Request for Qualifications

CITY OF UNALASKA
DUTCH HARBOR POWER PLANT
TITLE V PERMITTING ASSISTANCE
PM-1O TESTING

DPW/DPU Project No. 41-169

Prepared by:

City of Unalaska
Department of Public Utilities
PO Box 610
Unalaska, Alaska 99685
907-581-1260

November 29, 2019

1.0 INTRODUCTION

This is a Request for Qualifications by the City of Unalaska Department of Public Utilities for Consulting Services for the Dutch Harbor Power Plant Title V Permitting Assistance - PM-10 Testing Project (the Project). All questions about this RFQ are to be directed only to the Deputy Director of Public Utilities:

City of Unalaska - Department of Public Utilities
Steve Tompkins, Deputy Director of Public Utilities
stompkins@ci.unalaska.ak.us
907-581-1260

Interpretations or clarifications considered necessary by the City of Unalaska in response to such questions will be issued by Addenda. Addenda will be emailed to all registered potential Respondents and also posted on the City of Unalaska website: www.ci.unalaska.ak.us.

To be added to the registration list published on the City of Unalaska website send an email to: lgregory@ci.unalaska.ak.us

2.0 SCOPE OF SERVICES

The purpose of this RFQ is to obtain professional services for the performance of Alaska Department of Environmental Conservation mandated PM-10 Emissions Testing as a requirement for the Operating Permit for the Dutch Harbor Power Plant. The Consultant will perform PM-10 Source Testing on EU ID #13 or EU ID #14 in accordance with Permit #AQ0215TVP04 Condition 22.1(f). A copy of the Permit is attached as **Attachment "A"**.

3.0 DELIVERABLES

The Deliverables to be supplied by the Consultant are a Summary Report and Associated Calculations for PM-10 Source Testing on EU ID #13 or EU ID #14 provided to the City of Unalaska on or before March 9, 2020.

4.0 SELECTION PROCESS

Only one Statement of Qualifications from any individual, firm, partnership, or corporation, under the same or different names, will be considered. Should it appear to the City of Unalaska that any Respondent is interested in more than one Statement of Qualifications for the work contemplated, then all Statements of Qualifications in which such Respondent is interested will be rejected.

This does not preclude a subcontractor from appearing in more than one Statement of Qualifications. However; our recommendation is that the Statements of Qualifications focus on the project management team rather than other disciplines.

4.1 EVALUATION AND AWARD PROCESS

The Evaluation Team will be appointed by the Deputy Director of Public Utilities from among City of

Unalaska staff. The entire scoring procedure, including Evaluation Team meetings and scoring materials, will be held strictly confidential until after negotiations are concluded.

All Evaluation Team members will be required to certify that they have no conflicts of interest and that they will strictly adhere to the procedures herein described.

- The City of Unalaska receives the Statements of Qualifications.
- Evaluation Team evaluates the Statements of Qualifications according to established criteria.
- The Evaluation Team will schedule and conduct a phone interview with at least the two highest scored Respondents.
- The Evaluation Team re-evaluates the interviewed Respondents according to the established criteria.
- The Deputy Director of Public Utilities reviews final scores and forwards evaluation results to the Director of Public Utilities.
- Negotiation with the Respondent with the highest scored Statement of Qualifications or, if necessary, the next lower scored responsive Respondent and so on. The Contract will be the Consulting Services Agreement, **Attachment "B"**. The City of Unalaska will be inflexible with regards to the Contract language. The Scope of Services, Schedule and Fee for Services are negotiable.
- Director of Public Utilities forwards evaluation results and the Contract to the City Manager.
- City Manager makes their recommendation to the City Council for Contract award, if necessary.

The City of Unalaska and the successful Respondent execute the Contract and a purchase order. The purchase order serves as Notice to Proceed.

4.2 CONDITIONS

The City of Unalaska reserves the right to reject any and all Statements of Qualifications and/or to waive any informality in procedures.

This RFQ does not commit the City of Unalaska to award a Contract, or procure or Contract for any services of any kind whatsoever.

The selection of a successful Respondent shall be at the sole discretion of the City of Unalaska. No agreement between the City of Unalaska and any Respondent is effective until the contract is signed by the City Manager and a purchase order completed.

The City of Unalaska is not liable for any costs incurred by Respondents in preparing or submitting Statements of Qualifications.

In submitting a Statement of Qualifications, each Respondent acknowledges that the City of Unalaska is not liable to any entity for any costs incurred therewith or in connection with costs incurred by any respondent in anticipation of City of Unalaska City Manager approving or disapproving any agreement without limitation.

Any perception of a conflict of interest is grounds for rejections of any Statement of Qualifications. In submitting a Statement of Qualifications, each Respondent certifies that they have not and will not create and/or be party to conflicts of interest with any City of Unalaska official or employee, including but not limited to any direct or indirect financial gain and/or gratuity or kickback or through unauthorized communication with City employees or officials not listed in this RFQ before the selection process is complete.

Nothing in this RFQ or in subsequent negotiations creates any vested rights in any person or entity.

4.3 SOQ DUE DATE AND TRANSMITTAL REQUIREMENTS

Statements of Qualifications must be delivered to the email addresses below by 2:00 p.m., local time, on December 12, 2019.

mveeder@ci.unalaska.ak.us; rwinters@ci.unalaska.ak.us

Statements of Qualifications will only be accepted before and on the published date, and until the time specified.

Statements of Qualifications must be submitted in a single email no larger than 5 **megabytes**. The email header must clearly identify the Project and the Respondent e.g.:

Name of Consulting Firm – Statement of Qualifications for Dutch Harbor Power Plant Title V Permitting Assistance – PM-10 Testing

The City of Unalaska complies with Title II of the American with Disabilities Act of 1990 and the Rehabilitation Act of 1973. Individuals with disabilities who may need auxiliary aids or services or special modifications to participate in the RFQ process should contact the Director of Public Works at 907-581-1260.

4.4 DOCUMENT REQUIREMENTS

Our intent is that the preparation and review of an RFQ is not an overly onerous task. The recommended size of the Statement of Qualifications is about 1-3 pages not including resumes.

One (1) copy of the Statement of Qualifications must be submitted in an electronic PDF file organized with bookmarks and be printable to standard 8.5” x 11” paper.

5.0 EVALUATION FACTORS

The purpose of the Statement of Qualifications is to evaluate each Respondent’s capabilities for efficient execution of the Project. Evaluation criteria and weight are as follows.

Major Factor	**Weight**
1. Professional Qualifications	[40]
2. Experience and References	[30]
3. Narrative	[30]
Total	**[100]**

The Evaluation Team will rank each Respondent using a successive integer ranking system for each major factor. An Evaluator Score for each Respondent will be calculated.

$100 - ((Ranking_1 \times \%\ Weight_1 + Ranking_2 \times \%\ Weight_2 + Ranking_3 \times \%\ Weight_3)-1) \times 5$

The Total Score for each Respondent is an average of all of the Evaluator Scores.

The *Evaluation Score Sheet* will be used by the Evaluation Team to score each Statement of Qualifications; **Attachment "C"**.

5.1 PROFESSIONAL QUALIFICATIONS

The Professional Qualifications section should include:

- A brief description of the number, qualifications and types of key personnel who would serve on this Project including employees and potential subcontractors.
- Identify and furnish resumes of up to three key personnel or subcontractors who will serve in key positions for this project, including specific experience for each person on similar or related projects.
- Billing rates of key personnel in tabular format.
- The location of the home office and the scope of services offered there.
- Any additional information reflecting on the Respondents ability to perform on this Project.

5.2 EXPERIENCE AND REFERENCES

The satisfactory completion of similar projects of equal size and complexity will be an important element in the evaluation.

- Provide information for two (2) projects for which the Respondent has provided services most related to this Project.
- Provide a reference from the above projects that can comment on the firm's professional capabilities and experience. Names, email addresses and phone numbers of individual to contact must be included.

5.3 NARRATIVE WORK PLAN

Describe the methodology the Respondent will use to complete this Project for the City of Unalaska The Narrative Work Plan will later become the basis of the Scope of Services referenced within the Agreement Exhibit "A", **Attachment "B"**.

- Provide information about the Respondent's availability and challenges associated with completing the work in the given time frame.

ATTACHMENT "A" – DUTCH HARBOR POWER PLANT OPERATING PERMIT

THE STATE of ALASKA
GOVERNOR BILL WALKER

Department of Environmental Conservation

DIVISION OF AIR QUALITY
Air Permits Program

410 Willoughby Avenue, Suite 303
PO Box 111800
Juneau, Alaska 99811-1800
Main: 907-465-5100
Toll Free: 866-241-2805
Fax: 907-465-5129
www.dec.alaska.gov

September 14, 2018

Thomas Thomas, City Manager
City of Unalaska
PO Box 610
Unalaska, AK 99685

Subject: Final Air Quality Control Operating Permit AQ0215TVP04 for City of Unalaska, Dutch Harbor Power Plant, File No. 2542.16.006

Dear Mr. Thomas:

Under the authority of AS 46.14 and 18 AAC 50, the Alaska Department of Environmental Conservation (ADEC) is making a final permit decision on the operating permit application for the Dutch Harbor Power Plant.

Enclosed you will find the following documents relevant to this decision:

1. Operating Permit AQ0215TVP04, which satisfies your obligation to obtain an operating permit for the Dutch Harbor Power Plant.

2. The Statement of Basis, which explains ADEC's regulatory and technical basis for the terms and conditions of the operating permit.

3. The Response to Public Comments, which contains a summary of public comments received during this permit action, and ADEC's response to the public comments.

Under Alaska law, the City of Unalaska is required to comply with the terms and conditions of Operating Permit AQ0215TVP04.

A person who has a private, substantive, legally protected interest under state law that may be adversely affected by the permit action, the owner and operator, or, if a public comment process is required or solicited, a person who participated in the public comment process may request an adjudicatory hearing in accordance with 18 AAC 15.195 - 18 AAC 15.340 or an informal review by the Division Director in accordance with 18 AAC 15.185. Informal review requests must be delivered to the Division Director, 410 Willoughby Avenue, Suite 303, PO Box 111800, Juneau, Alaska 99811-1800, within 15 days of receipt of the permit decision by email, facsimile, or mail whichever is earlier. Adjudicatory hearing requests must be delivered to the Commissioner of the Department of Environmental Conservation, 410 Willoughby Avenue, Suite 303, PO Box 111800,

Juneau, Alaska 99811-1800, within 30 days of issuance of the permit decision. If a hearing is not requested within 30 days, the right to appeal is waived. More information on how to appeal an ADEC decision is available at http://dec.alaska.gov/commish/review-guidance

If a hearing is granted, it will be limited to the issues related to this permit decision. You are reminded that, even if a request for an adjudicatory hearing has been granted, all permit terms and conditions remain in full force and effect.

The responsibilities imposed by this operating permit may not be transferred without the written consent of ADEC. The terms and conditions of this operating permit remain effective until modified or revoked by ADEC, regardless of any change in ownership of the source or its emission units.

Please note that Alaska's air quality statutes, regulations, and permit application information can be obtained from ADEC's web page at: http://dec.alaska.gov/air/air-permit

If you have questions, please contact Scott Faber at (907) 269-6883 or at scott.faber@alaska.gov.

Sincerely,

for

James R. Plosay, Manager
Air Permits Program

Enclosures: Operating Permit AQ0215TVP04
Statement of Basis
Response to Comments

cc: Dan Winters (dwinters@ci.unalaska.ak.us)
Donna Celia (donna@hmhconsulting.org)
Doug Hardesty, EPA Region 10
Patrick Dunn, ADEC/APP, Anchorage
Aaron Simpson, ADEC/APP, Juneau
Moses Coss, ADEC/ACP, Fairbanks
Tom Turner, ADEC/ACP, Anchorage
Jason Olds, ADEC/ACP, Juneau
Alan Pefley, ADEC/ACP, Anchorage
Scott Faber, ADEC/APP, Anchorage

DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR QUALITY OPERATING PERMIT

Permit No. AQ0215TVP04

Issue Date: September 14, 2018
Expiration Date: September 14, 2023

The Alaska Department of Environmental Conservation, under the authority of AS 46.14 and 18 AAC 50, issues an operating permit to the Permittee, **City of Unalaska, Department of Public Utilities**, for the operation of the **Dutch Harbor Power Plant (DHPP)**.

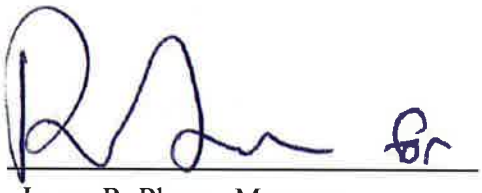
This permit satisfies the obligation of the owner and operator to obtain an operating permit as set out in AS 46.14.130(b).

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.

This operating permit becomes effective October 14, 2018.

Upon effective date of this permit, Operating Permit AQ0215TVP03, including all revisions, expires.



