18 AAC 50.040(j) & 50.326(j)(4)]
[40 CFR 71.6(a)(3) & (c)(6)]

Particulate Matter MR&R

Liquid Fuel-Burning Equipment (EU ID 2)

8. PM Monitoring. The Permittee shall conduct source tests on EU ID 2 (when required by Condition 6.1), to determine the concentration of PM in the exhaust of each emissions unit as follows:

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 CFR 71.6(a)(3)(i)]

8.1. If the result of any Method 9 observation conducted under Condition 3.3 for EU ID 2 is greater than the criteria of Condition 8.2.a or Condition 8.2.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 CFR 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 8.2; or

b. except as exempted in Condition 8.4, conduct a PM source test according to requirements set out in Section 6.

8.2. Take corrective action or conduct a PM source test, in accordance with Condition 8.1, if any Method 9 observation under Condition 3.3 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.

8.3. During each one-hour PM source test run under Condition 8.1.b, observe the emissions unit exhaust for 60 minutes in accordance with Method 9 and calculate the highest 18-consecutive-minute average opacity measured during each one-hour test run. Submit a copy of these observations with the source test report.

8.4. The PM source test requirements in Condition 8.1.b are waived for an emissions unit if

a. a source test on that unit has shown compliance with the PM 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 3.3) conducted thereafter within a six-month period show visible emissions less than the threshold in Condition 8.2.

9. PM Recordkeeping. The Permittee shall comply with the following:

9.1. Keep records of the results of any source test and visible emissions observations conducted under Condition 8.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 CFR 71.6(a)(3)(ii)]

10. PM Reporting. The Permittee shall report as follows:

10.1. Notify the Department of any Method 9 observation results that are greater than the threshold of either Condition 8.2.a or Condition 8.2.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 8.2.

10.2. In each operating report under Condition 84, include:

a. a summary of the results of any PM source test and visible emissions observations conducted under Condition 8; and

b. copies of any visible emissions observation results greater than the thresholds of Condition 8.2, if they were not already submitted.

10.3. Report in accordance with Condition 83:

a. anytime the results of a PM source test exceed the PM emissions standard in Condition 6; or

b. if the requirements under Condition 8.1 were triggered and the Permittee did not comply on time with either Condition 8.1.a or 8.1.b. Report the deviation within 24 hours of the date compliance with Condition 8.1 was required.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 CFR 71.6(a)(3)(iii)]

Sulfur Compound Emissions Standard

11. Sulfur Compound Emissions. The Permittee shall not cause or allow sulfur compound emissions, expressed as SO_2, from EU IDs 2, 4, and 5 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 CFR 71.6(a)(1)]

Sulfur Compound MR&R

Fuel Oil[6]

12. The Permittee shall comply as follows:

12.1. **Monitoring**. For EU ID 2, the Permittee shall comply with the sulfur compound emissions standard in Condition 11 by complying with Condition 30.1.a.

12.2. **Reporting**. In the operating report required by Condition 84, include a list of the fuel grades burned in EU ID 2 for each month covered by the report.

Natural Gas[7]

12.3. **Monitoring**. The Permittee shall burn only natural gas in EU IDs 4 and 5.

12.4. **Reporting**.

a. In the operating report required by Condition 84, certify that the gas supplied to the facility is pipeline quality natural gas.

b. Report in accordance with Condition 83 if the fuel burned in EU IDs 4 and 5 causes sulfur compound emissions to exceed the standard in Condition 11.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 CFR 71.6(a)(3) & (c)(6)]

Preconstruction Permit [8] Requirements

13. For EU ID 1, the Permittee shall conduct source tests and report the results in accordance with Table B. Alternative test methods may be proposed in accordance with Condition 71.7. Conduct the source test at the maximum anticipated operating rate.

[Conditions C.4, C.6, C.9, & Exhibit C, Permit No. 9521-AA001, 4/21/1995]
[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)]

13.1. Conduct source tests and submit the results in accordance with the performance testing frequency required under Condition 44.1 for 40 CFR 62 Subpart LLL and according to the requirements in Section 6.

Table B - Emission Testing Requirements

Source	Parameter and Unit of Measure	Test Method
Incinerator Exhaust	PM – lb/ton dry sludge input and grams/kg dry sludge input)	See reference test method for PM in Table D to 40 CFR Part 62, Subpart LLL.

[6] *Oil* means crude oil or petroleum or a liquid fuel derived from crude oil or petroleum, including distillate and residual oil, as defined in 40 CFR 60.41b.
[7] *Natural gas* is defined in 40 CFR 60.41.
[8] *Preconstruction Permit* refers to federal PSD permits, state-issued permits-to-operate issued on or before January 17, 1997 (these permits cover both construction and operations), construction permits issued on or after January 18, 1997, and minor permits issued on or after October 1, 2004.

Source	Parameter and Unit of Measure	Test Method
Incinerator Exhaust	Oxygen, O_2	Reference Method 3A as specified in 40 CFR Part 60, Appendix A.
Incinerator Exhaust	Stack Velocity and Volumetric Flow Rate	Reference Methods 1 through 4 as specified in 40 CFR Part 60, Appendix A.
Incinerator Exhaust	One Hour Opacity Reading	Reference Method 9 as specified in 40 CFR Part 60, Appendix A or continuous opacity monitoring system (COMS) as required by Condition 7.2.
Dewatered Sludge and Scum Charging	Sludge Charging Rate (tons/hr) Scum Charging Rate (gal/hr and lb/gal)	Meters accurate to ± 5%
Dewatered Sludge and Scum	Sulfur Content, (wt%, dry and wet)	ASTM D129 or ASTM D4239
Dewatered Sludge	Percent Moisture (% water or % solids)	Standard Method 209 G (Standard Methods 15th Edition) or Standard Method 2540 G (Similar methodology – Standard Methods 20th Edition) or methods used for moisture content sampling conducted according to Condition 42.4 or 46 for Subpart LLL.
Ash	Sulfur Content (% by weight)	ASTM D129 or ASTM D4239
Solids Reduction	Estimated percentage of dry sludge that is discharged as ash	Best Engineering Judgment
Fuel Consumption	1,000 cubic feet per hour	Meters accurate to ± 5%
Scrubber Pressure Drop	Maximum and minimum gas side pressure drop across each scrubber (inches of water)	Meters accurate to ± 5%
Hearth Temperature	Maximum and minimum temperature in all hearths	Meters accurate to ± 5%

[Exhibit C, Permit No. 9521-AA001, 4/21/1995]

14. In each operating report under Condition 84, include for EU ID 1:

14.1. Number of operating hours per month;

14.2. Quantity of sludge incinerated (tons/month);

14.3. Quantity of scum incinerated (gallons/month);

14.4. Quantity of fuel burned (MMscf); and

14.5. Maximum and minimum one hour-average pressure drop for each month, for the venturi and impingement scrubber.

[Items 1 through 3, Exhibit D, Permit No.9521-AA001, 4/21/1995]

Insignificant Emissions Units

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

15.1. **Visible Emissions Standard**: The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from an industrial process or 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)]

15.2. **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)]

15.3. **Sulfur Standard**: The Permittee shall not cause or allow sulfur compound emissions, expressed as SO_2, from an industrial process or fuel-burning equipment, to exceed 500 ppm averaged over three hours.

[18 AAC 50.055(c)]

15.4. **General MR&R for Insignificant Emissions Units:** The Permittee shall comply with the following:

a. Submit the compliance certifications of Condition 85 based on reasonable inquiry;

b. Comply with the requirements of Condition 66; and

c. Report in the operating report required by Condition 84 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 have become greater than any of those thresholds.

d. No other monitoring, recordkeeping or reporting is required for insignificant emissions units to demonstrate compliance with the emissions standards under Conditions 15.1, 15.2, and 15.3.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(b)(4)]
[40 CFR 71.6(a)(1) & (a)(3)]

Section 4. Federal Requirements

40 CFR Part 60 New Source Performance Standards (NSPS)

NSPS Subpart A – General Provisions

16. NSPS Subpart A Notification. Unless exempted by a specific subpart, for any affected facility[9] or existing facility[10] regulated under NSPS requirements in 40 CFR 60, the Permittee shall furnish the Administrator[11] written notification or, if acceptable to both the EPA and the Permittee, electronic notification, as follows:

[18 AAC 50.035 & 50.040(a)(1)]
[40 CFR 60.7(a) & 60.15(d), Subpart A]

16.1. A notification of the date construction (or reconstruction as defined under 40 CFR 60.15) of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form;

[40 CFR 60.7(a)(1), Subpart A]

16.2. A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date;

[40 CFR 60.7(a)(3), Subpart A]

16.3. A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include: [12]

a. information describing the precise nature of the change,

b. present and proposed emission control systems,

c. productive capacity of the facility before and after the change, and

d. the expected completion date of the change.

[40 CFR 60.7(a)(4), Subpart A]

16.4. A notification of the date upon which demonstration of the continuous monitoring system (CMS) performance commences in accordance with 40 CFR 60.13(c). The notification shall be postmarked not less than 30 days prior to such date;

[40 CFR 60.7(a)(5), Subpart A]

[9] *Affected facility* means, with reference to a stationary source, any apparatus to which a standard applies, as defined in 40 CFR 60.2.
[10] *Existing facility* means, with reference to a stationary source, any apparatus of the type for which a standard is promulgated in 40 CFR 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 CFR 60.2.
[11] The Department defines "Administrator" in 18 AAC 50.990(2).
[12] The Department and EPA may request additional relevant information subsequent to this notice.

16.5. A notification of the anticipated date for conducting the opacity observations required by 40 CFR 60.11(e)(1). The notifications shall also include, if appropriate, a request for the EPA to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date.

[40 CFR 60.7(a)(6), Subpart A]

16.6. A notification that continuous opacity monitoring system data results will be used to determine compliance with the applicable opacity standard during a performance test required by 40 CFR 60.8 in lieu of Method 9 observation data as allowed by 40 CFR 60.11(e)(5). This notification shall be postmarked not less than 30 days prior to the date of the performance test.

[40 CFR 60.7(a)(7), Subpart A]

16.7. A notification of 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 CFR 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.

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

[18 AAC 50.040(a)(1)]
[40 CFR 60.7(b), Subpart A]

18. NSPS Subpart A Excess Emissions and Monitoring Systems Performance Report. The Permittee shall submit excess emissions and monitoring systems performance (EEMSP)[13] report and/or summary report form (see Condition 19) to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each six-month period. Written reports of excess emissions shall include the following information:

[18 AAC 50.040(a)(1)]
[40 CFR 60.7(c), Subpart A]

18.1. The magnitude of excess emissions computed in accordance with Condition 25.5, any conversion factors used, the date and time of commencement and completion of each time period of excess emissions, and the process operating time during the reporting period.

[40 CFR 60.7(c)(1), Subpart A]

18.2. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of EU ID 1; the nature and cause of any malfunction (if known), and the corrective action taken or preventative measures adopted.

[40 CFR 60.7(c)(2), Subpart A]

18.3. The date and time identifying each period during which a CMS was inoperative except for zero and span checks and the nature of any repairs or adjustments.

[40 CFR 60.7(c)(3), Subpart A]

18.4. When no excess emissions have occurred or the CMS have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

[40 CFR 60.7(c)(4), Subpart A]

19. NSPS Subpart A Summary Report Form. The Permittee shall submit to the Administrator one "summary report form" in the format shown in Figure 1 of 40 CFR 60.7 (see Section 12) for each pollutant monitored for EU ID 1. The report shall be submitted semiannually, postmarked by the 30th day following the end of each six-month period, except when more frequent reporting is specifically required by an applicable subpart or the EPA, as follows:

[18 AAC 50.040(a)(1)]
[40 CFR 60.7(c) & (d), Subpart A]

19.1. If the total duration of excess emissions for the reporting period is less than one percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than five percent of the total operating time for the reporting period, submit a summary report form **unless** the EEMSP report described in Condition 18 is requested, or

[13] The federal EEMSP report is not the same as the state excess emission report required by Condition 83. Excess emissions are defined in applicable subparts.

[40 CFR 60.7(d)(1), Subpart A]

19.2. If the total duration of excess emissions for the reporting period is one percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is five percent or greater of the total time for the reporting period, then submit a summary report form **and the EEMSP report** described in Condition 18.

[40 CFR 60.7(d)(2), Subpart A]

20. NSPS Subpart A Recordkeeping. For EU ID 1, the Permittee shall maintain a file of all measurements, including CMS, monitoring device, and performance testing measurements; all CMS performance evaluations; all CMS or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. Except as provided in 40 CFR 60.7(f)(1) and (2), the file shall be retained for at least five years, in accordance with Condition 79, following the date of such measurements, maintenance, reports, and records.

[18 AAC 50.040(a)(1) & (j)(4)]
[40 CFR 60.7(f), Subpart A]
[40 CFR 71.6(a)(3)(ii)(B)]

21. NSPS Subpart A Performance (Source) Tests. The Permittee shall conduct source tests according to 40 CFR 60.8 and Section 6 on any affected facility at such times as may be required by the Administrator.

[18 AAC 50.040(a)(1)]
[40 CFR 60.8, Subpart A]

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

[18 AAC 50.040(a)(1)]
[40 CFR 60.11(d), Subpart A]

23. NSPS Subpart A Credible Evidence. For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of the standards set forth in Condition 27, nothing in 40 CFR Part 60 shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether EU ID 1 would have been in compliance with applicable requirements of 40 CFR Part 60 if the appropriate performance or compliance test or procedure had been performed.

[18 AAC 50.040(a)(1)]
[40 CFR 60.11(g), Subpart A]

24. NSPS Subpart A Concealment of Emissions. The Permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of a standard set forth in Conditions 27 and 31. 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 CFR 60.12, Subpart A]

25. NSPS Subpart A, Monitoring. For a CMS required under Condition 27.4[14], the Permittee shall comply as follows:

[18 AAC 50.040(a)(1)]
[40 CFR 60.13(a) Subpart A]

25.1. Ensure that all CMS and monitoring devices are installed and operational prior to a performance test conducted under Condition 21. Verification of operational status shall, as a minimum, include completion of manufacturer's written requirements or recommendations for installation, operation, and calibration of device.

[40 CFR 60.13(b), Subpart A]

25.2. Conduct continuous opacity monitoring system (COMS) or continuous emission monitoring system (CEMS) performance evaluations in accordance with 40 CFR 60.13(c) and at such other times as may be required by the Administrator under section 114 of the Act.

[40 CFR 60.13(c), Subpart A]

25.3. Check the zero (or low level value between zero and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with 40 CFR 60.13(d).

[40 CFR 60.13(d)(1), Subpart A]

25.4. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under Condition 25.3, keep all CMS in operation continuously and as follows:

[40 CFR 60.13(e), Subpart A]

a. for a COMS, complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive six-minute period; otherwise

[40 CFR 60.13(e)(1), Subpart A]

b. complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

[40 CFR 60.13(e)(2), Subpart A]

25.5. Reduce data in accordance with the following:

[14] Continuous monitoring exemptions are included in Condition 27.6.

[40 CFR 60.13(h), Subpart A]

a. For all CMS for measurement of opacity, reduce all data to six-minute averages. Calculate six-minute opacity averages from 36 or more data points equally spaced over each 6-minute period.

[40 CFR 60.13(h)(1), Subpart A]

b. For CMS other than opacity, reduce all data to one-hour averages for time periods as defined in 40 CFR 60.2. Compute one-hour averages in accordance with 40 CFR 60.13(h)(2)(i) through (ix).

[40 CFR 60.13(h)(2), Subpart A]

c. Convert all excess emission into units of the standard. After conversion the Permittee may round data to the same number of significant digits as used in the standards.

[40 CFR 60.13(h)(3), Subpart A]

25.6. The Permittee may request alternative monitoring procedures or requirements to those found in 40 CFR 60 through a written application, subject to the Administrator's approval.

[40 CFR 60.13(i)(1) through (9), Subpart A]

NSPS Subpart O – Sewage Treatment Plants

26. NSPS Subpart O Applicability. For EU ID 1 listed in Table A, the Permittee shall comply with the applicable requirements for an incinerator that

26.1. combusts wastes containing more than 10 percent sewage sludge (dry basis) produced by municipal sewage plants, or that charges more than 1000 kg (2205 lb) per day municipal sewerage sludge (dry basis); and

26.2. commences construction or modification after June 11, 1973.

[18 AAC 50.040(a)(2)(Q) & (j)(4) & 50.326(j)]
[40 CFR 71.6(a)(1)]
[40 CFR 60.150, Subpart O]

27. NSPS Subpart O Particulate Matter Standards. Emissions from EU ID 1 shall not exceed the limits in Conditions 27.1 and 27.2. Compliance with those standards will also comply with the state PM standard of Condition 7.

27.1. PM at a rate in excess of 0.65 g/kg dry sludge input (1.30 lb/ton dry sludge input).

27.2. Any gases (excluding condensed water vapor) which exhibit 20 percent opacity or greater.

[40 CFR 60.152(a), Subpart O]

27.3. **MR&R**. The Permittee shall demonstrate compliance with Conditions 27.1 and 27.2 as follows:

a. Perform a source test for PM emissions in accordance with the source test required under Condition 44.1.

b. Comply with the exhaust gas visible emissions reporting requirements under Condition 2.5.

[18 AAC 50.040(j) & 50.326(j)(4)]
[40 CFR 71.6(a)(3) & (c)(6)]

27.4. **Monitoring of Operations**. For EU ID 1, the Permittee shall:

[40 CFR 60.153(a), Subpart O]

a. Install, calibrate, maintain, and operate a flow measuring device that can be used to determine either the mass or volume of sludge charged to the incinerator. The flow measuring device shall be certified by the manufacturer to have an accuracy of ± 5 percent over its operating range. Except as provided in Condition 27.6, the flow-measuring device shall be operated continuously and data recorded during all periods of operation of the incinerator.

b. Provide access to the sludge charged so that a well-mixed representative grab sample of the sludge can be obtained.

[40 CFR 60.153(a)(1) & (2), Subpart O]

c. Install, calibrate, maintain, and operate a monitoring device that continuously measures and records the pressure drop of the gas flow through the wet scrubbing device. Where a combination of wet scrubbers is used in series, the pressure drop of the gas flow through the combined system shall be continuously monitored. The device used to monitor scrubber pressure drop shall be certified by the manufacturer to be accurate within ±250 pascals (± 1 inch water gauge) and shall be calibrated on an annual basis in accordance with the manufacturer's instructions.

d. Install, calibrate, maintain, and operate a monitoring device that continuously measures and records the oxygen content of the incinerator exhaust gas. The oxygen monitor shall be located upstream of any rabble shaft cooling air inlet into the incinerator exhaust gas stream, fan, ambient air re-circulation damper, or any other source of dilution air. The oxygen monitoring device shall be certified by the manufacturer to have a relative accuracy of ± 5 percent over its operating range and shall be calibrated according to methods prescribed by the manufacturer at least once each 24-hour operating period.

[40 CFR 60.153(b)(1) & (2), Subpart O]

e. Install, calibrate, maintain, and operate temperature measuring devices at every hearth in multiple hearth furnaces. For multiple hearth furnaces, install a minimum of one temperature measuring device in each hearth in the cooling and drying zones, and install a minimum of two temperature measuring devices in each hearth in the combustion zone. Each temperature measuring device shall be certified by the manufacturer to have an accuracy of ± 5 percent over its operating range. Except as provided in Condition 27.6, the temperature monitoring devices shall be operated continuously and data recorded during all periods of operation of the incinerator.

f. Install, calibrate, maintain, and operate a device for measuring the fuel flow to the incinerator. The flow measuring device shall be certified by the manufacturer to have an accuracy of ± 5 percent over its operating range. Except as provided in Condition 27.6, the fuel flow measuring device shall be operated continuously and data recorded during all periods of operation of the incinerator.

g. Except as provided in Condition 27.6, collect and analyze a grab sample of the sludge fed to the incinerator once per day. The dry sludge content and the volatile solids content of the sample shall be determined in accordance with 40 CFR 60.154(b)(5) except that the determination of volatile solids, step (3)(b) of the method, may not be deleted.

[40 CFR 60.153(b)(3) through (5), Subpart O]

27.5. **Recordkeeping.** The Permittee shall retain the following information in accordance with Condition 79 and make it available for inspection by the Administrator.

a. A record of the measured pressure drop of the gas flow through the wet scrubbing device, as required by Condition 27.4.c;

b. A record of the measured oxygen content of the incinerator exhaust gas, as required by Condition 27.4.d;

c. A record of the rate of sludge charged to the incinerator, the measured temperature of the incinerator, the fuel flow to the incinerator, and the total solids and volatile solids content of the sludge charged to the incinerator, as required by Conditions 27.4.a, 27.4.e, 27.4.f, and 27.4.g.

[40 CFR 60.153(c), Subpart O]

27.6. For EU ID 1, if the particulate matter emission rate measured during the performance test required under Condition 27.3.a is less than or equal to 0.38 g/kg of dry sludge input (0.75 lb/ton), the Permittee shall be required to comply with the requirements in Conditions 27.4 and 27.5 during all periods except that:

a. Continuous operation of the monitoring devices and data recorders in Conditions 27.4.a, 27.4.e, 27.4.f, and 27.4.g shall not be required.

b. Daily sampling and analysis of sludge feed in Condition 27.4.g shall not be required.

c. Recordkeeping specified in Condition 27.5.c shall not be required.

[40 CFR 60.153(d), Subpart O]

27.7. **Reporting.** The Permittee shall submit to the Administrator semi-annually a report in writing which contains the following:

a. A record of average scrubber pressure drop measurements for each period of 15 minutes duration or more during which the pressure drop of the scrubber was less than, by a percentage specified below, the average scrubber pressure drop measured during the most recent performance test. The percent reduction in scrubber pressure drop for which a report is required shall be determined as follows:

(i) For incinerators that achieved an average PM emission rate of 0.38 kg/Mg (0.75 lb/ton) dry sludge input or less during the most recent performance test, a scrubber pressure drop reduction of more than 30 percent from the average scrubber pressure drop recorded during the most recent performance test shall be reported.