James R. Plosay, Manager
Air Permits Program

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Abbreviations and Acronyms

AAAQS ..... Alaska Ambient Air Quality Standard
AAC ..... Alaska Administrative Code
ADEC ..... Alaska Department of Environmental Conservation
AS ..... Alaska Statutes
ASTM ..... American Society for Testing and Materials
BACT ..... best available control technology
bHp ..... brake horsepower
CAA or The Act . Clean Air Act
CDX ..... Central Data Exchange
CEDRI ..... Compliance and Emissions Data Reporting Interface
CFR ..... Code of Federal Regulations
CO ..... carbon monoxide
DHPP ..... Dutch Harbor Power Plant
dscf ..... dry standard cubic foot
EPA ..... US Environmental Protection Agency
EU ..... emissions unit
FITR ..... fuel injection timing retard
g/kW-hr ..... grams per kilowatt-hour
gph ..... gallons per hour
gr/dscf ..... grain per dry standard cubic foot (1 pound = 7000 grains)
HAPs ..... hazardous air pollutants [as defined in AS 46.14.990]
hp ..... horsepower
ID ..... emissions unit identification number
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
MR&R ..... monitoring, recordkeeping, and reporting
MWh ..... megawatt-hour
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
NSPS ..... New Source Performance Standards [as contained in 40 CFR 60]
O_2 ..... oxygen
PAL ..... plantwide applicability limitation
Pb ..... lead
$PM_{2.5}$ ..... particulate matter less than or equal to a nominal 2.5 microns in diameter
PM_{10} ..... particulate matter less than or equal to a nominal 10 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
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

Section 1. Stationary Source Information

Identification

Permittee:		City of Unalaska, Department of Public Utilities PO Box 610 Unalaska, AK 99685
Stationary Source Name:		Dutch Harbor Power Plant
Location:		53° 53′ 18.6" North; 166° 32′ 14.28" West
Physical Address:		1732 East Point Road Dutch Harbor, Alaska 99685
Owner and Operator:		City of Unalaska, Department of Public Utilities PO Box 610 Unalaska, AK 99685
Permittee's Responsible Official:		Thomas Thomas, City Manager PO Box 610 Unalaska, AK 99685
Designated Agent:		Dan Winters, Director of Public Utilities PO Box 610 Unalaska, AK 99685
Stationary Source and Building Contact:		Andy McCracken, Powerhouse Supervisor PO Box 610 Unalaska, AK 99685 (907) 581-1831
Fee and Permit Contact:		Dan Winters, Director of Public Utilities PO Box 610 Unalaska, AK 99685 (907) 581-1260
Process Description:	SIC Code	4911 - Electric services
	NAICS Code:	221112 - Electric power generation, fossil fuel

[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 listed in Table A have specific monitoring, recordkeeping, or reporting conditions in this permit. Except as noted elsewhere in the permit, emissions unit descriptions and ratings are given for identification purposes only.

Table A - Emissions Unit Inventory

EU ID	Emissions Unit Name	Emissions Unit Description	Fuel	Rating/Size	Installation Date
13	Genset #10	Wärtsilä 12V32C	Diesel	5,211 kWe	2010
14	Genset #11	Wärtsilä 12V32C	Diesel	5,211 kWe	2010
15	Genset #13	Caterpillar C-280	Diesel	4,400 kWe	2011
16	Genset #12	Caterpillar C-280	Diesel	4,400 kWe	2015
17	Genset #15	Caterpillar C-9 DITA	Diesel	250 kWe	2010

[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 13 through 17 listed in Table A to reduce visibility through the exhaust effluent by more than 20 percent averaged over any six consecutive minutes.

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

1.1. For EU IDs 13 through 17, monitor, record, and report in accordance with Conditions 2 through 4.

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

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

Liquid Fuel-Fired Emissions Units (EU IDs 13 through 17)

2. **Visible Emissions Monitoring.** When required by Condition 1.1, or in the event of replacement during the permit term, the Permittee shall observe the exhaust of EU IDs 13 through 17 for visible emissions using either the Method 9 Plan under Condition 2.3 or the Smoke/No-Smoke Plan under Condition 2.4.

2.1. The Permittee may change visible emissions plans for an emissions unit at any time unless prohibited from doing so by Condition 2.5.

2.2. The Permittee may for each unit elect to continue the visible emissions monitoring schedule in effect from the previous permit at the time a renewed permit is issued, if applicable.

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

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

a. **First Method 9 Observation**. Except as provided in Condition 2.2, observe exhaust for 18 minutes within six months after the issue date of this permit.

(i) For any unit, observe exhaust for 18 minutes within 14 calendar days after changing from the Smoke/No-Smoke Plan of Condition 2.4.

(ii) For any unit replaced during the term of this permit, observe exhaust for 18 minutes within 30 days of startup.

b. **Monthly Method 9 Observations**. After the first Method 9 observation, perform 18-minute observations at least once in each calendar month that an emissions unit operates.

c. **Semiannual Method 9 Observations**. After observing emissions for three consecutive operating months under Condition 2.3.b, unless a six-minute average is greater than 15 percent and one or more observations are greater than 20 percent, perform 18-minute observations:

(i) within six months after the preceding observation, or

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

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

(i) within twelve months after the preceding observation; or

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

e. **Increased Method 9 Frequency**. If a six-minute average opacity is observed during the most recent set of observations to be greater than 15 percent and one or more observations are greater than 20 percent, then increase or maintain the 18-minute observation frequency for that emissions unit to at least monthly intervals as described in Condition 2.3.b, until the criteria in Condition 2.3.c for semiannual monitoring are met.

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

a. **Initial Monitoring Frequency**. Observe the exhaust during each calendar day that an emissions unit operates.

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

c. **Smoke Observed**. If smoke is observed, either begin the Method 9 Plan of Condition 2.3 or perform the corrective action required under Condition 2.5.

2.5. **Corrective Actions Based on Smoke/No Smoke Observations**. If visible emissions are present in the exhaust during an observation performed under the Smoke/No Smoke Plan of Condition 2.4, then the Permittee shall either follow the Method 9 Plan of Condition 2.3 or

a. initiate actions to eliminate smoke from the emissions unit within 24 hours of the observation;

b. keep a written record of the starting date, the completion date, and a description of the actions taken to reduce smoke; and

c. after completing the actions required under Condition 2.5.a,

(i) make smoke/no smoke observations in accordance with Condition 2.4

(A) at least once per day for the next seven operating days and until the initial 30-day observation period is completed; and

(B) continue as described in Condition 2.4.b; or

(ii) if the actions taken under Condition 2.5.a do not eliminate the smoke, or if subsequent smoke is observed under the schedule of Condition 2.5.c(i)(A), then observe the exhaust using the Method 9 Plan unless the Department gives written approval to resume observations under the Smoke/No Smoke Plan; after observing smoke and making observations under the Method 9 Plan, the Permittee may at any time take corrective action that eliminates smoke and restart the Smoke/No Smoke Plan under Condition 2.4.a.

3. Visible Emissions Recordkeeping. When required by Condition 1.1, or in the event of replacement of any EU IDs 13 through 17 during the permit term, the Permittee shall keep records as follows:

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

3.1. If using the Method 9 Plan of Condition 2.3,

a. the observer shall record

(i) the name of the stationary source, emissions unit and location, emissions unit type, observer's name and affiliation, and the date on the Visible Emissions Observation Form in Section 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 mode (load or fuel consumption rate or best estimate if unknown) on the sheet at the time opacity observations are initiated and completed;

(iii) the presence or absence of an attached or detached plume and the approximate distance from the emissions outlet to the point in the plume at which the observations are made;

(iv) opacity observations to the nearest five percent at 15-second intervals on the Visible Emission Observation Form in Section 11, and

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

b. To determine the six-minute average opacity, divide the observations recorded on the record sheet into sets of 24 consecutive observations; sets need not be consecutive in time and in no case shall two sets overlap; for each set of 24 observations, calculate the average by summing the opacity of the 24 observations and dividing this sum by 24; record the average opacity on the sheet.

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

3.2. If using the Smoke/No Smoke Plan of Condition 2.4, 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. from Table A, the ID of the emissions unit observed;

c. whether visible emissions are present or absent in the exhaust;

d. a description of the background to the exhaust during the observation;

e. if the emissions unit starts operation on the day of the observation, the startup time of the emissions unit;

f. name and title of the person making the observation; and

g. operating rate (load or fuel consumption rate).

4. Visible Emissions Reporting. When required by Condition 1.1, or in the event of replacement of any of EU IDs 13 through 17 during the permit term, the Permittee shall report visible emissions as follows:

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

4.1. Include in each operating report required under Condition 63:

a. which visible emissions plan of Condition 2 was used for each emissions unit; if more than one plan was used, give the time periods covered by each plan;

b. for each emissions unit under the Method 9 Plan,

(i) copies of the observation results (i.e. opacity observations) for each emissions unit that used the Method 9 Plan, except for the observations the Permittee has already supplied to the Department; and

(ii) a summary to include:

(A) number of days observations were made;

(B) highest six- and 18-consecutive-minute average opacities observed; and

(C) dates when one or more observed six-minute average opacities were greater than 20 percent;

c. for each emissions unit under the Smoke/No Smoke Plan, the number of days that smoke/no smoke observations were made and which days, if any, that smoke was observed; and

d. a summary of any monitoring or recordkeeping required under Conditions 2 and 3 that was not done;

4.2. Report under Condition 62:

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

b. if any monitoring under Condition 2 was not performed when required, report within three days of the date the monitoring was required.

Particulate Matter Emissions Standard

5. Industrial Process and Fuel-Burning Equipment Particulate Matter. The Permittee shall not cause or allow particulate matter emitted from EU IDs 13 through 17 listed in Table A to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.

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

5.1. For EU IDs 13 through 17, monitor, record and report in accordance with Conditions 6 through 7.

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

Particulate Matter MR&R

Liquid Fuel-Fired Emissions Units (EU IDs 13 through 17)

6. Particulate Matter Monitoring for Diesel Engines. The Permittee shall conduct source tests on diesel engines, EU IDs 13 through 17, to determine the concentration of particulate matter in the exhaust of each emissions unit as follows:

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

6.1. Except as allowed in Condition 6.4, within six months of exceeding the criteria of Conditions 6.2.a or 6.2.b, either

a. conduct a particulate matter source test according to requirements set out in Section 6; or

b. make repairs so that emissions no longer exceed the criteria of Condition 6.2; to show that emissions are below those criteria, observe emissions as described in Condition 2.3 under load conditions comparable to those when the criteria were exceeded.

6.2. Conduct the test or make repairs according to Condition 6.1 if

a. 18 consecutive minutes of Method 9 observations result in an 18-minute average opacity greater than 20 percent; or

b. for an emissions unit with an exhaust stack diameter that is less than 18 inches, 18 consecutive minutes of Method 9 observations result in an 18-minute average opacity that is greater than 15 percent and not more than 20 percent, unless the Department has waived this requirement in writing.

6.3. During each one-hour particulate matter source test run, observe the exhaust for 60 minutes in accordance with Method 9 and calculate the average opacity that was measured during each one-hour test run. Submit a copy of these observations with the source test report.

6.4. The automatic particulate matter source test requirements in Conditions 6.1 and 6.2 are waived for an emissions unit if a particulate matter source test on that unit has shown compliance with the particulate matter standard during this permit term.

7. **Particulate Matter Reporting for Diesel Engines**. The Permittee shall report as follows:

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

7.1. Report under Condition 62:

a. the results of any particulate matter source test that exceeds the particulate matter emissions limit; or

b. if one of the criteria of Condition 6.2 was exceeded and the Permittee did not comply with either Condition 6.1.a or 6.1.b, this must be reported by the day following the day compliance with Condition 6.1 was required;

7.2. report observations in excess of the threshold of Condition 6.2.b within 30 days of the end of the month in which the observations occur;

7.3. in each operating report under Condition 63, include:

a. the dates, EU ID(s), and results when an observed 18-minute average was greater than an applicable threshold in Condition 6.2;

b. a summary of the results of any particulate matter testing under Condition 6; and

c. copies of any visible emissions observation results (opacity observations) greater than the thresholds of Condition 6.2, if they were not already submitted.

Sulfur Compound Emissions Standard

8. Sulfur Compound Emissions. The Permittee shall not cause or allow sulfur compound emissions, expressed as SO_2, from EU IDs 13 through 17 to exceed 500 ppm averaged over three hours.

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

Sulfur Compound MR&R

Fuel Oil[1] (EU IDs 13 through 17)

9. Sulfur Compound Monitoring and Recordkeeping. The Permittee shall comply with the following:

9.1. The Permittee shall do one of the following for each shipment of fuel:

a. If the fuel grade requires a sulfur content less than 0.5 percent by weight, keep receipts that specify fuel grade and amount; or

b. If the fuel grade does not require a sulfur content less than 0.5 percent by weight, keep receipts that specify fuel grade and amount and

(i) test the fuel for sulfur content; or

(ii) obtain test results showing the sulfur content of the fuel from the supplier or refinery; the test results must include a statement signed by the supplier or refinery of what fuel they represent.

9.2. Fuel testing under Condition 9.1 must follow an appropriate method listed in 18 AAC 50.035(b)-(c) or 40 CFR 60.17 incorporated by reference in 18 AAC 50.040(a)(1).

9.3. If a load of fuel contains greater than 0.75 percent sulfur by weight, the Permittee shall calculate SO_2 emissions in ppm using either the SO_2 material balance calculation in Section 12 or Method 19 of 40 CFR 60, Appendix A-7, adopted by reference in 18 AAC 50.040(a).

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

10.1. If SO_2 emissions calculated under Condition 9.3 exceed 500 ppm, the Permittee shall report under Condition 62. When reporting under this condition, include the calculation under Section 12 or Method 19.

10.2. The Permittee shall include in the report required by Condition 63

[1] *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.

a. a list of the fuel grades received at the stationary source during the reporting period;

b. for any grade with a maximum fuel sulfur greater than 0.5 percent sulfur, the fuel sulfur of each shipment; and

c. for fuel with a sulfur content greater than 0.75 percent, the calculated SO_2 emissions in ppm.

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

11. Used Oil. The Permittee may burn used oil in the engines only as follows:

11.1. When burning used oil, blend oil into the fuel system consistent with the DHPP Used Oil and Fuel Blending Log to keep the used oil ratio under 0.8%.

11.2. In the operating report required by Condition 63, include copies of the blending logs noting the used oil added and fuel oil added to produce the desired used oil ratio of less than 0.8%.

11.3. Report in accordance with Condition 62 any time the blend ratio deviates from Condition 11.1.

11.4. Whenever used oil is added to liquid fuel, the Permittee shall comply with Condition 19.1.

[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)(1), 71.6(a)(3), & 71.6(c)(6)]

Preconstruction Permit [2] Requirements

12. Stack Requirements. For EU IDs 13, 14, 15, and 17 construct stacks with:

[Condition 5, Construction Permit AQ0215CPT02, Rev 1, 7/20/2010]
[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)(1)]

12.1. sampling ports that comport with 40 CFR 60, Appendix A, Method 1, Section 2.1, and stack or duct free of cyclonic flow at the port location during the applicable test methods and procedures;

12.2. safe access to sampling ports; and

12.3. utilities for emission sampling and testing equipment.

[Conditions 5.a through 5.c, Construction Permit AQ0215CPT02, Rev 1, 7/20/2010]
[40 CFR 71.6(a)(1)]

[2] *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.

Best Available Control Technology (BACT) Requirements

13. NOx BACT Limit for Units 13 and 14. Limit the NOx emission rate, expressed as NO_2 averaged over three hours, from each of EU IDs 13 and 14 to no greater than 13.6 g/kW-hr at all times. Monitor, record, and report as follows:

[Condition 17, Construction Permit AQ0215CPT02, Rev 1, 7/20/2010]
[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)(1)]

13.1. Operate each unit with Fuel Injection Timing Retard (FITR) and with an aftercooler with a separate low temperature cooling water circuit.

13.2. After every engine re-configuration of EU IDs 13 and 14, conduct NOx source tests to ascertain compliance with the NOx emission rate limit in this condition. (Conduct the test on the reconfigured engine.) Conduct the test at 100 percent load. Determine the emission rate in g/kW-hr expressed as NO_2, using exhaust properties determined by Reference Method 19 and exhaust gas measurements as set out in Section 6.

13.3. If any NOx source test results in a NOx emission rate greater than the limit in this condition, report as excess emissions under Condition 62.

[Conditions 17.1, 17.3, 17.4, Construction Permit AQ0215CPT02, Rev 1, 7/20/2010]
[40 CFR 71.6(a)(3)]

14. NOx BACT Limit for EU ID 17. Limit the NOx emission rate, expressed as NO_2 averaged over three hours, from EU ID 17 to no greater than 5.75 g/kW-hr at all times.

[Condition 18.6, Construction Permit AQ0215CPT02, Rev 1, 7/20/2010]
[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)(1)]

14.1. Comply with Condition 27.7.

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

15. BACT Limits for EU ID 15. The Permittee shall limit the emissions from EU ID 15 to the values shown below in Table B. The Permittee shall implement the BACT controls on EU ID 15 listed in Table B.

[Conditions 20 & 20.1, Minor Permit AQ0215MSS03, 11/28/2012]
[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)(1)]

Table B – BACT Limits and Controls for EU ID 15

Pollutant	BACT Control	BACT Emission Limit
NOx	Turbocharger/Aftercooler	9.8 g/kW-hr
PM-2.5	Positive Crankcase Ventilation	0.50 g/kW-hr

15.1. To show compliance with the NOx BACT limit, the Permittee shall comply with the requirements in NSPS Subpart IIII set forth in Conditions 27.7 and 27.10.

[Conditions 20.2 & 20.2b, Minor Permit AQ0215MSS03, 11/28/2012]
[40 CFR 71.6(a)(3)]

15.2. To show compliance with the PM-2.5 BACT limit, the Permittee shall comply with the requirements in NSPS Subpart IIII set forth in Conditions 27.7 and 27.10.

[Conditions 20.3 & 20.3b, Minor Permit AQ0215MSS03, 11/28/2012]
[40 CFR 71.6(a)(3)]

Ambient Air Quality Protection Requirements

16. To protect the annual NO_2 Alaska Ambient Air Quality Standard (AAAQS) and increment; the 24-hour and annual PM-2.5 AAAQS; the 24-hour and annual PM-10 increment; the 1-hour, 3-hour, 24-hour, and annual SO_2 AAAQS and the 3-hour, 24-hour, and annual SO_2 increment, the Permittee shall:

[Condition 15, Minor Permit AQ0215MSS03, 11/28/2012]
[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)(1)]

16.1. For each exhaust stack that is installed and operated on EU IDs 13 through 15 and 17, construct the exhaust stack to have a release point that equals or exceeds an above grade height of the values listed in Table C.

[Condition 15.1, Minor Permit AQ0215MSS03, 11/28/2012]

Table C – Emission Unit Stack Heights

EU ID	Description	Stack Height (m)
13	Wärtsilä 12V32C	26.2
14	Wärtsilä 12V32C	26.2
15	Caterpillar C-280	25.6
17	Caterpillar C-9 DITA	3.66

17. The Permittee shall protect the 1-hour, 3-hour, 24-hour and annual SO_2 AAAQS by complying with the following:

17.1. Construct and maintain EU ID 16 with the minimum stack height of 25.4 meters above grade.

17.2. Construct and maintain EU ID 16 with an uncapped, vertical release. This condition does not preclude the use of flapper valve rain covers, or other similar designs, that do not hinder the vertical momentum of the exhaust plume.

17.3. Burn diesel fuel with a sulfur content of no greater than 0.01 percent by weight (wt%) in EU ID 16.

[Conditions 8 through 10, Minor Permit AQ0215MSS04, 11/24/2014]
[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)(1)]

a. Monitor, record, and report in accordance with Conditions 19.1.a through 19.1.e and 19.1.g.

b. If the fuel sulfur content combusted in EU ID 16 exceeds 0.01 wt%, report in accordance with Condition 62.

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

18. To protect the annual NO_2 increment, the Permittee shall operate EU ID 17 no more than 100 hours per rolling 12-month period.

[Conditions 16 & 16.1, Minor Permit AQ0215MSS03, 11/28/2012]
[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)(1)]

18.1. Install on EU ID 17 a non-resettable hour meter.

18.2. Monitor and record the hours of operation of EU ID 17.

18.3. Before the end of each calendar month calculate and record the total hours of operation for EU ID 17 for the previous month, then calculate the rolling 12-month total hours of operation by adding the previous 11 months.

18.4. Report the monthly and rolling 12-month hours of operation for each month in the operating report required in Condition 63.

18.5. Report in accordance with Condition 62 if the consecutive 12-month operating hours exceed the limit in Condition 18.

[Conditions 16.1a through 16.1e, Minor Permit AQ0215MSS03, 11/28/2012]
[40 CFR 71.6(a)(3)]

19. To protect the 1-hour, 3-hour, 24-hour, and annual SO_2 AAAQS and the 3-hour, 24-hour, and annual SO_2 increment, the Permittee shall burn diesel fuel with a sulfur content of no greater than 0.01 wt%S (100 ppm) in EU IDs 13 through 15 and 17.

[Conditions 17 & 17.1, Minor Permit AQ0215MSS03, 11/28/2012]
[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)(1)]

19.1. Monitor, record, and report as follows:

[Condition 17.1a, Minor Permit AQ0215MSS03, 11/28/2012]
[40 CFR 71.6(a)(3)]

a. Obtain a statement or receipt from the fuel supplier certifying the maximum sulfur content of the fuel for each shipment of fuel delivered to DHPP. If a certified statement or receipt is not available from the supplier, analyze a representative sample of any fuel added to any tank in accordance with Condition 19.1.b.

[Condition 17.1a(i), Minor Permit AQ0215MSS03, 11/28/2012]

b. If required under this permit to determine the sulfur content of fuel oil, analyze fuel sulfur content in accordance with Condition 9.2.

[Condition 17.1a(ii), Minor Permit AQ0215MSS03, 11/28/2012]

c. Except as indicated in Condition 19.1.d, calculate and record the sulfur content, by weight, of the fuel in each tank, after each time fuel is added to a tank, using Equation 1.

[Condition 17.1a(iv), Minor Permit AQ0215MSS03, 11/28/2012]

Equation 1 $$S_T = \frac{(Q_D \times S_D)+(Q_{BD} \times S_{BD})}{Q_T}$$

Where:

Q_D = quantity of delivered fuel, pounds

S_D = sulfur content of delivered fuel, percent sulfur by weight (wt%S)

Q_{BD} = quantity of fuel in tank before delivery, pounds

S_{BD} = sulfur content of fuel in tank before delivery, percent sulfur by weight

S_T = sulfur content of blended fuel in the tank, percent sulfur by weight (will be S_{BD} for next calculation)

Q_T = total quantity of fuel in tank ($Q_D + Q_{BD}$), pounds

d. If the fuel sulfur content in a given tank (S_{BD}) is less than 0.01 wt%S and the sulfur content of a given fuel oil delivery is less than 0.01 wt%S, then the Permittee may forego fuel sulfur content calculations in Condition 19.1.c for that delivery. If the Permittee foregoes fuel sulfur content calculations for a delivery, then for the next fuel delivery for which the fuel sulfur content is greater than 0.01 wt%S, the Permittee shall either

[Condition 17.1a(v), Minor Permit AQ0215MSS03, 11/28/2012]

(i) assume the fuel sulfur content of the fuel in the tank is 0.01 wt%S; or

(ii) test the fuel sulfur content of the fuel in the tank in accordance with Condition 19.1.b.

[Conditions 17.1a(v)(A) & 17.1a(v)(B), Minor Permit AQ0215MSS03, 11/28/2012]

e. Keep records of statements or receipts from the fuel supplier showing sulfur content and quantity of each shipment of fuel under Condition 19.1.a, results of each sulfur measurement required under Condition 19.1.a, and each fuel sulfur calculation conducted under Condition 19.1.c.

f. If the fuel sulfur content combusted in any of EU IDs 13 through 15 and 17 exceeds 0.01 wt%S, report in accordance with Condition 62.

[Conditions 17.1a(vi) & 17.1a(vii), Minor Permit AQ0215MSS03, 11/28/2012]

g. Include copies of the records required by Condition 19.1.e in the operating report required in Condition 63.

[40 CFR 71.6(c)(6)]

20. To protect the 24-hour PM-10 increment and 24-hour PM-2.5 AAAQS, the Permittee shall operate EU ID 17 only 12 hours or less in any rolling 24-hour period.

[Conditions 18 & 18.1, Minor Permit AQ0215MSS03, 11/28/2012]
[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)(1)]

20.1. Record the start and stop times and dates for EU ID 17.

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

20.2. Calculate and record the hours of operation of EU ID 17 for each consecutive 24-hour period.

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

20.3. Include the information in Conditions 20.1 and 20.2 in the operating report required in Condition 63.

[Conditions 18.1a & 18.1b, Minor Permit AQ0215MSS03, 11/28/2012]
[40 CFR 71.6(a)(3) & 71.6(c)(6)]

20.4. Report in accordance with Condition 62 if EU ID 17 is operated for more than 12 hours in any rolling 24-hour period.

[Condition 18.1c, Minor Permit AQ0215MSS03, 11/28/2012]
[40 CFR 71.6(a)(3)]

Owner Requested Limits (ORLs)

21. ORL to Avoid PSD Review for SO_2 and VOCs. The Permittee shall limit emissions of VOCs to no more than 51.2 tons per year and emissions of SO_2 to no more than 46.8 tons per year by complying with the following:

[Condition 22, Minor Permit AQ0215MSS03, 11/28/2012]
[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)(1)]

21.1. Comply with Condition 19.

21.2. Limit the total power production of EU IDs 13 through 15 to no more than 105,803 MWh per rolling 12-month period.

[Conditions 22.2 & 22.3, Minor Permit AQ0215MSS03, 11/28/2012]

a. Maintain on each of EU IDs 13 through 15, a dedicated kilowatt meter with an accuracy of plus or minus two percent.

b. Monitor and record the monthly kilowatts produced on each of EU IDs 13 through 15.

c. Before the end of each month, calculate and record the total MWh of power produced using Equation 2, then calculate the 12-month rolling MWh of power produced by adding the previous 11 months.

[Conditions 22.3a through 22.3c, Minor Permit AQ0215MSS03, 11/28/2012]
[40 CFR 71.6(a)(3)]

Equation 2 $$MWh = \frac{(kW_{13} + kW_{14} + kW_{15})}{1{,}000}$$

Where:

MWh = monthly power production in megawatts for the emissions units

kW = monthly power production in kilowatts for each emissions unit

d. Include copies of the records required in Condition 21.2.c in the operating report required in Condition 63.

e. Report in accordance with Condition 62 if the total power production exceeds the limit in Condition 21.2.