(ii) For incinerators that achieved an average particulate matter emission rate of greater than 0.38 kg/Mg (0.75 lb/ton) dry sludge input during the most recent performance test, a percent reduction in pressure drop greater than that calculated according to the following equation shall be reported:

$$P = -111E + 72.15$$

Where

P = Percent reduction in pressure drop, and

E = Average PM emissions (kilograms per megagram) (kg/Mg)

b. A record of average oxygen content in the incinerator exhaust gas for each period of 1-hour duration or more that the oxygen content of the incinerator exhaust gas exceeds the average oxygen content measured during the most recent performance test by more than 3 percent.

[40 CFR 60.155(a), Subpart O]

c. For EU ID 1, if the average particulate matter emission rate measured during the performance test required under Condition 27.3.a exceeds 0.38 g/kg of dry sludge input (0.75 lb/ton), the Permittee shall include in the report for each calendar day that a decrease in scrubber pressure drop or increase in oxygen content of exhaust gas is reported a record of the following:

(i) Scrubber pressure drop averaged over each 1-hour incinerator operating period.

(ii) Oxygen content in the incinerator exhaust averaged over each 1-hour incinerator operating period.

(iii) Temperatures of every hearth in multiple hearth incinerators averaged over each 1-hour incinerator operating period.

(iv) Rate of sludge charged to the incinerator averaged over each 1-hour incinerator operating period.

(v) Incinerator fuel use averaged over each 8-hour incinerator operating period.

(vi) Moisture and volatile solids content of the daily grab sample of sludge charged to the incinerator.

[40 CFR 60.155(b), Subpart O]

NSPS Subpart IIII[15] – Compression Ignition Internal Combustion Engines (CI ICE)

28. NSPS Subpart IIII Applicability and General Compliance Requirements. For non-emergency engine EU ID 2 listed in Table A, the Permittee shall comply with the applicable requirements for stationary CI ICE whose construction[16] commences after July 11, 2005, where the stationary CI ICE are manufactured after April 1, 2006.

28.1. Comply with the applicable provisions of 40 CFR 60 Subpart A as specified in Table 8 to Subpart IIII, and applicable provisions of Subpart IIII as specified in Conditions 29 through 33.

[18 AAC 50.040(a)(2)(OO) & (j)(4) & 50.326(j)]
[40 CFR 71.6(a)(1)]
[40 CFR 60.4200(a)(2)(i), 60.4218 and Table 8, Subpart IIII

29. NSPS Subpart IIII GAPCP. Except as permitted under Condition 32.1, the Permittee must operate and maintain EU ID 2 and control device according to the manufacturer's written instructions, change only those emission-related settings that are permitted by the manufacturer, and shall meet the requirements of Condition 31.1 and the applicable requirements of 40 CFR 1068. In addition, the Permittee must operate and maintain EU ID 2 that achieves the emissions standards as required in Condition 31.1 over the entire life of the engine.

[40 CFR 60.4206 & 60.4211(a), Subpart IIII]

30. NSPS Subpart IIII Fuel Requirements. For EU ID 2, the Permittee shall comply with the following:

30.1. For an emissions unit with a displacement of less than 30 liters per cylinder that uses diesel fuel, you must use diesel fuel that meets the requirements of 40 CFR 1090.305 for nonroad diesel fuel with the following specifications:

[18 AAC 50.040(a)(2)(OO) & (j); & 50.326(j)]
[40 CFR 71.6(a)(1)]
[40 CFR 60.4207(b), Subpart IIII]

a. Maximum sulfur content of 15 ppm.

b. Diesel fuel must meet one of the following standards:

[15] The provisions of NSPS Subpart IIII listed in Conditions 28 through 34 are current as amended through December 4, 2020. 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.

[16] For the purposes of NSPS Subpart IIII, the date that construction commences is the date the engine is ordered by the owner or operator as defined in 40 CFR 60.4200(a).

(i) Minimum cetane index of 40.

(ii) Maximum aromatic content of 35 volume percent.

[40 CFR 1090.305(b) & (c), Subpart D]

30.2. Report in accordance with Condition 12.2.

31. NSPS Subpart IIII Emission Standards. The Permittee shall comply with the emission standards for new nonroad CI engines in 40 CFR 60.4201, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later non-emergency stationary CI ICE:

[18 AAC 50.040(a)(2)(OO) & (j)(4) & 50.326(j)]
[40 CFR 71.6(a)(1)]
[40 CFR 60.4204(b) & 4201(a), Subpart IIII]
[40 CFR Part 1039, Appendix I]

31.1. Exhaust emissions from EU ID 2 shall not exceed the following exhaust emission standards:

a. 6.4 grams per kilowatt hour (g/kW-hr) of NOx + NMHC;

b. 3.5 g/kW-hr of CO; and

c. 0.20 g/kW-hr of PM

[40 CFR Part 1039, Appendix I]

31.2. Measure smoke as specified in 40 CFR 1039.105(c). Smoke from EU ID 2 may not exceed the following standards:

a. 20 percent during the acceleration mode.

b. 15 percent during the lugging mode.

c. 50 percent during the peaks in either the acceleration or lugging modes.

[40 CFR 1039.105, Subpart B]

32. NSPS Subpart IIII Monitoring and Recordkeeping. The Permittee shall comply with the following:

[18 AAC 50.040(a)(2)(OO) & (j)(4) & 50.326(j)]
[40 CFR 71.6(a)(3)(i) & (ii) & (c)(6)]

32.1. Comply with the emission standards in Condition 31 by purchasing an engine certified according to 40 CFR 60.4204(b) for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's emission related specifications except as permitted in Condition 32.2.

[40 CFR 60.4211(c), Subpart IIII]

32.2. If you do not install, configure, operate, and maintain EU ID 2 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 as follows:

a. You must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. You must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

[40 CFR 60.4211(g)(3), Subpart IIII]

32.3. Conduct performance tests in accordance with 40 CFR 60.4212(a). Exhaust emissions must not exceed the not-to-exceed (NTE) numerical requirements, rounded to the same number of decimal places as the applicable standard, determined from the following equation:

$$\text{NTE requirement for each pollutant} = 1.25 \times (\text{Standard in Condition 31.1})$$

[40 CFR 60.4212(a) & (c), Subpart IIII]

33. NSPS Subpart IIII Reporting. The Permittee shall report as follows:

33.1. Report in accordance with Condition 83 if any of the requirements in Conditions 28 through 34 was not met.

[18 AAC 50.040 (j)(4) & 50.326(j)]
[40 CFR 71.6(a)(3)(iii) & (c)(6)]

34. NSPS Subpart IIII Deadline for Importing or Installing Stationary CI ICE. The Permittee shall comply with the following:

[18 AAC 50.040(a)(2)(OO) & (j)(4) & 50.326(j)]
[40 CFR 71.6(a)(1)]
[40 CFR 60.4200(a)(4), 60.4208(a) – (i), & 60.4216(e), Subpart IIII]

34.1. The Permittee shall not install stationary CI ICE units in previous (2007 – 2017) model years after the dates and as specified in 40 CFR 60.4208(a) – (g).

[40 CFR 60.4208(a) - (g), Subpart IIII]

34.2. In addition to the requirements specified in 40 CFR 60.4201, 60.4202, 60.4204, and 60.4205, the Permittee shall not import stationary CI ICE with a displacement of less than 30 liters per cylinder that do not meet the applicable requirements and after the dates specified in 40 CFR 60.4208(a) – (g).

[40 CFR 60.4208(h), Subpart IIII]

34.3. The requirements of Condition 34 do not apply to stationary CI ICE that have been modified, reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location.

[40 CFR 60.4208(i), Subpart IIII]

40 CFR Part 61 National Emission Standards for Hazardous Air Pollutants (NESHAP)

Subpart A – General Provisions & Subpart M – Asbestos

35. NESHAP Subpart A. The Permittee shall comply with the applicable requirements of 40 CFR 61 Subpart A for EU ID 1.

36. NESHAP Subpart M. The Permittee shall comply with the applicable requirements set forth in 40 CFR 61.145, 61.150, and 61.152 of Subpart M, and the applicable sections set forth in 40 CFR 61, Subpart A and Appendix A

[18 AAC 50.040(b)(1), (b)(2)(F), & 50.326(j)]
[40 CFR 61, Subparts A & M, and Appendix A]
[40 CFR 71.6(a)(1)]

40 CFR 61, Subpart E, Emission Standard for Mercury (Hg)

37. NESHAP Subpart E Applicability. For EU ID 1, the Permittee shall comply with the applicable requirements of NESHAP Subpart E for stationary sources that incinerate wastewater treatment plant sludge.

[18 AAC 50.040(b)(2)(A), 50.040(j), & 50.326(a)]
[40 CFR 71.6(a)(1)]
[40 CFR 61.50, Subpart E]

38. NESHAP Subpart E, Hg Standard. Emissions to the atmosphere from EU ID 1 shall not exceed 3.2 kilograms (7.1 lb) of Hg per 24-hour period.

[40 CFR 61.52(b), Subpart E]

38.1. **Stack sampling**. Unless a waiver of emission testing is obtained under 40 CFR 61.13, the owner or operator of a source subject to the Hg standard of Condition 38 shall test emissions from EU ID 1. Such tests shall be conducted in accordance with the procedures set forth in either 40 CFR 61.53(d) or Condition 38.2.

a. Samples shall be taken over such a period or periods as are necessary to accurately determine the maximum emissions which will occur in a 24-hour period. No changes in the operation shall be made, which would potentially increase emissions above that determined by the most recent source test, until the new emission level has been estimated by calculation and the results reported to the Administrator.

[40 CFR 61.53(d)(1) & (4), Subpart E]

b. Report in accordance with Condition 83 if Hg emissions exceed the standard in Condition 38.

[40 CFR 71.6(a)(3)(iii) & (c)(6)]

c. Except as required under Condition 38.4, if the Permittee demonstrates compliance with Condition 38 by conducting source tests for Hg, the testing may conducted according to the schedule of Condition 44.1.

38.2. **Sludge sampling**. As an alternative means for demonstrating compliance with Condition 38, the Permittee may use Method 105 of appendix B (40 CFR 61, Subpart E) and the procedures specified in 40 CFR 61.54.

a. No changes in the operation of a plant shall be made after a sludge test has been conducted which would potentially increase emissions above the level determined by the most recent sludge test, until the new emission level has been estimated by calculation and the results reported to the Administrator.

[40 CFR 61.54(a) & (e), Subpart E]

38.3. **Recordkeeping**. Records of emission test results and other data needed to determine total emissions; records of sludge sampling, charging rate determination and other data needed to determine Hg content of wastewater treatment plant sludges shall be retained at the source and shall be made available for inspection, in accordance with Condition 79.