[Conditions 22.3d & 22.3e, Minor Permit AQ0215MSS03, 11/28/2012]
[40 CFR 71.6(a)(3)]

22. ORL to Avoid PSD Review for PM-10. The Permittee shall limit emissions of PM-10 to no more than 22.3 tons per year by complying with the following:

[Condition 23, Minor Permit AQ0215MSS03, 11/28/2012]
[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)(1)]

22.1. Limit the total emissions from EU IDs 13 through 15 and 17 to no more than 22.3 tons per year.

[Condition 23.1, Minor Permit AQ0215MSS03, 11/28/2012]

a. Install a non-resettable hour meter on each of EU IDs 13 through 15 and monitor and record the monthly hours of operation.

[Conditions 23.1a, 23.1a(i), & 23.1a(ii), Minor Permit AQ0215MSS03, 11/28/2012]
[40 CFR 71.6(a)(3)]

b. For EU ID 17, comply with Conditions 18.1 and 18.2.

c. Before the end of each calendar month calculate and record the total PM-10 emissions for the previous month, then calculate the rolling 12-month total hours of operation by adding the previous 11 months. Use Equation 3 with the emission factors in Table D to determine the rolling 12-month PM-10 emissions.

[Conditions 23.1b & 23.1c, Minor Permit AQ0215MSS03, 11/28/2012]
[40 CFR 71.6(a)(3)]

Table D – Department-Approved Emission Factors

EU ID	EF (lb/hr)
13	2.22
14	2.22
15	2.99
17	0.83

Equation 3 $$PM_{10} = \frac{(EF_{13} \times h_{13} + EF_{14} \times h_{14} + EF_{15} \times h_{15} + EF_{17} \times h_{17})}{2{,}000}$$

Where:

PM_{10} = Monthly PM-10 emissions

EF = Department-approved PM-10 emission factor for each emissions unit

h = hours of operation for each emissions unit each month

d. Report the information in Condition 22.1.c in the operating report required in Condition 63.

e. Report in accordance with Condition 62 if the total PM-10 emissions exceed the limit in Condition 22.1.

[Conditions 23.1d & 23.1e, Minor Permit AQ0215MSS03, 11/28/2012]
[40 CFR 71.6(a)(3)]

f. The Permittee shall source test EU ID 13 or 14 for PM-10 emissions within one year of the issue date of this operating permit to verify the emission factor in Table D.

(i) Testing shall be conducted:

(A) In accordance with the requirements of Section 6 of this permit, and

(B) within ± 10 percent of 50 and 75 percent of maximum possible load and within ± 10 percent of 100 percent of maximum possible or maximum achievable load.

(ii) Three one-hour runs shall be conducted at each load specified in Condition 22.1.f(i)(B).

(iii) If source test results show an emission factor greater than that in Table D, the Permittee shall submit a minor permit application under 18 AAC 50.508(6) within 60 days of completing the source test to revise the emission factor in Table 4 of Minor Permit AQ0215MSS03.

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

23. Limit to Avoid Prevention of Significant Deterioration (PSD) Review for PM-10 Emissions. The Permittee shall limit annual PM-10 emissions from EU ID 16 to no more than 6.6 tons.

[Condition 12, Minor Permit AQ0215MSS04, 11/24/2014]
[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)(1)]

23.1. **MR&R for PM-10 Emissions:** Comply with the following:

[Condition 12.1, Minor Permit AQ0215MSS04, 11/24/2014]
[40 CFR 71.6(a)(3)]

a. Install a non-resettable hour meter if one is not already installed. Monitor and record the monthly hours of operation.

b. Before the end of each calendar month calculate and record the PM-10 emissions for the previous month. Calculate the PM-10 emissions for each month using the monthly operating hours recorded in Condition 23.1.a and emission rate of 2.99 pounds per hour (lb/hr).

c. Calculate the rolling 12-month PM-10 emissions by adding the 11 months preceding the month described in Condition 23.1.b. Add the 11-month emission total to the emission total calculated in Condition 23.1.b.

d. Report the PM-10 emissions calculated in Condition 23.1.c in the operating report required in Condition 63.

e. Report in accordance with Condition 62 if the PM-10 emissions calculated in Condition 23.1.c exceed the limit in Condition 23.

[Conditions 12.1a through 12.1e, Minor Permit AQ0215MSS04, 11/24/2014]

Insignificant Emissions Units

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

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

[18 AAC 50.050(a) & 50.055(a)(1)]

24.2. **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)]

24.3. **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)]

24.4. General MR&R for Insignificant Emissions Units

a. The Permittee shall submit the compliance certifications of Condition 64 based on reasonable inquiry;

b. The Permittee shall comply with the requirements of Condition 45;

c. The Permittee shall report in the operating report required by Condition 63 if an emissions unit has historically been classified as insignificant because of actual emissions less than the thresholds of 18 AAC 50.326(e) and current actual emissions become greater than any of those thresholds; and

d. No other monitoring, recordkeeping or reporting is required.

[18 AAC 50.346(b)(4)]

Section 4. Federal Requirements

For this section of this permit, the Department defines the "the Administrator" to mean "the EPA Administrator and the Department".

40 CFR Part 60 New Source Performance Standards

Subpart A

25. New Source Performance Standards (NSPS) Subpart A Notification. For any affected facility[3] or existing facility[4] regulated under NSPS requirements in 40 CFR 60, the Permittee shall furnish the Administrator written notification or, if acceptable to both the Administrator 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]

25.1. A notification of any proposed replacement of components 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.

[3] *Affected facility* means, with reference to a stationary source, any apparatus to which a standard applies, as defined in 40 CFR 60.2.

[4] *Existing facility* means, with reference to a stationary source, any apparatus of the type for which a standard is promulgated in this part, 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.

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

Subpart IIII

27. For EU IDs 15 through 17 listed in Table A, the Permittee shall comply with the following applicable requirements of NSPS Subpart IIII for stationary compression ignition (CI) internal combustion engines (ICE) whose construction, modification, or reconstruction commences after July 11, 2005.

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

27.1. Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in Conditions 27.3 through 27.5 over the entire life of the engine.

[40 CFR 71.6(a)(1)]
[40 CFR 60.4206, Subpart IIII]

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

[40 CFR 71.6(a)(1)]
[40 CFR 60.4218 & Table 8, Subpart IIII]

NSPS Subpart IIII Emission Standards

27.3. For EU IDs 15 and 16, the Permittee must comply with the following emission standards:

a. 9.8 g/kW-hr of THC + NOx

b. 5.0 g/kW-hr of CO

c. 0.50 g/kW-hr of PM

[40 CFR 71.6(a)(1)]
[40 CFR 60.4201(d)(1) & (3) & 60.4204(b), Subpart IIII]

27.4. For EU ID 17, the Permittee must comply with the following emission standards:

a. 4.0 g/kW-hr of NMHC + NOx

b. 3.5 g/kW-hr of CO

c. 0.20 g/kW-hr of PM

[40 CFR 71.6(a)(1)]
[40 CFR 60.4202(a)(2) & 60.4205(b), Subpart IIII]

27.5. Notwithstanding the requirements in Condition 27.4, EU ID 17 may be certified to the provisions of 40 CFR part 94.

[40 CFR 60.4202(g) & (g)(1), Subpart IIII]

27.6. For EU IDs 15 through 17, the Permittee shall comply with the following:

a. Owners and operators who conduct performance tests in-use must meet the not-to-exceed (NTE) standards as indicated in 40 CFR 60.4212.

[40 CFR 71.6(a)(3)]
[40 CFR 60.4204(d) & 60.4205(e), Subpart IIII]

NSPS Subpart IIII Compliance Requirements

27.7. For EU IDs 15 through 17, the Permittee shall comply with the following:

a. You must do all of the following, except as permitted under Condition 27.7.c:

[40 CFR 71.6(a)(3)]
[40 CFR 60.4211(a), Subpart IIII]

(i) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;

(ii) Change only those emission-related settings that are permitted by the manufacturer; and

(iii) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.

[40 CFR 60.4211(a)(1) through (3), Subpart IIII]

b. You must comply with Conditions 27.3 and 27.4 by purchasing an engine certified to the emission standards in Condition 27.3 or 27.4, as applicable, 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 27.7.c.

[40 CFR 71.6(a)(3)]
[40 CFR 60.4211(c), Subpart IIII]

c. If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows:

[40 CFR 71.6(a)(3)]
[40 CFR 60.4211(g), Subpart IIII]

(i) For EU ID 17, 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.

(ii) For EU IDs 15 and 16, 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)(2) & (3), Subpart IIII]

27.8. For EU ID 17, the Permittee shall comply with the following:

a. You must operate the emergency stationary ICE according to the requirements in Conditions 27.8.a(i) through 27.8.a(iii). In order for the engine to be considered an emergency stationary ICE under NSPS Subpart IIII, any operation other than emergency operation, maintenance and testing, and operation in nonemergency situations for 50 hours per year, as described in Conditions 27.8.a(i) through 27.8.a(iii), is prohibited. If you do not operate the engine according to the requirements in Conditions 27.8.a(i) through 27.8.a(iii), the engine will not be considered an emergency engine under NSPS Subpart IIII and must meet all requirements for non-emergency engines.

[40 CFR 71.6(a)(3)]
[40 CFR 60.4211(f), Subpart IIII]

(i) There is no time limit on the use of emergency stationary ICE in emergency situations.

(ii) You may operate your emergency stationary ICE for the purpose specified in Condition 27.8.a(ii)(A) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by Condition 27.8.a(iii) counts as part of the 100 hours per calendar year allowed by this paragraph.

[40 CFR 60.4211(f)(1) & (2), Subpart IIII]

(A) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

[40 CFR 60.4211(f)(2)(i), Subpart IIII]

(iii) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in Condition 27.8.a(ii). Except as provided in Condition 27.8.a(iii)(A), the 50 hours per calendar year for nonemergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

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

(A) The 50 hours per year for nonemergency situations can be used to supply power as part of a financial arrangement with another entity if all of the conditions of 40 CFR 60.4211(f)(3)(i)(A) through (E) are met.

[40 CFR 60.4211(f)(3)(i), Subpart IIII]

NSPS Subpart IIII Test Methods

27.9. Owners and operators who conduct performance tests pursuant to NSPS Subpart IIII must do so according to 40 CFR 60.4212(a) through (e).

[40 CFR 71.6(a)(3)]
[40 CFR 60.4212, Subpart IIII]

NSPS Subpart IIII Notification, Reporting, and Recordkeeping Requirements

27.10. For EU IDs 15 and 16, the Permittee must keep records of the following information:

[40 CFR 71.6(a)(3)]
[40 CFR 60.4214(a) & (a)(2), Subpart IIII]

a. All notifications submitted to comply with NSPS Subpart IIII and all documentation supporting any notification.

b. Maintenance conducted on the engine.

c. Documentation from the manufacturer that the engine is certified to meet the emission standards.

[40 CFR 60.4214(a)(2)(i) through (iii), Subpart IIII]

27.11. If EU ID 17 operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in Condition 27.8.a(iii)(A), you must submit an annual report according to the requirements in 40 CFR 60.4214(d)(1) through (3).

[40 CFR 71.6(a)(3)]
[40 CFR 60.4214(d), Subpart IIII]

40 CFR Part 61 National Emission Standards for Hazardous Air Pollutants

Subparts A & M

28. 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) & (2)(F), & 50.326(j)]
[40 CFR 61, Subparts A & M, and Appendix A]

40 CFR Part 63 National Emission Standards for Hazardous Air Pollutants

Subpart A

29. National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart A. For EU IDs 13 and 14, 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 Subpart ZZZZ, Table 8.

[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)(1)]
[40 CFR 63.6665 & Table 8, Subpart ZZZZ]

Subpart ZZZZ

30. NESHAP Subpart ZZZZ Applicability. For EU IDs 13 through 17 listed in Table A, the Permittee shall comply with the following applicable requirements of NESHAP Subpart ZZZZ for stationary reciprocating internal combustion engines (RICE) located at an area source of hazardous air pollutant (HAP) emissions.

[18 AAC 50.040(c)(23) & (j); 18 AAC 50.326(j)]

40 CFR 71.6((a)(1)
[40 CFR 63.6585 & 63.6590, Subpart ZZZZ]

30.1. For EU IDs 15 through 17, the Permittee must meet the requirements of 40 CFR 63 by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines. No further requirements apply for such engines under 40 CFR 63.

[40 CFR 63.6590(c), Subpart ZZZZ]
[40 CFR 71.6(a)(1)]

NESHAP Subpart ZZZZ Emission Limitations, Operating Limitations, and Other Requirements

30.2. For EU IDs 13 and 14, the Permittee shall comply with the following:

[40 CFR 63.6603(a), (b), & (b)(1); Subpart ZZZZ]
[40 CFR 71.6(a)(1)]

a. You must meet the following requirements, except during periods of startup:

(i) Change oil and filter every 1,000 hours of operation or annually, whichever comes first;

(ii) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and

(iii) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

[Table 2d, Item 1, Subpart ZZZZ]
[40 CFR 71.6(a)(3)]

b. You have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Condition 30.2.a(i). The oil analysis must be performed at the same frequency specified for changing the oil in Condition 30.2.a(i). The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

[40 CFR 63.6625(i) & Table 2d, Subpart ZZZZ]
[40 CFR 71.6(a)(3)]

30.3. For EU IDs 13 and 14, during periods of startup you must minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

[40 CFR 63.6625(h) & Table 2d, Subpart ZZZZ]
[40 CFR 71.6(a)(1)]

NESHAP Subpart ZZZZ General Requirements

30.4. For EU IDs 13 and 14, the Permittee shall comply with the following:

a. You must be in compliance with the requirements under Condition 30 at all times.

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

[40 CFR 63.6605(a) & (b), Subpart ZZZZ]
[40 CFR 71.6(a)(1)]

NESHAP Subpart ZZZZ Requirements for Demonstration of Continuous Compliance with Emission Limitations, Operating Limitations, and Other Requirements

30.5. For EU IDs 13 and 14, you must demonstrate continuous compliance with each requirement in Condition 30.2.a by:

[40 CFR 63.6640(a), Subpart ZZZZ]
[40 CFR 71.6(a)(3)]

a. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or

b. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

[Table 6, Item 9; Subpart ZZZZ]

NESHAP Subpart ZZZZ Recordkeeping Requirements

30.6. For EU IDs 13 and 14, the Permittee shall comply with the following:

a. You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan.

[40 CFR 63.6655(e), Subpart ZZZZ]
[40 CFR 71.6(a)(3)]

b. Your records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1).

c. As specified in 40 CFR 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

d. You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1).

[40 CFR 63.6660(a) through (c), Subpart ZZZZ]
[40 CFR 71.6(a)(3)]

NESHAP Subpart ZZZZ Reporting Requirements

30.7. For EU IDs 13 and 14, the Permittee shall comply with the following:

a. You must report each instance in which you did not meet the requirements in Table 8 to NESHAP Subpart ZZZZ that apply to you.

[40 CFR 63.6640(e), Subpart ZZZZ]
[40 CFR 71.6(a)(3)]

b. You must report all deviations as defined in NESHAP Subpart ZZZZ in the monitoring report required by Condition 63.

[40 CFR 63.6650(f), Subpart ZZZZ]
[40 CFR 71.6(a)(3)]

40 CFR Part 82 Protection of Stratospheric Ozone

31. 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]

32. Subpart G – Significant New Alternatives. The Permittee shall comply with the applicable prohibitions set out in 40 CFR 82.174.

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

33. Subpart H – Halons Emissions Reduction. The Permittee shall comply with the applicable prohibitions set out in 40 CFR 82.270.

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

General NSPS and NESHAP Requirements

34. NESHAP Applicability Determinations. The Permittee shall determine rule applicability and designation of affected sources under National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Source Categories (40 CFR 63) in accordance with the procedures described in 40 CFR 63.1(b) and 63.10(b)(3). If a source becomes affected by an applicable subpart of 40 CFR 63, the Permittee 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).

34.1. 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 and the Department 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), & 63.10(b)(3), Subpart A]

35. NSPS and NESHAP Reports. The Permittee shall:

35.1. **Reports:** Except for 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 63 for the period covered by the report, a copy of any NSPS and NESHAPs reports submitted to the U.S. Environmental Protection Agency (EPA) Region 10. For reports 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; and

35.2. **Waivers**: Upon request by the Department, provide a written copy of any EPA-granted alternative monitoring requirement, custom monitoring schedule or waiver of the federal emission standards, recordkeeping, monitoring, performance testing, or reporting requirements. The Permittee shall keep a copy of each U.S. EPA-issued monitoring waiver or custom monitoring schedule with the permit.

[18 AAC 50.326(j)(4) & 50.040(j)]
[40 CFR 60.13, 63.10(d) & (f) & 40 CFR 71.6(c)(6)]

Section 5. General Conditions

Standard Terms and Conditions

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

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

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

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

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

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

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

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

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

40.1. the stationary source's assessable potential to emit of 1,427 tpy; or

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

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

b. material balance calculations;

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

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

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

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

41.1. no later than March 31 of each year, the Permittee may submit an estimate of the stationary source's assessable emissions to ADEC, Air Permits Program, ATTN: Assessable Emissions Estimate, 410 Willoughby Ave., Suite 303, PO Box 111800, Juneau, AK 99811-1800; the submittal must include all of the assumptions and calculations used to estimate the assessable emissions in sufficient detail so the Department can verify the estimates; or

41.2. if no estimate is submitted on or before March 31 of each year, emission fees for the next fiscal year will be based on the potential to emit set out in Condition 40.1.

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

42. 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)]

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

[18 AAC 50.045(d), 50.040(e), 50. 326(j)(3), & 50.346(c)]

43.1. 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 43.1.a or to address the results of Department inspections that found potential problems; and

(ii) to prevent future dust problems.

43.2. The Permittee shall report according to Condition 45.

44. 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)]

45. Air Pollution Prohibited. No person may permit any emission which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property.

[18 AAC 50.110, 50.040(e), 50.326(j)(3) & 50.346(a)]
[40 CFR 71.6(a)(3)]

45.1. Monitoring, Recordkeeping, and Reporting for Condition 45:

a. If emissions present a potential threat to human health or safety, the Permittee shall report any such emissions according to Condition 62.

b. As soon as practicable after becoming aware of a complaint that is attributable to emissions from the stationary source, the Permittee shall investigate the complaint to identify emissions that the Permittee believes have caused or are causing a violation of Condition 45.

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

(i) after an investigation because of a complaint or other reason, the Permittee believes that emissions from the stationary source have caused or are causing a violation of Condition 45; or

(ii) the Department notifies the Permittee that it has found a violation of Condition 45.

d. The Permittee shall keep records of

(i) the date, time, and nature of all emissions complaints received;

(ii) the name of the person or persons that complained, if known;

(iii) a summary of any investigation, including reasons the Permittee does or does not believe the emissions have caused a violation of Condition 45; and

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

e. With each stationary source operating report under Condition 63, the Permittee shall include a brief summary report which must include

(i) the number of complaints received;

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

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

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

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

46. 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[5] listed in Conditions 13, 14, 15, 27 and 31 (refrigerants), the Permittee shall

46.1. take all reasonable steps to minimize levels of emissions that exceed the standard, and

46.2. report in accordance with Condition 62; 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

47. 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:

47.1. 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

47.2. include this condition in the annual certification required under Condition 64.

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

[5] 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

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

[18 AAC 50.220(a) & 50.345(a) & (k)]

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

[18 AAC 50.220(b)]

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

49.2. 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.

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

50.1. 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) & 50.040(a)]
[40 CFR 60]

50.2. 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) & 50.220(c)(1)(B)]
[40 CFR 61]

50.3. 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) & 50.220(c)(1)(C)]
[40 CFR 63]

50.4. 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 & 50.220(c)(1)(D)]

50.5. 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) & 50.220(c)(1)(E)]
[40 CFR 60, Appendix A]

50.6. Source testing for emissions of $PM_{2.5}$ and PM_{10} 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]

50.7. 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]

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

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

52. Test Exemption. The Permittee is not required to comply with Conditions 54, 55 and 56 when the exhaust is observed for visible emissions by Method 9 Plan (Condition 2.3) or Smoke/No Smoke Plan (Condition 2.4).

[18 AAC 50.345(a)]

53. 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)]

54. Test Plans. Except as provided in Condition 52, 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 48 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)]

55. Test Notification. Except as provided in Condition 52, 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)]

56. **Test Reports.** Except as provided in Condition 52, 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 59. 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)]

57. **Particulate Matter Calculations.** In source testing for compliance with the particulate matter standards in Conditions 5 and 24.2, 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

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

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

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

58.2. Records of all monitoring required by this permit, and information about the monitoring including:

a. the date, place, and time of sampling or measurements;

b. the date(s) analyses were performed;

c. the company or entity that performed the analyses;

d. the analytical techniques or methods used;

e. the results of such analyses; and,

f. the operating conditions as existing at the time of sampling or measurement.

Reporting Requirements

59. 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.

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

a. a certifying authority registered under AS 09.80.020 verifies that the electronic signature is authentic; and

b. the person providing the electronic signature has made an agreement, with the certifying authority described in Condition 59.1.a, that the person accepts or agrees to be bound by an electronic record executed or adopted with that signature.

[18 AAC 50.345(a) & (j), 50.205, & 50.326(j)]
[40 CFR 71.6(a)(3)(iii)(A)]

60. Submittals. Unless otherwise directed by the Department or this permit, the Permittee shall submit reports, compliance certifications, and/or other submittals required by this permit, to ADEC, Air Permits Program, 610 University Ave., Fairbanks, AK 99709-3643, ATTN: Compliance Technician. The Permittee shall submit the documents either by hard copy or electronically.

60.1. Provide electronic submittals, either by:

a. E-mail under a cover letter using dec.aq.airreports@alaska.gov; or

b. using the Department's Air Online Services at http://dec.alaska.gov/applications/air/airtoolsweb/.

[18 AAC 50.326(j)]
[40 CFR 71.6(a)(3)(iii)(A)]

61. 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)]

62. Excess Emissions and Permit Deviation Reports.

62.1. Except as provided in Condition 45, the Permittee shall report all emissions or operations that exceed or deviate from the requirements of this permit as follows:

a. in accordance with 18 AAC 50.240(c), as soon as possible after the event commences or is discovered, report

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

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

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

c. report all other excess emissions and permit deviations

(i) within 30 days after the end of the month during which the emissions or deviation occurred, except as provided in Condition 62.1.c(iii); or

(ii) if a continuous or recurring excess emissions is not corrected within 48 hours of discovery, within 72 hours of discovery unless the Department provides written permission to report under Condition 62.1.c(i); and

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

62.2. When reporting either excess emissions or permit deviations, the Permittee shall report using either the Department's online form, which can be found at http://dec.alaska.gov/applications/air/airtoolsweb, or if the Permittee prefers, the form contained in Section 13 of this permit. The Permittee must provide all information called for by the form that is used.

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

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

63. Operating Reports. During the life of this permit[6], the Permittee shall submit an operating report by August 1 for the period January 1 to June 30 of the current year and by February 1 for the period July 1 to December 31 of the previous year.

63.1. 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.

63.2. When excess emissions or permit deviations that occurred during the reporting period are not included with the operating report under Condition 63.1, the Permittee shall identify

a. the date of the deviation;

b. the equipment involved;

c. the permit condition affected;

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

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

63.3. when excess emissions or permit deviations have already been reported under Condition 62 the Permittee shall cite the date or dates of those reports.

63.4. The operating report must include, for the period covered by the report, a listing of emissions monitored under Conditions 2.3.e and 2.4.c which trigger additional testing or monitoring, whether or not the emissions monitored exceed an emission standard. The Permittee shall include in the report.

a. the date of the emissions;

b. the equipment involved;

c. the permit condition affected; and

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

d. the monitoring result which triggered the additional monitoring.

63.5. **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)]

64. 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 60.

64.1. 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;

64.2. **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.

64.3. In addition, submit a copy of the report directly to the Clean Air Act Compliance Manager, US EPA Region 10, Mail Stop: OCE-101, 1200 Sixth Avenue, Suite 900, Seattle, WA 98101.

[18 AAC 50.205, 50.345(a) & (j), & 50.326(j)]
[40 CFR 71.6(c)(5)]

65. Emission Inventory Reporting. The Permittee shall submit to the Department reports of actual emissions, by emissions unit, of CO, NH_3, NOx, PM_{10}, $PM_{2.5}$, SO_2, VOCs and lead (Pb) (and lead compounds) using the form in Section 14 of this permit, as follows:

65.1. Each year by April 30, if the stationary source's potential to emit for the previous calendar year equals or exceeds:

a. 250 tpy of NH_3, PM_{10}, $PM_{2.5}$ or VOCs; or

b. 2,500 tpy of CO, NO_X or SO_2.

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

a. 0.5 tpy of actual Pb, or

b. 1,000 tpy of CO; or

c. 100 tpy of SO_2, NH_3, PM_{10}, $PM_{2.5}$, NO_X or VOCs.

65.3. For reporting under Condition 65.2, the Permittee shall report in 2015 for calendar year 2014, 2018 for calendar year 2017, 2021 for calendar year 2020, etc., in accordance with the Environmental Protection Agency set schedule.

65.4. Include in the report required by this condition, the required data elements contained within the form in Section 14 or those contained in Table 2A of Appendix A to Subpart A of 40 CFR 51 for each stack associated with an emissions unit.

[18 AAC 50.346(b)(8) & 50.200]
[40 CFR 51.15, 51.30(a)(1) & (b)(1), & 40 CFR 51, Appendix A to Subpart A]

Section 8. Permit Changes and Renewal

66. Permit Applications and Submittals. The Permittee shall comply with the following requirements for submitting application information to the US Environmental Protection Agency (EPA):

66.1. 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;

66.2. The information shall be submitted to the Part 70 Operating Permit Program, US EPA Region 10, Mail Stop: OAW-150, 1200 Sixth Avenue, Suite 900, Seattle, WA 98101.

66.3. 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

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

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

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

[18 AAC 50.040(j)(4) & 50.326(j)]
[40 CFR 71.6(a)(8)]

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

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

68.2. 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;

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

68.4. The Permittee shall keep a record describing changes made at the stationary source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

[18 AAC 50.040(j)(4) & 50.326(j)]
[40 CFR 71.6(a)(12)]

69. Operational Flexibility. The Permittee may make CAA Section 502(b)(10)[7] 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):

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

69.2. For each such change, the notification required by Condition 69.1 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.