[40 CFR 61.53(d)(6) & 61.54(g), Subpart E]

38.4. **Monitoring of emissions and operations**. All the sources for which Hg emissions exceed 1.6 kg (3.5 lb) per 24-hour period, demonstrated either by stack sampling according to Condition 38.1 or sludge sampling according to Condition 38.2, shall monitor Hg emissions at intervals of at least once per year by use of Method 105 of appendix B or the procedures specified in 40 CFR 61.53(d)(2) and (4). The results of monitoring shall be reported and retained according to 40 CFR 61.53(d)(5) and (6) or 40 CFR 61.54(f) and (g).

[40 CFR 61.55(a), Subpart E]

40 CFR Part 62 Subpart LLL – Federal Plan for Sewage Sludge Incineration (SSI) Units

39. Subpart LLL Applicability and General Compliance Requirements. For the sewage sludge incinerator, EU ID 1 listed in Table A, the Permittee shall comply with the applicable requirements of 40 CFR 62 Subpart LLL.

[18 AAC 50.040(j)(4) & 50.326(j)(4)]
[40 CFR 71.6(a)(1)]

39.1. Maintain an onsite copy of the final control plan you submitted to EPA and the Department.

39.2. Operate all necessary process changes and air pollution control devices as designed.

39.3. If you close your SSI unit but will restart it after the final compliance date, you must complete emission control retrofits and meet the emission limits, emission standards, and operating limits on the date your unit restarts operation.

[40 CFR 62.15900(b), 62.15905, & 62.15910(b), Subpart LLL]

40. Subpart LLL Operator Training and Qualifications. EU ID 1 cannot be operated unless a fully trained and qualified SSI unit operator is accessible, either at the facility or can be at the facility within 1 hour. The trained and qualified SSI unit operator may operate the SSI unit directly or be the direct supervisor of one or more other plant personnel who operate the unit. If all qualified SSI unit operators are temporarily not accessible, you must follow the procedures in Condition 40.5.

40.1. Operator training and qualification must be obtained by completing an incinerator operator training course that includes, at a minimum, the three elements described in 40 CFR 62.15920(c)(1) through (3).

[40 CFR 62.15920(a) & (c), Subpart LLL]

40.2. The operator training course must be completed within six months after an employee assumes responsibility for operating the SSI unit or assumes responsibility for supervising the operation of the SSI unit.

[40 CFR 62.15925(c), Subpart LLL]

40.3. Qualification is valid from the date on which the training course is completed and the operator successfully passes the examination required under 40 CFR 62.15920(c)(2).

[40 CFR 62.15930(b), Subpart LLL]

40.4. To maintain qualification, operators must complete an annual review or refresher course covering, at a minimum, the five topics described in 40 CFR 62.15935(a) through (e).

[40 CFR 62.15935, Subpart LLL]

40.5. If a qualified operator is not at the facility and cannot be at the facility within 1 hour, you must meet the criteria specified in either Condition 40.5.a or 40.5.b, depending on the length of time that a qualified operator is not accessible:

a. When a qualified operator is not accessible for more than 8 hours, the SSI unit may be operated for less than 2 weeks by other plant personnel who are familiar with the operation of the SSI unit and who have completed a review of the information specified in Condition 40.6.a and 40.7 within the past 12 months. However, you must record the period when a qualified operator was not accessible and include this deviation in the annual report as specified under 40 CFR 62.16030(c)(10).

b. When a qualified operator is not accessible for 2 weeks or more, you must take the two actions that are described in Conditions 40.5.b(i) and 40.5.b(ii):

(i) Notify the Administrator of this deviation in writing within 10 days. In the notice, state what caused this deviation, what you are doing to ensure that a qualified operator is accessible, and when you anticipate that a qualified operator will be accessible; and

(ii) Submit a status report to the Administrator every 4 weeks outlining what you are doing to ensure that a qualified operator is accessible, stating when you anticipate that a qualified operator will be accessible and requesting approval from the Administrator to continue operation of the SSI unit. You must submit the first status report 4 weeks after you notify the Administrator of the deviation under Condition 40.5.b(i).

(A) If the Administrator notifies you that your request to continue operation of the SSI unit is disapproved, the SSI unit may continue operation for 30 days and then must cease operation; and

(B) Operation of the unit may resume if a qualified operator is accessible as required under Condition 40. You must notify the Administrator within 5 days of having resumed operations and of having a qualified operator accessible.

[40 CFR 62.15945, Subpart LLL]

40.6. You must maintain at the facility:

a. the documentation of the operator training procedures specified under 40 CFR 62.15920(c)(1) and make the documentation readily accessible to all SSI unit operators.

[40 CFR 62.15950(a), Subpart LLL]

b. certificates for successful completion of the training course and annual refresher courses for each qualified operator;

c. renewed lapsed operator certifications, as applicable; and

d. written material covering the training and refresher courses.

[40 CFR 71.6(a)(3) & (c)(6)]

40.7. You must establish a program for reviewing the information listed in 40 CFR 62.15920(c)(1) with each qualified incinerator operator and other plant personnel who may operate the unit according to Condition 40.5.a. Annual reviews of the information listed in 40 CFR 62.15920(c)(1) must be conducted no later than 12 months following the previous review.

[40 CFR 62.15950(b) & (b)(2), Subpart LLL]

41. Emission Limits and Standards. You must meet the emission limits and standards specified in Table C. The emission limits and standards apply at all times the unit is operating and during periods of malfunction. The emission limits and standards apply to emissions from a bypass stack or vent while sewage sludge is in the combustion chamber. (*i.e.*, until the sewage sludge feed to the combustor has been cut off for a period of time not less than the sewage sludge incineration residence time).

[40 CFR 62.15955 & 62.15970, Subpart LLL]

Table C: Emission Limits and Standards for Existing Multiple Hearth SSI Units

Air Pollutant	Emission Limit[17]	Averaging Methods & Minimum Sampling Volumes or Durations	Compliance Method
Particulate Matter (PM)	80 milligrams per dry standard cubic meter	3-run average (collect a minimum volume of 0.75 dry standard cubic meters (dscm) per run)	Performance test (Method 5 at 40 CFR 60, Appendix A-3; Method 26A or Method 29 at 40 CFR 60, Appendix A-8).
Hydrogen Chloride (HCl)	1.2 parts per million by dry volume (ppmdv)	3-run average (For Method 26, collect a minimum volume of 200 liters per run. For Method 26A, collect a minimum volume of 1 dscm per run)	Performance test (Method 26 or 26A at 40 CFR 60, Appendix A-8).
Carbon Monoxide (CO)	3,800 ppmdv	3-run average (collect sample for a minimum duration of one hour per run)	Performance test (Method 10, 10A, or 10B at 40 CFR 60, Appendix A-4).
Dioxins/furans (total mass basis)	5.0 nanograms per dry standard cubic meter	3-run average (collect a minimum volume of 1 dscm per run)	Performance test (Method 23 at 40 CFR 60, Appendix A-7).
Dioxins/furans; toxic equivalency basis[18]	0.32 nanograms per dry standard cubic meter (ng/dscm)		
Mercury (Hg)	0.28 milligrams per dry standard cubic meter (mg/dscm)	3-run average (For Method 29 and ASTM D6784-02 (Reapproved 2008), collect a minimum volume of 1 dscm per run. For Method 30B, collect a minimum sample as specified in Method 30B at 40 CFR 60, Appendix A-8)	Performance test (Method 29 at 40 CFR 60, Appendix A-8; Method 30B at 40 CFR 60, Appendix A-8; or ASTM D6784-02 (Reapproved 2008)).
Oxides of Nitrogen (NOx)	220 ppmdv	3-run average (collect sample for a minimum duration of one hour per run)	Performance test (Method 7 or 7E at 40 CFR 60, Appendix A-4).
Sulfur Dioxide (SO_2)	26 ppmdv	3-run average (For Method 6, collect a minimum volume of 200 liters per run. For Method 6C, collect sample for a minimum duration of one hour per run)	Performance test (Method 6 or 6C at 40 CFR 60, appendix A-4; or ANSI/ASME PTC 19.10-1981).
Cadmium (Cd)	0.095 mg/dscm	3-run average (collect a minimum volume of 1 dscm per run)	Performance test (Method 29 at 40 CFR 60, Appendix A-8).
Lead (Pb)	0.30 mg/dscm	3-run average (collect a minimum volume of 1 dscm per run)	Performance test (Method 29 at 40 CFR 60, Appendix A-8).

[17] All emission limits are measured at 7% oxygen, dry basis at standard conditions

[18] You may comply with either the dioxins/furans limit on either a total mass basis or on a toxic equivalency basis.

Air Pollutant	Emission Limit[17]	Averaging Methods & Minimum Sampling Volumes or Durations	Compliance Method
Fugitive Emissions from Ash Handling	VE of combustion ash from ash conveying system (including conveyor transfer points) for no more than 5% of the hourly observation period	Three 1-hour observation periods	Visible emission test (Method 22 of Appendix A-7 of 40 CFR 60).

[Table 3 to 40 CFR 62, Subpart LLL]

42. Operating Limits and Requirements. You must meet, as applicable, the operating limits and requirements specified in Conditions 42.1 through 42.3. The operating parameters for which you establish operating limits are listed in Table D. You must comply with the operating requirements in Condition 42.4 and the requirements in Condition 42.5 for meeting any new operating limits, re-established in Condition 44.1.a. The operating limits apply at all times that sewage sludge is in the combustion chamber (*i.e.*, until the sewage sludge feed to the combustor has been cut off for a period of time not less than the sewage sludge incineration residence time):

[40 CFR 62.15960, Subpart LLL]

42.1. You must meet the site-specific operating limit for minimum operating temperature of the combustion chamber (or afterburner combustion chamber) that you established during the initial compliance demonstration;

42.2. If you use a wet scrubber or afterburner to comply with an emission limit, you must meet the site-specific operating limits that you established during the initial compliance demonstration for each operating parameter associated with each air pollution control device;

42.3. You must meet the operating requirements in your site-specific fugitive emissions monitoring plan, submitted as specified in 40 CFR 62.15995(d) to ensure your ash handling system will meet the emission standard for fugitive emissions from ash handling;

[40 CFR 62.15960(a), (b) & (d), Subpart LLL]

42.4. You must monitor the feed rate and moisture content of the sewage sludge fed to the SSI as specified in Conditions 42.4.a and 42.4.b:

a. Continuously monitor the sewage sludge feed rate and calculate a daily average for all hours of operation during each 24-hour period. Keep a record of the daily average feed rate, as specified in Condition 48.6.a(ii); and

b. Take at least one grab sample per day of the sewage sludge fed to the SSI. If you take more than one grab sample in a day, calculate the daily average for the grab samples. Keep a record of the daily average moisture content, as specified in Condition 48.6.a(ii).

42.5. For the operating limits and requirements specified in Conditions 42.1 through 42.3, you must meet any new operating limits and requirements, re-established according to Condition 44.1.a.