69.3. The permit shield described in 40 CFR 71.6(f) shall not apply to any change made pursuant to Condition 69.

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

70. Permit Renewal. To renew this permit, the Permittee shall submit to the Department[8] an application under 18 AAC 50.326 no sooner than March 14, 2022 and no later than March 14, 2023. 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), 50.326(c) & (j)(2)]
[40 CFR 71.5(a)(1)(iii) & 71.7(b) & (c)(1)(ii)]

[7] 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.

[8] 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. General Compliance Requirements

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

71.1. included and specifically identified in the permit; or

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

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

72. 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

72.1. an enforcement action;

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

72.3. denial of an operating permit renewal application.

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

73. For applicable requirements with which the stationary source is in compliance, the Permittee shall continue to comply with such requirements.

[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(c)(3) & 71.5(c)(8)(iii)(A)]

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

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

75. 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

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

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

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

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

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

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

[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(c)(3) & 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.

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

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

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

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

78. 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 50.326(j)]
[40 CFR 71.6(f)(1)(ii)]

Table E - Permit Shields Granted

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
(3) Diesel Storage Tanks (10,000 gallons each)	40 CFR 60 Subpart K	Two tanks were constructed and installed in 1943. The other was built in 1995.
	40 CFR 60 Subpart Ka	Two tanks were constructed and installed in 1943. The other was built in 1995.
	40 CFR 60 Subpart Kb	Two tanks were constructed and installed prior to 1984. The other was constructed after 1984, but has a capacity of 10,000 gallons.

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

Section 11. 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."

- 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, is Plume...: check "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 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.
- Organization: observer's employer.
- 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		Min \ Sec	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 stack exit to where the plume was read: No / Yes		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					
		30					
		Range of Opacity Minimum				Maximum	
I have received a copy of these opacity observations Print Name: / Signature:		Print Observer's Name / Observer's Signature				Date / 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. SO_2 Material Balance Calculation

If a fuel shipment contains more than 0.75 percent sulfur by weight, calculate the three-hour exhaust concentration of SO_2 using the following equations:

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

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

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

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

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

F. = 20.9 – [**vol%$_{dry}O_{2,\ exhaust}$**] = 20.9 – _____ = _____

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

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

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

SO_2 concentration = A ÷ I = _____ ÷ _____ = _____ ppm

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

The fuel weight percent (wt%) of sulfur is obtained pursuant to Condition 9. The fuel weight percents of carbon and hydrogen are obtained from the fuel refiner.

The volume percent of oxygen in the exhaust (**vol%$_{dry}O_{2,\ exhaust}$**) is obtained from oxygen meters, manufacturer's data, or from the most recent analysis under 40 CFR 60, Appendix A-2, Method 3, adopted by reference in 18 AAC 50.040(a), at the same engine load used in the calculation.

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

[18 AAC 50.346(c)]

Section 13. ADEC Notification Form[9]

Dutch Harbor Power Plant — **Stationary Source (Facility) Name**

AQ0215TVP04 — **Air Quality Permit Number.**

City of Unalaska, Department of Public Utilities — **Company Name**

When did you discover the Excess Emissions/Permit Deviation?

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

When did the event/deviation?

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

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

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

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

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

☐ Excess Emissions – Complete Section 1 and Certify

☐ Deviation from Permit Condition – Complete Section 2 and Certify

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

Section 1. Excess Emissions

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

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

☐ Start Up/Shut Down ☐ Natural Cause (weather/earthquake/flood)

☐ Control Equipment Failure ☐ Schedule Maintenance/Equipment Adjustment

☐ Bad Fuel/Coal/Gas ☐ Upset Condition ☐ Other _____

(c) **Description**
Describe briefly, what happened and the cause. Include the parameters/operating conditions exceeded, limits, monitoring data and exceedance.

(d) **Emissions Units Involved:**
Identify the emissions unit involved in the event, using the same identification number and name as in the permit. Identify each emission standard potentially exceeded during the event and the exceedance.

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

[9] Revised as of September 27, 2010.

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

☐ Opacity _____ % ☐ Venting _____ gas/scf ☐ Control Equipment Down

☐ Fugitive Emissions ☐ Emission Limit Exceeded ☐ Recordkeeping Failure

☐ Marine Vessel Opacity ☐ Flaring ☐ Other

(f) **Unavoidable Emissions:**

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

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

Certify Report (go to end of form)

Section 2. Permit Deviations

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

- ☐ Emissions Unit-Specific
- ☐ Failure to Monitor/Report
- ☐ General Source Test/Monitoring Requirements
- ☐ Recordkeeping/Reporting/Compliance Certification
- ☐ Standard Conditions Not Included in the Permit
- ☐ Other Section: _____ (Title of section and section number of your permit).
- ☐ Generally Applicable Requirements
- ☐ Reporting/Monitoring for Diesel Engines
- ☐ Insignificant Emissions Unit
- ☐ Stationary Source Wide

(b) **Emissions Units Involved:**

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

EU ID	EU Name	Permit Condition/ Potential Deviation

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

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

(d) **Corrective Actions:**

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

Certification:

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

Printed Name: _____ Title: _____ Date: _____

Signature: _____ Phone Number: _____

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

To submit this report:

1. Fax to: 907-451-2187

   Or

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

   Or

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

   Or

4. Phone Notifications: 907-451-5173

   Phone notifications require a written follow-up report.

   Or

5. Submission of information contained in this report can be made electronically at the following website: *http://dec.alaska.gov/applications/air/airtoolsweb/.*

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

[18 AAC 50.346(b)(3)]

Section 14. Emission Inventory Form

ADEC Reporting Form **Emission Inventory Reporting** **State of Alaska Department of Environmental Conservation** **Division of Air Quality**	**Emission Inventory Year- [ ]**

Mandatory information is highlighted in bright yellow. Make additional copies as needed.

Stationary Source Detail		
Inventory start date		
Inventory end date		
ADEC ID or Permit Number		
EPA ID:		
Census Area/ Community		
Facility Name		
Facility Physical Location	**Address:**	
	City, State, Zip Code:	
	Latitude:	**Longitude:**
	Legal Description:	
Owner Name & Address & contact number	**Owner Name:**	
	Owner Address:	
	Phone Number:	
Mailing Contact Information	**Mailing Address:**	
Line of Business (NAICS)		
Line of Business (SIC)		
Facility Status:		

Emissions Unit Data			
Specifications			
ID		**Design Capacity**	
Description			
Emissions Unit Status			
Manufacturer		**Manufactured Year**	
Model Number		**Serial Number**	
Regulations			
Regulation/Description:			
Control Equipment (List All if applicable):			
ID			
System Description	-		
Equipment Type(s)			
Manufacturer			
Model			
Control Efficiency (%)			
Capture Efficiency (%)			
Pollutants Controlled		**Reduction Efficiency (%):**	
		Reduction Efficiency (%):	

Processes	
Process	**Primary Process**
SCC Code	(ex. 20100201)
	>
	>
	>
	>
Material Processed	
Period Start	
Period End	
Throughput (units)	
Summer %	
Fall %	

Winter %	
Spring %	
Operational Schedule	
Days/Week	
Hours/Day	
Weeks/Year	
Hours/Year	

Fuel Characteristics			
Heat Content	**Elem. Sulfur Content (%)**	**H2S Sulfur Content**	**Ash Content (if applicable)**

Heating		
Heat Input	**Heat Output**	**Heat Values Convention**

Emissions Operating Type:					
Pollutant	**Emission Factor (EF)**	**EF Numerator**	**EF Denominator**	**EF Source**	**Tons**
Carbon Monoxide (CO)					
Nitrogen Oxides NOx					
PM_{10} Primary (PM_{10}-PRI)					
$PM_{2.5}$ Primary (PM_{25}-PRI)					
Sulfur Dioxide (SO_2)					
Ammonia (NH_3)					
Lead and lead compounds					
Volatile Organic Compounds (VOC)					
Emissions' Release Point					
Release Point ID					
Apportion%					

Process	**Secondary Process**
SCC Code	(ex. 20100201)
	>
	>

	>
	>
Material Processed	
Period Start	
Period End	
Throughput (units)	
Summer %	
Fall %	
Winter %	
Spring %	

Operational Schedule

Days/Week	
Hours/Day	
Weeks/Year	
Hours/Year	

Fuel Characteristics

Heat Content	Elem. Sulfur Content (%)	H2S Sulfur Content	Ash Content (if applicable)

Heating

Heat Input	Heat Output	Heat Values Convention

Emissions Operating Type:

Pollutant	Emission Factor (EF)	EF Numerator	EF Denominator	EF Source	Tons
Carbon Monoxide (CO)					
Nitrogen Oxides NOx					
PM_{10} Primary (PM_{10}-PRI)					
$PM_{2.5}$ Primary (PM_{25}-PRI)					
Sulfur Dioxide (SO_2)					
Ammonia (NH_3)					
Lead and lead compounds					
Volatile Organic Compounds (VOC)					

Emissions' Release Point						
Release Point ID						
Apportion%						

Stack Detail (Release Point)	
> Specifications	
ID	
Type	
Description	
Stack Status	
> Stack Parameters	
Stack Height (ft)	
Stack Diameter (ft)	
Exit Gas Temp (F)	
Exit Gas Velocity (fps)	
Exit Gas Flow Rate (acfm)	
> Geographic Coordinate	
Latitude	
Longitude	
Datum	
Accuracy (meters)	
Base Elevation (meters)	

Certification:

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

Printed Name:_____ Title_____ Date _____

Signature:_____ Phone number_____

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

To submit this report:

1. Fax this form to: 907-465-5129; or
2. E-mail to: DEC.AQ.airreports@alaska.gov; or
3. Mail to: ADEC
   Air Permits Program
   410 Willoughby Ave., Suite 303
   PO Box 111800
   Juneau, AK 99811-1800

Or

4. Direct data entry for emission inventory can be done through the Air Online System (AOS). A myAlaska account is needed to gain access and a profile needs to be set up in Permittee Portal. http://dec.alaska.gov/Applications/Air/airtoolsweb/.

[18 AAC 50.346(b)(9)]

Alaska Department of Environmental Conservation
Air Permits Program

City of Unalaska, Department of Public Utilities
Dutch Harbor Power Plant

STATEMENT OF BASIS

for

Operating Permit No. AQ0215TVP04
September 14, 2018

Prepared by Scott Faber
ADEC AQ/APP (Anchorage)

INTRODUCTION

This document sets forth the statement of basis for the terms and conditions of Operating Permit No. AQ0215TVP04.

STATIONARY SOURCE IDENTIFICATION

Section 1 of Operating Permit No. AQ0215TVP04 contains information on the stationary source as provided in the Title V permit application.

The stationary source is owned and operated by the City of Unalaska, Department of Public Utilities and City of Unalaska, Department of Public Utilities is the Permittee for the stationary source's operating permit. The standard industrial classification (SIC) code for this stationary source is 4911 - Electric services.

The stationary source is a prime power, diesel-electric generating facility that provides electricity to about 550 residential and commercial customers in the Unalaska and Dutch Harbor area. As provided in the application, the stationary source contains five diesel-electric generator sets. The stationary source also includes storage tanks and a Smart Ash burn barrel that are insignificant emission units under 18 AAC 50.326(e).

EMISSIONS UNIT INVENTORY AND DESCRIPTION

Under 18 AAC 50.326(a), the Department requires operating permit applications to include identification of all emissions-related information, as described under 40 CFR 71.5(c)(3).

The emissions units at the Dutch Harbor Power Plant that have specific monitoring, recordkeeping, and reporting requirements are listed in Table A of Operating Permit No. AQ0215TVP04.

Table A of Operating Permit No. AQ0215TVP04 contains information on the emissions units regulated by this permit as provided in the application. The table is provided for informational and identification purposes only. Specifically, the emissions unit rating/size provided in the table is not intended to create an enforceable limit.

EMISSIONS

A summary of the stationary source's potential to emit (PTE)[1] and assessable PTE is shown in the table below.

Table F - Emissions Summary, in Tons Per Year (tpy)

Emissions	NO_X	CO	PM_{10}	SO_2	VOC	CO_2e[1]	HAPs	Total[2]
PTE	1,239.5	102.3	31.0	4.8	53.8	70,369.8	0.68	1,431.4
Assessable PTE	1,240	102	31	0	54	0	0	1,427

Table Notes:

[1] CO_2e emissions are defined as the sum of the mass emissions of each individual GHG adjusted for its global warming potential.

[2] Total PTE and total assessable PTE shown in the table do not include CO_2e and HAPs.

The assessable PTE listed under Condition 40.1 is the sum of the PTE of each individual air pollutant, other than greenhouse gases (GHGs), for which the stationary source has PTE of 10 tpy or greater. The emissions listed in Table F are estimates that are for informational use only. The listing of the emissions does not create an enforceable limit for the stationary source.

For criteria pollutants and GHGs, emissions are as provided in the application. However, the Department also included the emissions from the Smart Ash burn barrel. The PTE for this unit was calculated using emission factors from Table 2.1-12 (industrial/commercial, single chamber for combustor type) in EPA's AP 42.

The Department also calculated HAP emissions using emission factors from EPA's AP 42.

BASIS FOR REQUIRING AN OPERATING PERMIT

In accordance with AS 46.14.130(b), an owner or operator of a Title V source[2] must obtain a Title V permit consistent with 40 CFR Part 71, as adopted by reference in 18 AAC 50.040.