[40 CFR 62.15960(f) & (g), Subpart LLL]

42.6. You must comply with the operating parameters in Table D, established during the initial compliance demonstration or operating parameters re-established according to Condition 44.1.a.

[40 CFR 71.6(a)(3) & (c)(6)]

Table D: Operating Parameters for Existing SSI

Operating Parameter	Minimum Frequencies	
	Data Recording	**Data Averaging Period**
Opacity of Fugitive Emissions from Ash Handling	Not Applicable	Not Applicable
Minimum Pressure Drop Across Each Wet Scrubber	Every 15 minutes	12-hour block
Minimum Scrubber Liquid Flow Rate	Every 15 minutes	12-hour block
Minimum Scrubber Liquid Potential of Hydrogen (pH)	Every 15 minutes	3-hour block
Minimum Temperature of the afterburner combustion chamber	Every 15 minutes	12-hour block

Table Notes:
The recording time refers to the minimum frequency that the measuring device records data.
For all data recorded every 15 minutes, you must calculate hourly arithmetic averages.
For all parameters, you use hourly averages to calculate the specified block average for demonstrating compliance. You maintain records of 1-hour averages.

[Table 4 to 40 CFR 62, Subpart LLL]

43. Requirements for Continuous Compliance with Operating Limits: You must continuously monitor your operating parameters as specified in Condition 43.1, and meet the requirements of Conditions 43.2 and 43.3, according to the monitoring and calibration requirements in Condition 47. You must confirm and re-establish your operating limits as specified in Condition 43.4.

[40 CFR 62.15985 & 62.16005, Subpart LLL]

43.1. You must continuously monitor the operating parameters specified in Condition 43.1.a using the continuous monitoring equipment and according to procedures specified in Condition 47. To determine compliance, you must use the data averaging period specified in Table D.

a. You must demonstrate that the SSI unit meets the operating limits established according to the initial compliance demonstration and Condition 43.4 for each applicable operating parameter.

[40 CFR 62.16005(a) & (a)(1), Subpart LLL]

43.2. Operation above the established maximum, below the established minimum, or outside the allowable range of the operating limits specified in Condition 43.1 constitutes a deviation from your operating limits, except during performance tests conducted to determine compliance with the emission and operating limits or to establish new operating limits. You must submit the deviation report specified in 40 CFR 62.16030(d) for each instance that you did not meet one of your operating limits.

43.3. You must submit the annual compliance report specified in 40 CFR 62.16030(c) to demonstrate continuous compliance.

[40 CFR 62.16005(b) & (c), Subpart LLL]

43.4. You must confirm your operating limits according to Condition 43.4.a or re-establish operating limits according to Condition 44.1.a. Your operating limits must be established so as to ensure ongoing compliance with the emission limits. These requirements also apply to your operating requirements in your fugitive emissions monitoring plan specified in 40 CFR 62.15960(d).

a. Your operating limits must be based on operating data recorded during any performance test.

[40 CFR 62.15985(a) & 62.16005(d) & (d)(1), Subpart LLL]

44. Continuous Compliance with Emission Limits and Standards: To demonstrate continuous compliance with the emission limits and standards specified in Table C, use the procedures specified in Condition 44.1. You must meet the requirements of Condition 44.1, as applicable, and Conditions 44.2 through 44.4, according to the performance testing, monitoring, and calibration requirements in Condition 46.1. You may also petition the Administrator for alternative monitoring parameters as specified in paragraph 40 CFR 62.16000(f).

[40 CFR 62.16000, Subpart LLL]

44.1. Demonstrate continuous compliance using a performance test. Except as provided in Condition 44.1.c, following the date that the initial performance test for each pollutant in Table C is completed, you must conduct a performance test for each such pollutant on an annual basis (between 11 and 13 calendar months following the previous performance test). The performance test must be conducted using the test methods, averaging methods, and minimum sampling volumes or durations specified in Table C and according to the testing, monitoring and calibration requirements specified in Condition 46.1.

[40 CFR 62.16000(a), Subpart LLL]

a. You may conduct a repeat performance test at any time to establish new values for the operating limits to apply from that point forward. The Administrator may request a repeat performance test at any time.

[40 CFR 62.16000(a)(1) & 62.16005(d)(2), Subpart LLL]

b. You must repeat the performance test within 60 days of a process change, as defined in 40 CFR 62.16045.

[40 CFR 62.16000(a)(2) & 62.16045, Subpart LLL]

c. Except as specified in Conditions 44.1.a and 44.1.b, you can conduct performance tests less often for a given pollutant, as specified in Conditions 44.1.c(i) through 44.1.c(iii).

(i) You can conduct performance tests less often if your performance tests for the pollutant for at least 2 consecutive years show that your emissions are at or below 75 percent of the emission limit specified in Table C, and there are no changes in the operation of the affected source or air pollution control equipment that could increase emissions. In this case, you do not have to conduct a performance test for that pollutant for the next 2 years. You must conduct a performance test during the third year and no more than 37 months after the previous performance test.

(ii) If your SSI unit continues to meet the emission limit for the pollutant, you may choose to conduct performance tests for the pollutant every third year if your emissions are at or below 75 percent of the emission limit, and if there are no changes in the operation of the affected source or air pollution control equipment that could increase emissions, but each such performance test must be conducted no more than 37 months after the previous performance test.

(iii) If a performance test shows emissions exceeded 75 percent of the emission limit for a pollutant, you must conduct annual performance tests for that pollutant until all performance tests over two consecutive years show compliance.

[40 CFR 62.16000(a)(3), Subpart LLL]

44.2. To demonstrate compliance with the dioxins/furans toxic equivalency emission limit in Table C, you must determine dioxins/furans equivalency factor as follows:

a. Measure the concentration of each dioxin/furan tetra through octachlorinated-isomer emitted using Method 23 at 40 CFR 60, Appendix A-7.

b. For each isomer measured in accordance with Condition 44.2.a, multiply the isomer concentration by its corresponding toxic equivalency factor specified in Table 5 to 40 CFR 62 Subpart LLL.

c. Sum the products calculated in Condition 44.2.b to obtain the total concentration of dioxins/furans emitted in terms of toxic equivalency.

[40 CFR 62.16000(c), Subpart LLL]

44.3. You must submit an annual compliance report as specified in 40 CFR 62.16030(c). You must submit a deviation report as specified in 40 CFR 62.16030(d) for each instance that you did not meet each emission limit in Table C.

44.4. If you demonstrate continuous compliance using a performance test, as specified in Condition 44.1, then the provisions of this condition apply. If a force majeure is about to occur, occurs or has occurred for which you intend to assert a claim of force majeure, you must notify the Administrator in writing as soon as practicable after the force majeure occurs as specified in 40 CFR 62.16030(f). You must conduct the performance test as soon as practicable after the force majeure occurs. The Administrator will determine whether or not to grant the extension to the performance test deadline.

[40 CFR 62.16000(d) & (e), Subpart LLL]

45. Air Pollution Control Device Inspections. You must conduct an annual inspection of each air pollution control device used to comply with the emission limits, according to Condition 46.2, no later than 12 months following the previous annual air pollution control device inspection. Within 10 operating days following an air pollution control device inspection, all necessary repairs must be completed unless you obtain written approval from the Administrator establishing a date whereby all necessary repairs of the affected SSI units must be completed.

[40 CFR 62.16010, Subpart LLL]

46. Performance Testing, Monitoring, **and Calibration Requirements.** You must meet, as applicable, the performance testing requirements specified in Condition 46.1, the air pollution control device requirements specified in Condition 46.2, and the bypass stack provisions specified in Condition 46.3.

[40 CFR 62.16015, Subpart LLL]

46.1. **Performance Testing Requirements.**

a. All performance tests must consist of a minimum of three test runs conducted under conditions representative of normal operations, as specified in 40 CFR 60.8(c). Emissions in excess of the emission limits or standards during periods of startup, shutdown and malfunction are considered deviations from the applicable emission limits or standards.

b. You must document that the dry sludge burned during the performance test is representative of the sludge burned under normal operating conditions by:

(i) Maintaining a log of the quantity of sewage sludge burned during performance test by continuously monitoring and recording the average hourly rate that sewage sludge is fed to the incinerator.

(ii) Maintaining a log of the moisture content of the sewage sludge burned during the performance test by taking grab samples of the sewage sludge fed to the incinerator for each 8 hour period that testing is conducted.

c. All performance tests must be conducted using the test methods, minimum sampling volume, observation period, and averaging method specified in Table C.

d. Method 1 at 40 CFR 60, Appendix A must be used to select the sampling location and number of traverse points

e. Method 3A or 3B at 40 CFR 60, Appendix A-2, must be used for gas composition analysis, including measurement of O_2 concentration. Method 3A or 3B at 40 CFR 60, Appendix A-2, must be used simultaneously with each method.

[40 CFR 62.16015(a)(1) through (5), Subpart LLL]

f. All pollutant concentrations must be adjusted to 7 percent O_2 using the following equation:

$$C_{adj} = C_{meas} (20.9 – 7) / (20.9 – \%O_2)$$

Where:

C_{adj} = Pollutant concentration adjusted to 7 percent O_2.

C_{meas} = Pollutant concentration measured on a dry basis.

(20.9 – 7) = 20.9% O_2 – 7% O_2 (defined oxygen concentration basis).

20.9 = O_2 concentration in air, percent.

$\%O_2$ = O_2 concentration measured on a dry basis, percent.

[40 CFR 62.16015(a)(6), Subpart LLL]

g. Performance tests must be conducted and data reduced in accordance with the test methods and procedures in 40 CFR 62 Subpart LLL unless the Administrator does one of the actions in 40 CFR 62.16015(a)(7)(i) through (iv).

[40 CFR 62.16015(a)(7), Subpart LLL]

h. You must provide the Administrator at least 30 days prior notice of any performance test, except as specified under other subparts, to afford the Administrator the opportunity to have an observer present. If after 30 days' notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, you must notify the Administrator as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Administrator by mutual agreement.

[40 CFR 62.16015(a)(8) & 62.16030(g)(2) & (3), Subpart LLL]

i. You must provide, or cause to be provided, performance testing facilities listed in 40 CFR 62.16015(a)(9)(i) through (iv).

j. Unless otherwise specified in 40 CFR 62 Subpart LLL, each performance test must consist of three separate runs using the applicable test method. Each run must be conducted for the time and under the conditions specified in the applicable standard. Compliance with each emission limit must be determined by calculating the arithmetic mean of the three runs.

k. During each test run specified in Condition 46.1.a, you must operate your sewage sludge incinerator at a minimum of 85-percent of your maximum permitted capacity.

[40 CFR 62.16015(a)(9) through (11), Subpart LLL]

46.2. **Air Pollution Control Device Inspections**. You must conduct air pollution control device inspections that include, at a minimum, the following:

a. Inspect air pollution control device(s) for proper operation.

b. Generally observe that the equipment is maintained in good operating condition.

c. Develop a site-specific monitoring plan according to the control plan you submitted to the EPA.

[40 CFR 62.16015(c), Subpart LLL]

46.3. **Bypass Stack**. Use of a bypass stack at any time that sewage sludge is being charged to the SSI unit is an emissions standards deviation for all pollutants listed in Table C. The use of the bypass stack during a performance test invalidates the performance test

[40 CFR 62.16015(d), Subpart LLL]

47. Monitoring and Calibration Requirements for Compliance with Operating Limits. You must install, operate, calibrate, and maintain the continuous parameter monitoring systems according to the requirements in Conditions 47.1 and 47.2.

47.1. Meet the following general requirements for flow, pressure, pH, and operating temperature measurement devices:

a. You must collect data using the CMS at all times the affected SSI unit is operating and at the intervals specified in Condition 47.1.b, except for periods of monitoring system malfunction, repairs associated with monitoring systems malfunctions, and required monitoring systems quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments). Any such periods that you do not collect data using the CMS constitute a deviation from the monitoring requirements and must be reported in a deviation report.

b. You must collect continuous parameter monitoring systems data in accordance with 40 CFR 60.13(e)(2).

c. Any data collected during monitoring system malfunctions, repairs associated with monitoring system malfunctions, or required monitoring system quality assurance or control activities must not be included in the calculations used to report emissions or operating levels. Any such periods must be reported in your annual deviation report.

d. Any data collected during periods when the monitoring system is out of control as specified in the monitoring plan must not be included in calculations used to report emissions or operating levels. Any such periods that do not coincide with a monitoring system malfunction constitute a deviation from the monitoring requirements and must be reported in a deviation report.

e. You must use all the data collected during all periods except those periods specified in Conditions 47.1.c and 47.1.d in assessing the operation of the control device and associated control system.

f. Record the results of each inspection, calibration, and validation check.

47.2. Operate and maintain your CMS according to your monitoring plan.

[40 CFR 62.16020(a)(1) & (2), Subpart LLL]

47.3. You must operate and maintain the continuous parameter monitoring systems specified in Condition 47.1 in continuous operation according to your monitoring plan.

47.4. If your SSI unit has a bypass stack, you must install, calibrate (to manufacturers' specifications), maintain and operate a device or method for measuring the use of the bypass stack including date, time, and duration.

[40 CFR 62.16020(c) & (d), Subpart LLL]

48. 40 CFR 62, Subpart LLL Recordkeeping. You must maintain the items (as applicable) specified in Conditions 48.1 through 48.14 for a period of at least five years. All records must be available on site in either paper copy or computer-readable format that can be printed on request, unless an alternative format is approved by the Administrator.

[40 CFR 62.16025, Subpart LLL]

48.1. ***Date.*** Calendar date of each record.

48.2. ***Final control plan and final compliance.*** Copies of the final control plan and any additional notifications, reported under Condition 49.

48.3. ***Operator training.*** Documentation of the operator training procedures and records specified in 40 CFR 62.16025(c)(1) through (4). You must make available and readily accessible at the facility at all times for all SSI unit operators the documentation specified in 40 CFR 62.16025(c)(1).

48.4. ***Air pollution control device inspections.*** Records of the results of initial and annual air pollution control device inspections conducted as specified in Condition 46.2, including any required maintenance and any repairs not completed within 10 days of an inspection or the timeframe established by the Administrator.

48.5. ***Performance test reports***.

a. The results of the initial, annual and any subsequent performance tests conducted to determine compliance with the emission limits and standards and/or to establish operating limits, as applicable.

b. Retain a copy of the complete performance test report, including calculations.

c. Keep a record of the hourly dry sludge feed rate measured during performance test runs as specified in Condition 46.1.b(i).

d. Keep any necessary records to demonstrate that the performance test was conducted under conditions representative of normal operations, including a record of the moisture content measured as required in Condition 46.1.b(ii) for each grab sample taken of the sewage sludge burned during the performance test.

[40 CFR 62.16025(a) through (e), Subpart LLL]

48.6. ***Continuous monitoring data.*** Records of the following data, as applicable:

a. For continuous parameter monitoring systems:

(i) All 1-hour average values recorded for the following operating parameters, as applicable:

(A) Combustion chamber operating temperature (or afterburner temperature).

(B) If a wet scrubber is used to comply with the rule, pressure drop across each wet scrubber system and liquid flow rate to each wet scrubber used to comply with the emission limit in Table C for particulate matter, cadmium or lead and scrubber liquid flow rate and scrubber liquid pH for each wet scrubber used to comply with an emission limit in Table C for sulfur dioxide or hydrogen chloride.

[40 CFR 62.16025(f)(3)(i)(A) & (B), Subpart LLL]

(ii) All daily average values recorded for the feed rate and moisture content of the sewage sludge fed to the sewage sludge incinerator, monitored and calculated as specified in Condition 42.4.

[40 CFR 62.16025(f)(3)(ii), Subpart LLL]

48.7. ***Other records for continuous monitoring systems.*** You must keep the following records, as applicable:

a. Keep records of any notifications to the Administrator of starting or stopping use of a continuous monitoring system for determining compliance with any emissions limit.

b. Keep records of any requests that compliance with the emission limits be determined using carbon dioxide measurements corrected to an equivalent of 7-percent oxygen.

[40 CFR 62.16025(g)(1) & (2), Subpart LLL]

48.8. ***Deviation reports.*** Records of any deviation reports submitted under 40 CFR 62.16030(e) and (f).

48.9. ***Equipment specifications and operation and maintenance requirements.*** Equipment specifications and related operation and maintenance requirements received from vendors for the incinerator, emission controls and monitoring equipment.

48.10. ***Inspections, calibrations and validation checks of monitoring devices.*** Records of inspections, calibration and validation checks of any monitoring devices as required under Conditions 46 and 47.

48.11. ***Monitoring plans.*** Records of the monitoring plans required under 40 CFR 62.15995.

48.12. ***Less frequent testing.*** If, consistent with Condition 44.1.c, you elect to conduct performance tests less frequently than annually, you must keep annual records that document that your emissions in the two previous consecutive years were at or below 75-percent of the applicable emission limit in Table C, and document that there were no changes in source operations or air pollution control equipment that would cause emissions of the relevant pollutant to increase within the past 2 years.

48.13. ***Use of bypass stack.*** Records indicating use of the bypass stack, including dates, times and durations as required under Condition 47.4.

48.14. ***Malfunctions***. If a malfunction occurs, you must keep a record of the information submitted in your annual report in 40 CFR 62.16030(c)(16).

[40 CFR 62.16025(h) through (n), Subpart LLL]

49. 40 CFR 62, Subpart LLL Reporting. You must submit the reports to the Administrator specified in 40 CFR 62.16030(c) through (f) (*annual compliance report, deviation reports, qualified operator deviation, notification of a force majeure*). See Table 6 to 40 CFR 62 Subpart LLL for a summary of these reports.

[40 CFR 62.16030(c) through (f), Subpart LLL]

49.1. ***Other notifications and reports required.*** You must submit other notifications as provided by Conditions 16, 18, and 19.

[40 CFR 62.16030(g), Subpart LLL]

49.2. **Report submission form**.

a. Submit annual and deviation reports electronically or in paper format, postmarked on or before the submittal due dates.

[40 CFR 62.16030(h)(1), Subpart LLL]

b. Submit performance tests and evaluations according to Condition 49.2.b(i):

(i) Within 60 days after the date of completing each performance test required by 40 CFR 62 Subpart LLL, you must submit the results of the performance test according to the method specified by either 40 CFR 62.16030(h)(2)(i)(A) or (B).

[40 CFR 62.16030(h)(2) & (2)(i), Subpart LLL]

c. ***Changing report dates.*** If the Administrator agrees, you may change the semiannual or annual reporting dates. See 40 CFR 60.19(c) for procedures to seek approval to change your reporting date.

[40 CFR 62.16030(h)(3), Subpart LLL]

40 CFR Part 63 National Emission Standards for Hazardous Air Pollutants

NESHAP Subpart A – General Provisions

50. NESHAP Subpart A Applicability. The Permittee shall comply with the applicable requirements of 40 CFR 63 Subpart A in accordance with the provisions for applicability of Subpart A in Table 8 to NESHAP Subpart ZZZZ for EU ID 2 listed in Table A.

[18 AAC 50.040(c)(1), (c)(23), 50.040(j)(4) & 50.326(j)]
[40 CFR 71.6(a)(1) & (a)(3)]
[40 CFR 63.1-63.15, Subpart A]
[40 CFR 63.6665 & Table 8, Subpart ZZZZ]

NESHAP Subpart ZZZZ – Stationary RICE

51. NESHAP Subpart ZZZZ Applicability. The Permittee shall comply with applicable requirements for new[19] stationary reciprocating internal combustion engines (RICE) located at an area source of hazardous air pollutant (HAP) emissions.

51.1. For EU ID 2, the Permittee shall meet the requirements of 40 CFR 63 Subpart ZZZZ by meeting the requirements of 40 CFR 60 Subpart IIII in Conditions 28 through 34. No further requirements apply for such engines under 40 CFR 63.

[18 AAC 50.040(c)(23) & (j)(4) and 50.326(j)]
40 CFR 71.6((a)(1)
[40 CFR 63.6585(c), 63.6590(a)(1)(iii), (a)(2)(iii) & (c)(1), and 63.6605(a), Subpart ZZZZ]

[19] In accordance with 40 CFR 63.6590(a)(2)(iii), a stationary RICE located at an area source of HAP emissions is *new* if you commenced construction of the stationary RICE on or after June 12, 2006.

40 CFR Part 82 Protection of Stratospheric Ozone

52. Subpart F – Recycling and Emissions Reduction. The Permittee shall comply with the applicable standards for recycling and emission reduction of refrigerants set forth in 40 CFR 82, Subpart F.

[18 AAC 50.040(d) & 50.326(j)]
[40 CFR 82, Subpart F]

53. Subpart G – Significant New Alternatives. The Permittee shall comply with the applicable prohibitions set out in 40 CFR 82.174 (Protection of Stratospheric Ozone Subpart G – Significant New Alternatives Policy Program).

[18 AAC 50.040(d) & 50.326(j)]
[40 CFR 82.174(b) through (d), Subpart G]

54. Subpart H – Halons Emissions Reduction. The Permittee shall comply with the applicable prohibitions set out in 40 CFR 82.270 (Protection of Stratospheric Ozone Subpart H – Halon Emission Reduction).

[18 AAC 50.040(d) & 50.326(j)]
[40 CFR 82.270(b) through (f), Subpart H]

NESHAP Applicability Determination Requirements

55. The Permittee shall determine rule applicability and designation of affected sources under National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories (40 CFR 63) in accordance with the procedures described in 40 CFR 63.1(b).

55.1. If an owner or operator of a stationary source who is in the relevant source category determines that the source is not subject to a relevant standard or other requirement established under 40 CFR 63, the owner or operator must keep a record as specified in 40 CFR 63.10(b)(3).

55.2. If a source becomes affected by an applicable subpart of 40 CFR 63, the owner or operator shall comply with such standard by the compliance date established by the Administrator in the applicable subpart, in accordance with 40 CFR 63.6(c).