Except for sources exempted or deferred by AS 46.14.120(e) or (f), AS 46.14.130(b) lists the following categories of sources that require an operating permit:

- A major source;
- A stationary source, including an area source, subject to federal New Source Performance Standards (NSPS) under Section 111 of the Clean Air Act or National Emission Standards for Hazardous Air Pollutants (NESHAP) under Section 112 of the Clean Air Act;
- Another stationary source designated by the Federal Administrator by regulation.

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

[2] *Title V source* means a stationary source classified as needing a permit under AS 46.14.130(b) [ref. 18 AAC 50.990(111)].

The Permittee is required to obtain an operating permit for the Dutch Harbor Power Plant as specified under 18 AAC 50.326(a) and 40 CFR 71.3(a), because the stationary source is a major source. This stationary source is a major source because, as defined in Section 302 of the Clean Air Act, it directly emits, or has the potential to emit, 100 tpy or more of any air pollutant subject to regulation.

AIR QUALITY PERMITS

Permits to Operate

The last permit to operate issued for this stationary source was Permit to Operate No. 9625-AA003. This permit to operate included all construction authorizations issued through November 9, 1994, and was issued before January 18, 1997 (the effective date of the divided Title I/Title V permitting program). All stationary source-specific requirements established in this permit were included Operating Permit 215TVP01. However, all of the emissions units authorized in the permit to operate have been shut down and removed.

Title I (Construction and Minor) Permits

Construction Permit No. AQ0215CPT01. The application for this permit was withdrawn.

Construction Permit No. AQ0215CPT02. The Department issued this permit on January 31, 2007 for the installation of EU IDs 13 through 18. EU IDs 13, 14, 17, and 18 were to be installed as Phase I of the project and EU IDs 15 and 16 were to be installed as Phase II.

- Revision No. 1. The Department issued this revision to more clearly define the emission units covered under Phase I and Phase II and to correct other typographical errors. All stationary source-specific requirements established in this permit are included in Operating Permit No. AQ0215TVP04 as described in Table H below.

Construction Permit No. AQ0215CPT03. The Department issued this permit on July 14, 2011 to revise specific conditions of Construction Permit AQ0215CPT02. Additionally, EU ID 16 was no longer part of Phase II, and the Department removed authorization to construct the unit.

- Revision No. 1. The Department issued this revision to correct a material mistake in Condition 18.1. This permit was rescinded by Minor Permit AQ0215MSS03.

Construction Permit No. AQ0215CPT04. The application for this permit was withdrawn.

Minor Permit No. AQ0215MSS01. The application for this permit was withdrawn.

Minor Permit No. AQ0215MSS02. The application for this permit was withdrawn.

Minor Permit No. AQ0215MSS03. The Department issued this permit on November 28, 2012 to revise stack height requirements and operational requirements for certain emission units. The permit rescinds Construction Permit AQ0215CPT03, Rev 1. All stationary source-specific requirements established in this permit are included in Operating Permit No. AQ0215TVP04 as described in Table H below.

Minor Permit No. AQ0215MSS04. The Department issued this permit on November 24, 2014 to authorize installation of an engine as EU ID 16. All stationary source-specific requirements established in this permit are included in Operating Permit No. AQ0215TVP04 as described in Table I below.

Title V Operating Permits

Operating Permit No. 215TVP01. The Department issued this permit on July 28, 2000.

- Revision No. 1. The Department issued an administrative amendment on September 16, 2002 for the emission fee condition.

Operating Permit No. AQ0215TVP02. The Department issued this permit on August 8, 2007.

- Revision No. 1. The Department issued a significant modification on November 22, 2010 to include the conditions of Construction Permit AQ0215CPT02 and to allow used oil to be blended with diesel fuel in accordance with the Department approval letter dated May 28, 2009.
- Revision No. 2. The Department issued an administrative amendment on October 25, 2011 to include the conditions of Construction Permit AQ0215CPT03, Rev 1.

Operating Permit No. AQ0215TVP03. The Department issued this permit on May 10, 2013.

- Revision No. 1. The Department issued an administrative amendment on January 16, 2015 to include the conditions of Minor Permit AQ0215MSS04.

The Department received the application for Operating Permit AQ0215TVP04 on November 3, 2017.

COMPLIANCE HISTORY

The stationary source has operated at its current location since 1986. Review of the permit files for this stationary source, which includes the past inspection reports and compliance evaluations shows eight non-compliance determinations from 2009 to 2016. The Department closed all of these cases without any formal enforcement action.

APPLICABLE REQUIREMENTS FROM PRECONSTRUCTION PERMITS

Incorporated by reference at 18 AAC 50.326(j), 40 CFR Part 71.2 defines "applicable requirement" to include the terms and conditions of any preconstruction permit issued under rules approved in Alaska's State Implementation Plan (SIP).

Alaska's SIP includes the following types of preconstruction permits:

- 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.

Preconstruction permit terms and conditions include both source-specific conditions and conditions derived from regulatory applicable requirements such as standard conditions, generally applicable conditions, and conditions that quote or paraphrase requirements in regulation.

These requirements include, but are not limited to, each emissions unit- or source-specific requirement established in permits issued under 18 AAC 50 that are still in effect at the time of issuance of Operating Permit No. AQ0215TVP04. Table G, Table H, and Table I below lists the requirements carried into Operating Permit No. AQ0215TVP04 to ensure compliance with the preconstruction permit requirements.

Table G - Comparison of Construction Permit No. AQ0215CPT02, Rev 1 Conditions to Operating Permit No. AQ0215TVP04 Conditions

AQ0215CPT02, Rev 1 Condition No.	Description of Requirement	AQ0215TVP04 Condition No.	How Condition was Revised
5	Stack requirements	12	Did not include EU ID 16 because authorization to construct that engine was removed with Construction Permit AQ0215CPT03. EU ID 16 was re-permitted later under Minor Permit AQ0215MSS04.
11	Phase I ORL	None	Phase I has ended.
12	Phase I PSD avoidance for SO_2	None	Phase I has ended.
13, 14, & 16	Phase II limits for PSD avoidance	None	Conditions are rescinded by Condition 21 of Minor Permit AQ0215MSS03.
15	Phase I limit for PSD avoidance	None	Condition is rescinded by Condition 21 of Minor Permit AQ0215MSS03.
17	NOx BACT for EU IDs 13 & 14	13	Did not include Condition 17.2 of Construction Permit AQ0215CPT02, Rev 1 because the Permittee has complied with the one-time requirement. Did not include initial source test requirements from Condition 17.3 of Construction Permit AQ0215CPT02, Rev 1 because the Permittee has previously complied with these one-time requirements.
18	NOx BACT for EU IDs 15 & 16	None	With the issuance of Construction Permit AQ0215CPT03, the limit for EU ID 15 was revised, and the installation of EU ID 16 was no longer authorized. Conditions 18.1 through 18.5 are rescinded by Condition 19 of Minor Permit AQ0215MSS03.

AQ0215CPT02, Rev 1 Condition No.	Description of Requirement	AQ0215TVP04 Condition No.	How Condition was Revised
18.6	NOx BACT for EU ID 17	14	Not revised.
19	Reassessment of NOx BACT for Phase II	None	A new BACT analysis was conducted for Construction Permit AQ0214CPT03.
20 & 22	Stack configuration and Phase II requirements	None	Conditions are rescinded by Condition 14 of Minor Permit AQ0215MSS03.
21	Phase I requirements	None	Phase I has ended.
23 through 36	NSPS Subpart IIII requirements	27	Subpart IIII requirements are included in Operating Permit AQ0215TVP04 as currently applicable.
37	Maintenance requirements	None	EU IDs 13, 14, and 17 comply with NSPS Subpart IIII and NESHAP Subpart ZZZZ for these requirements. EU IDs 15 and 16 were not constructed under Construction Permit AQ0215CPT02. EU ID 18 is listed as a 10,000 gallon diesel storage tank with an estimated construction date of 2007. The application for Operating Permit AQ0215TVP04 includes three 10,000 gallon diesel storage tanks, but lists the construction dates as 1948 and 1995. Therefore, the Department does not have any record of construction for EU ID 18.

Table Note: This table does not include all standard and general conditions.

Table H - Comparison of Minor Permit No. AQ0215MSS03 Conditions to Operating Permit No. AQ0215TVP04 Conditions

AQ0215MSS03 Condition No.	Description of Requirement	AQ0215TVP04 Condition No.	How Condition was Revised
15 through 18	Ambient air quality requirements	16 and 18 through 20	Did not include EU IDs 7 and 8 from Condition 15.1 of Minor Permit AQ0215MSS03 because those units have been removed. Did not include Condition 15.2 of Minor Permit AQ0215MSS03 because the Permittee has complied with the one-time requirement. Did not include Condition 17.1a(iii) of Minor Permit AQ0215MSS03 because the Permittee has complied with the one-time requirement.
20	BACT requirements for EU ID 15	15	Did not include the initial compliance requirements from Conditions 20.2a and 20.3a of Minor Permit AQ0215MSS03 because the Permittee has complied with the one-time requirements.
22 & 23	ORLs for PSD avoidance	21 & 22	Did not include EU IDs 1 through 8 since those units have been removed.
24 through 36	NSPS and NESHAP requirements for EU ID 15	25 through 27, 29, & 30	NSPS and NESHAP requirements for EU ID 15 are included in Operating Permit AQ0215TVP04 as currently applicable.

Table Note: This table does not include all standard and general conditions.

Table I - Comparison of Minor Permit No. AQ0215MSS04 Conditions to Operating Permit No. AQ0215TVP04 Conditions

AQ0215MSS04 Condition No.	Description of Requirement	AQ0215TVP04 Condition No.	How Condition was Revised
2	Maintenance and notification requirements for EU ID 16	None	The Permittee has complied with the one-time notification requirements. EU ID16 complies with NSPS Subpart IIII for the maintenance requirements.
8 through 10	Ambient air quality requirements	17	Did not include Conditions 8.1 and 9.1 of Minor Permit AQ0215MSS04 because the Permittee has complied with the one-time requirements.
11	ORLs for PSD avoidance	None	The Permittee has complied with the one-time requirements.
12	ORLs for PSD avoidance	23	Did not include the initial performance test requirements of Condition 12.2 of Minor Permit AQ0215MSS04 because the Permittee has complied with the one-time requirements.
13	NOx emission rate verification for EU ID 16	None	The Permittee has complied with the one-time requirements.

Table Note: This table does not include all standard and general conditions.

NON-APPLICABLE REQUIREMENTS

This section discusses standard conditions and other requirements that are not included in the operating permit for specific reasons.

- **40 CFR 60 Subpart EEEE – Standards of Performance for Other Solid Waste Incineration Units for Which Construction is Commenced After December 9, 2004, or for Which Modification or Reconstruction is Commenced on or After June 16, 2006:** The smart ash unit was constructed prior to December 9, 2004. Therefore, Subpart EEEE requirements are not applicable.
- **40 CFR 64 Compliance Assurance Monitoring (CAM):** None of the emissions units at the stationary source use a control device to achieve compliance with emission limits or standards. Therefore, CAM requirements are not applicable.

STATEMENT OF BASIS FOR THE PERMIT CONDITIONS

The Department adopted regulations from 40 CFR 71, as specified in 18 AAC 50.040(j), in addition to creating state regulations, to establish an operating permit program. The EPA fully approved the Alaska Operating Permit Program on November 30, 2001, as noted in Appendix A to 40 CFR 70. This Statement of Basis, required under 40 CFR 71.11(b), provides the legal and factual basis for each condition of Operating Permit No. AQ0215TVP04. Additionally and as required by 40 CFR 71.6(a)(1)(i), the state and federal regulations for each permit condition are cited in the permit.

Conditions 1 through 4, Visible Emissions Standard and MR&R

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

- 18 AAC 50.055(a) applies to the operation of fuel-burning equipment and industrial processes. EU IDs 13 through 17 are fuel-burning equipment or industrial processes.

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

Factual Basis: Condition 1 prohibits the Permittee from causing or allowing visible emissions in excess of the applicable standard in 18 AAC 50.055(a)(1). MR&R requirements are listed in Conditions 2 through 4 of the permit. These conditions have been adopted into regulation as Standard Operating Permit Condition IX. The Department has modified these conditions, as follows:

- Made the last two sentences in Condition 2 of Standard Operating Permit Condition IX sub-conditions (Conditions 3.1 and 3.2) to facilitate cross-referencing of specific statements.
- Added reference to the newly created Condition 2.2 in Condition 2.3.a (formerly Condition 3.1.a of Standard Operating Permit Condition IX), to clarify an additional exception for the requirement to conduct a First Method 9 observation within six months after the issue date of the renewal permit; i.e., if the Permittee elects to continue visible emissions monitoring schedule from the previous permit.

The Permittee must establish by visual observations, which may be supplemented by other means, such as a defined Stationary Source Operation and Maintenance Program, that the stationary source is in continuous compliance with the state standards for visible emissions.

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

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

Liquid Fuel-Fired Equipment:

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

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

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

Conditions 5 through 7, Particulate Matter Standard and MR&R

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

- 18 AAC 50.055(b)(1) applies to the operation of fuel-burning equipment and industrial processes. EU IDs 13 through 17 are fuel-burning equipment or industrial processes.

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

Factual Basis: Condition 5 prohibits emissions in excess of the applicable state particulate matter standard. MR&R requirements are listed in Conditions 6 and 7 of the permit. These conditions have been adopted into regulation as Standard Operating Permit Condition IX. The Department did not include the requirement from the standard condition to record and report the exhaust stack diameters of the emissions units. These one-time requirements have already been fulfilled.