55.3. After the effective date of any relevant standard promulgated by the Administrator under this part, an owner or operator who constructs a new affected source that is not major-emitting or reconstructs an affected source that is not major-emitting that is subject to such standard, or reconstructs a source such that the source becomes an affected source subject to the standard, must notify the Administrator of the intended construction or reconstruction. The notification must be submitted in accordance with the procedures in 40 CFR 63.9(b).

[18 AAC 50.040(c)(1), 50.040(j), & 50.326(j)]
[40 CFR 71.6(a)(3)(ii)]
[40 CFR 63.1(b), 63.5(b)(4), 63.6(c)(1), 63.9(b), & 63.10(b)(3), Subpart A]

Section 5. General Conditions

Standard Terms and Conditions

56. 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) and 50.345(a) & (e)]

57. 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) and 50.345(a) & (f)]

58. The permit does not convey any property rights of any sort, nor any exclusive privilege.

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

59. 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, and 50.403]
[AS 37.10.052(b) and AS 46.14.240]

60. Assessable Emissions. For each period from July 1 through the following June 30, the Permittee shall pay to the Department an annual emission fee based on the stationary source's assessable emissions, as determined by the Department under 18 AAC 50.410. The 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 the stationary source's:

60.1. potential to emit of 274 tpy; or

60.2. projected annual rate of emissions, in tpy, based upon actual annual emissions for the most recent calendar year, or another 12-month period approved in writing by the Department, when demonstrated by credible evidence of actual emissions, based upon the most representative information available from one or more of the following methods:

a. an enforceable test method described in 18 AAC 50.220;

b. material balance calculations;

c. emission factors from EPA's publication AP-42, Vol. I, adopted by reference in 18 AAC 50.035; or

d. other methods and calculations approved by the Department, including appropriate vendor-provided emissions factors when sufficient documentation is provided.

[18 AAC 50.040(j)(4), 50.035, 50.326(j)(1) & (3), 50.346(b)(1), 50.410, & 50.420]

61. Assessable Emission Estimates. The Permittee shall comply as follows:

61.1. No later than March 31 of each year, the Permittee may submit an estimate of the stationary source's assessable emissions as determined in Condition 60.2. Submit actual emissions estimates in accordance with the submission instructions on the Department's Standard Permit Conditions web page at http://dec.alaska.gov/air/air-permit/standard-conditions/standard-condition-i-submission-instructions/.

61.2. 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.

61.3. 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 in Condition 60.1.

[18 AAC 50.040(j)(4), 50.326(j)(1) & (3), 50.346(b)(1), 50.410, & 50.420]

62. Good Air Pollution Control Practice (GAPCP). The Permittee shall do the following for EU IDs 4 and 5:

62.1. Perform regular maintenance considering the manufacturer's or the operator's maintenance procedures;

62.2. Keep records of any maintenance that would have a significant effect on emissions; the records may be kept in electronic format; and

62.3. Keep a copy of either the manufacturer's or the operator's maintenance procedures.

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

63. 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)]

64. 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.

64.1. 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 64.1.a or to address the results of Department inspections that found potential problems; and

(ii) to prevent future dust problems.

64.2. The Permittee shall report according to Condition 66.3.

[18 AAC 50.045(d), 50. 326(j)(3), and 50.346(c)]

65. 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)]

66. 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 50.040(j)(4), 50.110, 50.326(j)(3), and 50.346(a)]
[40 CFR 71.6(a)(3)]

66.1. **Monitoring.** The Permittee shall monitor as follows:

a. As soon as practicable after becoming aware of a complaint that is attributable to emissions from the stationary source, the Permittee shall investigate the complaint to identify emissions that the Permittee believes have caused or are causing a violation of Condition 66.

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

(i) after an investigation because of a complaint or other reason, the Permittee believes that emissions from the stationary source have caused or are causing a violation of Condition 66; or

(ii) the Department notifies the Permittee that it has found a violation of Condition 66.

66.2. **Recordkeeping.** The Permittee shall keep records of

a. the date, time, and nature of all emissions complaints received;

b. the name of the person or persons that complained, if known;

c. a summary of any investigation, including reasons the Permittee does or does not believe the emissions have caused a violation of Condition 66; and

d. any corrective actions taken or planned for complaints attributable to emissions from the stationary source.

66.3. **Reporting.** The Permittee shall report as follows:

a. With each stationary source operating report under Condition 84, the Permittee shall include a brief summary report which must include the following for the period covered by the report:

(i) the number of complaints received;

(ii) the number of times the Permittee or the Department found corrective action necessary;

(iii) the number of times action was taken on a complaint within 24 hours; and

(iv) the status of corrective actions the Permittee or Department found necessary that were not taken within 24 hours.

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

c. If emissions present a potential threat to human health or safety, the Permittee shall report any such emissions according to Condition 83.

67. Technology-Based Emission Standard. If an unavoidable emergency, malfunction (as defined in 18 AAC 50.235(d)), or non-routine repair (as defined in 18 AAC 50.990(64)), causes emissions in excess of a technology-based emission standard[20] listed in Conditions 27, 31, and 52 (refrigerants), the Permittee shall

67.1. take all reasonable steps to minimize levels of emissions that exceed the standard; and

67.2. report in accordance with Condition 83.1.b; the report must include information on the steps taken to mitigate emissions and corrective measures taken or to be taken.

[18 AAC 50.235(a), 50.326(j)(4), & 50.040(j)(4)]
[40 CFR 71.6(c)(6)]

Open Burning Requirements

68. 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:

68.1. 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

68.2. Include this condition in the annual certification required under Condition 85.

[18 AAC 50.065, 50.040(j), and 50.326(j)]
[40 CFR 71.6(a)(3)]

[20] As defined in 18 AAC 50.990(106), the term "*technology-based emission standard*" means a best available control technology (BACT) standard; a lowest achievable emission rate (LAER) standard; a maximum achievable control technology (MACT) standard established under 40 CFR 63, Subpart B, adopted by reference in 18 AAC 50.040(c); a standard adopted by reference in 18 AAC 50.040(a) or (c); and any other similar standard for which the stringency of the standard is based on determinations of what is technologically feasible, considering relevant factors.

Section 6. General Source Testing and Monitoring Requirements

69. 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) and 50.345(a) & (k)]

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

[18 AAC 50.220(b)]

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

70.2. 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.

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

71.1. 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 CFR 60.

[18 AAC 50.220(c)(1)(A) and 50.040(a)]
[40 CFR 60]

71.2. 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 CFR 61.

[18 AAC 50.040(b) and 50.220(c)(1)(B)]
[40 CFR 61]

71.3. 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 CFR 63.

[18 AAC 50.040(c) and 50.220(c)(1)(C)]
[40 CFR 63]

71.4. 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 11 to record data.

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

71.5. 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 CFR 60, Appendix A.

[18 AAC 50.040(a)(3) and 50.220(c)(1)(E)]
[40 CFR 60, Appendix A]

71.6. Source testing for emissions of PM_{10} and $PM_{2.5}$ must be conducted in accordance with the procedures specified in 40 CFR 51, Appendix M, Methods 201 or 201A and 202.

[18 AAC 50.035(b)(2) & 50.220(c)(1)(F)]
[40 CFR 51, Appendix M]

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

[18 AAC 50.040(c)(32) & 50.220(c)(2)]
[40 CFR 63, Appendix A, Method 301]

72. 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) and 50.990(102)]

73. Test Exemption. The Permittee is not required to comply with Conditions 75, 76 and 77 when the exhaust is observed for visible emissions by Method 9 Plan (Condition 3.3) or Smoke/No Smoke Plan (Condition 3.4).

[18 AAC 50.345(a)]

74. 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)]

75. Test Plans. Except as provided in Condition 73, 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 69 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)]

76. Test Notification. Except as provided in Condition 73, 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)]

77. Test Reports. Except as provided in Condition 73, 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 80. 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)]

78. Particulate Matter Calculations. In source testing for compliance with the particulate matter standards in Conditions 6, 7, and 15.2, the three-hour average is determined using the average of three one-hour test runs.

[18 AAC 50.220(f)]

Section 7. General Recordkeeping and Reporting Requirements

Recordkeeping Requirements

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

79.1. Copies of all reports and certifications submitted pursuant to this section of the permit; and

79.2. 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.

[18 AAC 50.040(a)(1) & (j)(4) and 50.326(j)]
[40 CFR 60.7(f), Subpart A, 40 CFR 71.6(a)(3)(ii)(A) & (B)]

Reporting Requirements

80. 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.

80.1. The Department may accept an electronic signature on an electronic application or other electronic record required by the Department if the person providing the electronic signature

a. uses a security procedure, as defined in AS 09.80.190, that the Department has approved; and

b. accepts or agrees to be bound by an electronic record executed or adopted with that signature.

[18 AAC 50.205, 50.326(j)(3), 50.345(a) & (j), & 50.346(b)(10)]

81. Submittals. Unless otherwise directed by the Department or this permit, the Permittee shall submit to the Department one certified copy of reports, compliance certifications, and/or other submittals required by this permit. The Permittee may submit the documents electronically or by hard copy.

81.1. Submit the certified copy of reports, compliance certifications, and/or other submittals in accordance with the submission instructions on the Department's Standard Permit Conditions web page at http://dec.alaska.gov/air/air-permit/standard-conditions/standard-condition-xvii-submission-instructions/.

[18 AAC 50.326(j)(3) & 50.346(b)(10)]

82. 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 CFR 71.5(a)(2) & 71.6(a)(3)]

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

83.1. **Excess Emissions Reporting.** Except as provided in Condition 66, the Permittee shall report all emissions or operations that exceed emissions standards or limits of this permit as follows:

a. In accordance with 18 AAC 50.240(c), as soon as possible, report

(i) excess emissions that present a potential threat to human health or safety; and

(ii) excess emissions that the Permittee believes to be unavoidable.

b. In accordance with 18 AAC 50.235(a), within two working days after the event commenced or was discovered, report an unavoidable emergency, malfunction, or nonroutine repair that causes emissions in excess of a technology-based emission standard.

c. If a continuous or recurring excess emissions is not corrected within 48 hours of discovery, report within 72 hours of discovery unless the Department provides written permission to report under Condition 83.1.d.

d. Report all other excess emissions not described in Conditions 83.1.a, 83.1.b, and 83.1.c within 30 days after the end of the month during which the excess emissions occurred or as part of the next routine operating report in Condition 84 for excess emissions that occurred during the period covered by the report, whichever is sooner.

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

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

83.2. **Permit Deviations Reporting.** For permit deviations that are not "excess emissions," as defined under 18 AAC 50.990:

a. Report according to the required deadline for failure to monitor, as specified in other applicable conditions of this permit (Conditions 5.3.b and 10.3.b).

b. Report all other permit deviations within 30 days after the end of the month during which the deviation occurred or as part of the next routine operating report in Condition 84 for permit deviations that occurred during the period covered by the report, whichever is sooner.

[18 AAC 50.326(j)(3) & 50.346(b)(2)]

83.3. **Notification Form.** When reporting either excess emissions or permit deviations, the Permittee shall report using either the Department's online form, which can be found at the Division of Air Quality's Air Online Services (AOS) system webpage http://dec.alaska.gov/applications/air/airtoolsweb using the Permittee Portal option, 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. Submit the report in accordance with the submission instructions on the Department's Standard Permit Conditions webpage found at http://dec.alaska.gov/air/air-permit/standard-conditions/standard-conditions-iii-and-iv-submission-instructions/.

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

84. Operating Reports. During the life of this permit[21], the Permittee shall submit to the Department an operating report in accordance with Conditions 80 and 81 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 .

84.1. 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.

84.2. When excess emissions or permit deviations that occurred during the reporting period are not included with the operating report under Condition 84.1, the Permittee shall identify

a. the date of the excess emissions or permit deviation;

b. the equipment involved;

c. the permit condition affected;

d. a description of the excess emissions or permit deviation; and

[21] *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.

e. any corrective action or preventive measures taken and the date(s) of such actions; or

84.3. when excess emissions or permit deviation reports have already been reported under Condition 83 during the period covered by the operating report, the Permittee shall either

a. include a copy of those excess emissions or permit deviation reports with the operating report; or

b. cite the date(s) of those reports.

84.4. The operating report must include, for the period covered by the report, a listing of emissions monitored under Conditions 3.3.e, 3.4.c, and 8.2, which trigger additional testing or monitoring, whether or not the emissions monitored exceed an emission standard. The Permittee shall include in the report

a. the date of the emissions;

b. the equipment involved;

c. the permit condition affected; and

d. the monitoring result which triggered the additional monitoring.

84.5. **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 CFR 71.6(a)(3)(iii)(A)]

85. Annual Compliance Certification. Each year by March 31, the Permittee shall compile and submit to the Department an annual compliance certification report according to Condition 81.

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

a. identify each term or condition set forth in Section 3 through Section 9, that is the basis of the certification;

b. briefly describe each method used to determine the compliance status;

c. state whether compliance is intermittent or continuous; and

d. identify each deviation and take it into account in the compliance certification.

85.2. **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.

85.3. 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 CFR 71.6(c)(5)]

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

86.1. **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 84 for the period covered by the report, a copy of any NSPS and NESHAP 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 online reports submitted during the reporting period.

86.2. **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 50.040(j)(4) and 50.326(j)(4)]
[40 CFR 60.13, 63.10(d) & (f) and 40 CFR 71.6(c)(6)]

Section 8. Permit Changes and Renewal

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

87.1. The Permittee shall provide a copy of each application for modification or renewal of this permit, including any compliance plan, or application addenda, at the time the application or addendum is submitted to the Department;

87.2. The information shall be submitted to the Part 70 Operating Permit Program, US EPA Region 10, Air Permits and Toxics Branch, Mail Stop: 15-H13, 1200 Sixth Avenue, Suite 155, Seattle, WA 98101-3188;

87.3. To the extent practicable, the Permittee shall provide to EPA applications in portable document format (pdf), MS Word format (.doc), or other computer-readable format compatible with EPA's national database management system; and

87.4. The Permittee shall maintain records as necessary to demonstrate compliance with this condition.

[18 AAC 50.040(j)(7), 50.326(a) & (j)(3), and 50.346(b)(7)]
[40 CFR 71.10(d)(1)]

88. 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) and 50.326(j)(4)]
[40 CFR 71.6(a)(8)]

89. Off Permit Changes. The Permittee may make changes that are not addressed or prohibited by this permit other than those subject to the requirements of 40 CFR 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:

89.1. Each such change shall meet all applicable requirements and shall not violate any existing permit term or condition;

89.2. 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;

89.3. The change shall not qualify for the shield under 40 CFR 71.6(f);

89.4. 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) and 50.326(j)(4)]
[40 CFR 71.6(a)(12)]

90. Operational Flexibility. The Permittee may make CAA Section 502(b)(10)[22] 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).

90.1. The Permittee shall provide EPA and the Department with a written notification no less than seven days in advance of the proposed change.

90.2. For each such change, the notification required by Condition 90.1 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.

90.3. The permit shield described in 40 CFR 71.6(f) shall not apply to any change made pursuant to Condition 90.

[18 AAC 50.040(j)(4) and 50.326(j)(4)]
[40 CFR 71.6(a)(13)]

91. Permit Renewal. To renew this permit, the Permittee shall submit to the Department[23] 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 CFR 71.7(b) and 71.5(a)(1)(iii).

[18 AAC 50.040(j)(3) and 50.326(c) & (j)(2)]
[40 CFR 71.5(a)(1)(iii) and 71.7(b) & (c)(1)(ii)]

[22] As defined in 40 CFR 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.

[23] 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

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

92.1. included and specifically identified in the permit; or

92.2. determined in writing in the permit to be inapplicable.

[18 AAC 50.326(j)(3) and 50.345(a) & (b)]

93. 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

93.1. an enforcement action;

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

93.3. denial of an operating permit renewal application.

[18 AAC 50.040(j), 50.326(j) & 50.345(a) & (c)]

94. 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)(3) & (4) and 50.326(j)]
[40 CFR 71.6(c)(3) and 71.5(c)(8)(iii)(A)]

95. 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) and 50.345(a) & (d)]

96. 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

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

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

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

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

[18 AAC 50.326(j)(3) and 50.345(a) & (h)]

97. 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) and 50.326(j)]
[40 CFR 71.6(c)(3) and 71.5(c)(8)(iii)(B)]

Section 10. Permit As Shield from Inapplicable Requirements

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

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

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

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

[18 AAC 50.040(j)(4) and 50.326(j)]
[40 CFR 71.6(f)(3)(i) & (ii)]

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

[18 AAC 50.040(j)(4) and 50.326(j)]
[40 CFR 71.6(f)(1)(ii)]

Table E - Permit Shields Granted

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
1	40 CFR 60.153(a)(3), Monitoring for incinerators combusting both municipal solid waste and sewage sludge	Incinerator does not combust municipal solid waste.
1	40 CFR 60.153(e), Requirements for incinerators other than multiple hearth type.	Incinerator is a multiple hearth, equipped with a wet scrubber system.
1	40 CFR 60.155(c), Semiannual report for incinerators other than multiple hearth type.	Incinerator is a multiple hearth, equipped with a wet scrubber.

[18 AAC 50.326(j)]
[40 CFR 71.6(f)(1)(ii)]

Section 11. Visible Emissions Forms

VISIBLE EMISSIONS OBSERVATION FORM

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

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

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR PERMITS PROGRAM - VISIBLE EMISSIONS OBSERVATION FORM

Page No.

Stationary Source Name	Type of Emission Unit	Observation Date	Start Time	End Time
Emission Unit Location		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 / Clinometer Reading		6		
Distance From Observer Start / End	Direction From Observer Start / End	7		
Describe Emissions & Color Start	End	8		
Visible Water Vapor Present? If yes, determine approximate distance from the No / Yes	stack exit to w here the plume w as read	9		
Point in Plume at Which Opacity Was Determined		10		
Describe Plume Background Start / End	Background Color Start / End	11		
Sky Conditions: Start	End	12		
Wind Speed Start / End	Wind Direction From Start / End	13		
Ambient Temperature	Wet Bulb Temp / RH percent	14		
SOURCE LAYOUT SKETCH: 1 Stack or Point Being Read 2 Wind Direction From 3 Observer Location 4 Sun Location 5 North Arrow 6 Other Stacks		15		
		16		
		17		
		18		
		19		
		20		
		21		
		22		
		23		
		24		
		25		
		26		
		27		
		28		
		29		
Additional Information:		30		
		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:		
		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%:	
In compliance with six-minute opacity limit? (Yes or No)	Highest 18-Consecutive –Minute Average Opacity (%)(engines and turbines only)

Average Opacity Summary:

Set Number	Time			Opacity		Comments
	Start	End		Sum	Average	

Section 12. EEMSP Summary Report Form

FIGURE 1--SUMMARY REPORT--GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE

[Note: This form is referenced in 40 C.F.R. 60.7, Subpart A-General Provisions]

Pollutant *(Circle One)*: SO_2 NO_X TRS H_2S CO Opacity

Reporting period dates: From _____ to _____

Company:
Emission Limitation: _____

Address: _____

Monitor Manufacturer: _____

Model No.: _____

Date of Latest CMS Certification or Audit: _____

Process Unit(s) Description: _____

Total source operating time in reporting period [1]: _____

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

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

[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in 40 C.F.R. 60.7(c) shall be submitted.

Note: On a separate page, describe any changes since last quarter in CMS, process or controls.

I certify that the information contained in this report is true, accurate, and complete.

Name: _____

Signature: _____ *Date*: _____

Title: _____

Section 13. Notification Form[24]

John M. Asplund Water Pollution Control Facility	**AQ0245TVP05**
Stationary Source Name	**Air Quality Permit Number.**

Anchorage Water & Wastewater Utility
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
Note: All "excess emissions" are also "permit deviations." However, use only Section 1 for events that involve excess emissions.

☐ Deviation from Permit Conditions - Complete Section 2 and Certify
Note: Use only Section 2 for permit deviations that do not involve excess emissions.

☐ Deviation from COBC[25], CO[26], or Settlement Agreement - Complete Section 2 and Certify

[24] Revised as of July 22, 2020.

[25] Compliance Order By Consent

[26] Compliance Order

Section 1. Excess Emissions

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

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

☐Start Up/Shut Down
☐Natural Cause (weather/earthquake/flood)
☐Control Equipment Failure
☐Scheduled Maintenance/Equipment Adjustments
☐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. Attach supporting information if necessary.

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

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

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

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

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

(f) **Corrective Actions:**

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

(g) **Unavoidable Emissions:**

Do you intend to assert that these excess emissions were unavoidable? ☐ YES ☐ NO

Do you intend to assert the affirmative defense of 18 AAC 50.235? ☐ YES ☐ NO

Certify Report (<u>go to end of form</u>)

Section 2. Permit Deviations

(a) **Permit Deviation Type:** (Check all boxes that apply per event. Complete a separate form for each event, as applicable.)

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

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

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

EU ID	EU Name	Permit Condition /Potential Deviation

(c) **Description of Potential Deviation:**

Describe briefly what happened and the cause. Include the parameters/operating conditions and the potential deviation. Attach supporting information if necessary.

(d) **Corrective Actions:**

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

Certification:

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

Printed Name:_____Title_____Date _____

Signature:_____ Phone number_____

NOTE: *This document must be certified in accordance with 18 AAC 50.345(j). Read and sign the certification in the bottom of the form above. (See Condition 80.)*

Submit this report in accordance with the submission instructions on the Department's Standard Permit Conditions web page at http://dec.alaska.gov/air/air-permit/standard-conditions/standard-conditions-iii-and-iv-submission-instructions/.

If submitted online, report must be submitted by an authorized E-signer for the stationary source (according to Condition 80).

[18 AAC 50.346(b)(3)]