Liquid Fuel-Fired Equipment:

Monitoring – The Permittee is required to conduct particulate matter source testing or make repairs to reduce visible emissions if threshold values for opacity are exceeded.

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

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

Conditions 8 through 10, Sulfur Compound Emissions Standard and MR&R

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

- 18 AAC 50.055(c) applies to the operation of fuel-burning equipment and industrial processes. EU IDs 13 through 17 are fuel-burning equipment or industrial processes.

These sulfur compound standards apply because they are contained in the federally-approved SIP. The Department included permit conditions for MR&R as required by 40 CFR 71.6(a)(3) and 71.6(c)(1).

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

Liquid Fuels:

For oil fired fuel burning equipment, the MR&R conditions are Standard Operating Permit Conditions XI and XII, adopted into regulation pursuant to AS 46.14.010(e). These conditions have been modified in this permit as follows. The Department corrected Condition 9.2 to replace the text *"...method listed in 18 AAC 50.035 or an alternative method approved by the Department*" with *"...method listed in 18 AAC 50.035(b)-(c) and 40 CFR 60.17 incorporated by reference in 18 AAC 50.040(a)(1)".* The text *"...or an alternative method approved by the Department"* was discarded during the Revised Action Plan submitted to EPA on July 15, 2007, as a result of the EPA Audit of the September 2006 Title V Program Review. This text is not to be used in subsequent permits since it allows a Permittee to bypass the public process for changing monitoring requirements by submitting off-record requests to change monitoring methods.

Condition 11, Used Oil Requirements

Legal Basis: This condition ensures compliance with state particulate matter emission standard when used oil is added to diesel fuel. As previously stated, the particulate matter standard is contained in the federally-approved SIP.

Factual Basis: Because of various metal contaminants, used oil may have higher particulate emissions and sulfur emissions than virgin fuel oil. In a letter dated May 28, 2009, the Department approved a method for blending used oil with fuel oil. The method keeps the used oil ratio under 0.8%.

At low blend ratios ($\leq$ 0.80% used oil), the Department concludes there is probably no significant difference between the fuel properties of the blended fuel and that of regular fuel oil after normal contamination from storage & transfer systems and handling. The Department expects the blended fuel will still meet ASTM No. 2 diesel fuel specification.

With a fuel blend of 0.8 percent or less of used oil the state sulfur standard will be met. However, monitoring must be conducted when used oil is added to fuel to ensure the ambient air quality limit of 0.01 percent fuel sulfur is met.

Conditions 12 through 23, Preconstruction Permit Requirements

Legal Basis: The Permittee is required to comply with all stationary source-specific requirements that were carried forward from previous SIP-approved Permits to Operate issued on or before January 17, 1997 and operating permits issued between January 18, 1997 and September 30, 2004, and with all stationary source-specific requirements in EPA PSD permits, SIP-approved construction permits, SIP-approved minor permits, and owner requested limits established under 18 AAC 50.225. These requirements include Best Available Control Technology (BACT) limits, limits to ensure compliance with the attainment or maintenance of ambient air quality standards or maximum allowable ambient

concentrations, and owner requested limits. Requirements from the permits listed above apply because they were originally developed through case-by-case action under a federally-approved SIP or approved operating permit program.

Factual Basis: EU IDs 13 through 15 and 17 have NOx BACT limits. NOx source testing is required for EU IDs 13 and 14 anytime an engine is reconfigured to show the engine continues to meet the NOx BACT limit. The NOx limits in NSPS Subpart IIII for EU IDs 15 and 17 are as stringent or more stringent than the NOx BACT limits. The Permittee must demonstrate compliance with the NOx BACT limits by following the compliance requirements for NOx in NSPS Subpart IIII, which includes purchasing an engine that is certified to meet the emissions standard.

EU ID 15 also has a BACT limit for PM-2.5, which is equal to the limit for PM for EU ID 15 in NSPS Subpart IIII. Therefore, the Permittee also demonstrates compliance with the PM-2.5 BACT limit by following the compliance requirements for PM in NSPS Subpart IIII.

The PSD avoidance limits of 51.2 tpy for VOC and 46.8 tpy for SO_2 were established in Construction Permit AQ0215CPT03, which contained requirements for EU IDs 7, 8, 13 through 15 and 17. The limits were established to prevent VOC and SO_2 emissions increases from exceeding 39.9 tpy each. The limits are operationally achieved by limiting EU IDs 13 through 15 (EU IDs 7 and 8 have been removed) to no more than 105,803 MWh in any 12 consecutive month period. MR&R requirements include monitoring and recording total combined MWh for EU IDs 13 through 15.

Total PM-10 emissions from EU IDs 13 through 15 and 17 are limited to no more than 22.3 tpy to avoid PSD permit requirements. MR&R requirements include monitoring hours of operation of each engine and calculating PM-10 emissions using emission factors provided in the operating permit. Limits for ambient air quality require EU ID 17 to operate 12 hours or less each day and 100 hours or less each year. Therefore, the Department is not requiring source testing of EU ID 17 in Operating Permit AQ0215TVP04 to verify the PM-10 emission factor. EU ID 15 is identical to EU ID 16, and has the same PM-10 emission factor in the operating permit. The Department is not requiring testing of EU ID 15 to verify the emission factor for the reasons stated in the following paragraph for EU ID 16. The Department does not have a record of any PM-10 source testing for verification of the emission factors for EU IDs 13 and 14. Therefore, source testing must be conducted within one year of the issue date of Operating Permit AQ0215TVP04.

PM-10 emissions for EU ID 16 are limited to 6.6 tpy to avoid PSD permit requirements. MR&R requirements include monitoring hours of operation and calculating emissions using an emission factor of 2.99 lb/hr. This emission factor is based on the manufacturer-provided emission rate of 0.59 g/kW-hr for 50 percent load. The manufacturer data provided also shows the lb/hr emission rate at 50 percent load is greater than that at 75, 100, and 110 percent load. A source test conducted in 2015 showed emissions of 2.85 lb/hr, and the engine is subject to the PM limit in NSPS Subpart IIII of 0.5 g/kW-hr. The Permittee complies with Subpart IIII by purchasing an engine certified to meet the emission standards of the subpart. Therefore, the Department is not requiring additional source testing in Operating Permit AQ0215TVP04.

Condition 24, Insignificant Emissions Units

Legal Basis: The Permittee is required to meet the state emission standards in 18 AAC 50.050(a) for all incinerators regardless of size and 18 AAC 50.055 for all industrial processes and fuel-burning equipment regardless of size. As previously noted, 18 AAC 50.050(a) and 50.055 are contained in the federally-approved SIP. The Department also added permit conditions for MR&R as required by 40 CFR 71.6(a)(3) and 71.6(c)(1).

Factual Basis: The condition requires insignificant emissions units to comply with the state emission standards for visible emissions, particulate matter emissions, and sulfur-compound emissions. Insignificant emissions units are not generally listed in operating permits unless specific monitoring, recordkeeping and reporting are necessary to ensure compliance. However, the Permittee may not cause or allow insignificant emission units at the stationary source to violate these standards whether or not they are listed in the operating permit.

The Department finds that the insignificant units at this stationary source do not require specific monitoring, recordkeeping and reporting to ensure compliance with the state emission standards. The permit condition requires certification that the units did not exceed state emission standards during the previous year and did not emit any prohibited air pollution. The Department used the language in Standard Operating Permit Condition V for the permit condition.

Conditions 25 and 26, 40 CFR 60 Subpart A Requirements

Legal Basis: New Source Performance Standards (NSPS)[3] are included in the applicable requirement definition under 40 CFR 71.2, which the Department adopted under 18 AAC 50.040(j)(1). Under 40 CFR 60.1(a), the provisions of 40 CFR 60 apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication in 40 CFR 60 of any standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility. EU IDs 15 through 17 affected facilities under NSPS Subpart IIII. Therefore the Permittee must comply with the applicable requirements of Subpart A.

Factual Basis: In general, the intent of NSPS requirements is to provide technology-based emission control standards for new, modified, and reconstructed affected facilities. NSPS Subpart A contains the general requirements for 40 CFR 60.

Condition 25.1 requires notification for any proposed replacement of components of an existing facility in the event that the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable, entirely new facility.

Condition 26 prohibits concealment of emissions in accordance with 40 CFR 60.12.

[3] EPA has not delegated to the Department the authority to administer the NSPS program as of the issue date of this permit.

Condition 27, 40 CFR 60 Subpart IIII Requirements

Legal Basis: The Department adopted the requirements of NSPS Subpart IIII under 18 AAC 50.040(a)(2). NSPS Subpart IIII applies to stationary compression ignition internal combustion engines (CI ICE) that commence construction, modification, or reconstruction after July 11, 2005 where the stationary CI ICE are manufactured after April 1, 2006 for non-fire pump engines and after July 1, 2006 for certified fire pump engines. EU IDs 15 through 17 are subject to Subpart IIII requirements because they are generator engines constructed after July 11, 2005 and manufactured after April 1, 2006. EU ID 17 is an emergency engine under Subpart IIII. For EU IDs 13 and 14, the Permittee entered into a purchase contract for the engines in 2004. Therefore, construction of these engines commenced prior to July 11, 2005 and these engines are not subject to the requirements of Subpart IIII.

Factual Basis: These conditions incorporate the Subpart IIII emissions standards applicable to EU IDs 15 through 17. These conditions also require MR&R specified within the subpart. The Permittee is required to operate and maintain the stationary CI ICE according to the manufacturer's written instructions. EU IDs 15 and 16 do not have diesel particulate filters installed. Therefore, the requirements of 40 CFR 60.4209(b) and 60.4214(c) are not applicable.

For EU ID 17, the U.S. Court of Appeals for the District of Columbia Circuit vacated 40 CFR 60.4211(f)(2)(ii) and (iii) on May 4, 2016. Therefore, 40 CFR 60.4211(f)(2)(ii) and (iii) have ceased to have any legal effect and have not been included in the operating permit.

Condition 28, 40 CFR 61 Subpart A & M Requirements

Legal Basis: The requirements of 40 CFR 61 are applicable requirements for Title V permitting purposes, as stated in item 4 of the "applicable requirement" definition under 40 CFR 71.2. The condition requires the Permittee to comply with asbestos demolition or renovation requirements in 40 CFR 61, Subpart M, as adopted by reference under 18 AAC 50.040(b)(2)(F). The asbestos demolition and renovation requirements apply if the Permittee engages in asbestos demolition or renovation.

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

Condition 29, 40 CFR 63 Subpart A Requirements

Legal Basis: National Emission Standards for Hazardous Air Pollutants (NESHAP) are included in the "applicable requirement" definition under 40 CFR 71.2, which the Department adopted under 18 AAC 50.040(j)(1). Under 40 CFR 63.1(c)(1), if a relevant standard has been established under 40 CFR 63, the owner or operator of an affected source must comply with the provisions of that standard and of NESHAP Subpart A. EU IDs 13 through 17 are subject to the requirements of NESHAP Subpart ZZZZ. Therefore, the Permittee must comply with the applicable requirements of Subpart A.

Factual Basis: NESHAP Subpart A contains the general requirements for 40 CFR 63.

Condition 30, 40 CFR 63 Subpart ZZZZ Requirements

Legal Basis: The Department adopted the requirements of NESHAP Subpart ZZZZ under 18 AAC 50.040(c). NESHAP Subpart ZZZZ applies to owners and operators of any existing, new, or reconstructed stationary reciprocating internal combustion engines (RICE), located at major and area sources of HAP emissions, excluding stationary RICE units being tested at a stationary RICE test cell/stand. Dutch Harbor Power Plant is an area source that contains RICE units subject to NESHAP Subpart ZZZZ.

Factual Basis: EU IDs 13 and 14 are existing, non-emergency, compression ignition (CI) RICE located in an area not accessible by the Federal Aid Highway System (FAHS). These engines are not subject to emission or operational limitations, but are subject to work and management practice standards for stationary non-emergency CI RICE with a rating of less than or equal to 300 hp, as specified in Table 2d to Subpart ZZZZ. Additionally, fuel requirements do not apply as specified in 40 CFR 63.6604(d).

Under 40 CFR 63.6645(a)(5), initial notification is not required for existing stationary CI RICEs that are not subject to any numerical emission standards.

EU IDs 15 through 17 are new engines under Subpart ZZZZ and must comply with Subpart ZZZZ by complying with NSPS Subpart IIII.

Conditions 31 through 33, 40 CFR 82 Subpart F, G, & H Requirements

Legal Basis: The requirements of 40 CFR 82 are applicable requirements for Title V permitting purposes, as stated in item 12 of the "applicable requirement" definition under 40 CFR 71.2. Condition 31 requires compliance with the applicable requirements in 40 CFR 82, as adopted by reference under 18 AAC 50.040(d). The requirements apply if the Permittee engages in the recycling or disposal of certain refrigerants. The condition requires the Permittee to comply with the standards for recycling and emission reduction of refrigerants in 40 CFR 82, Subpart F.

Conditions 32 and 33 also require compliance with the applicable requirement adopted under 18 AAC 50.040(d). Condition 32 prohibitions apply to all stationary sources that use substitutes for ozone-depleting compounds. Condition 33 prohibitions apply to all stationary sources that use halon for extinguishing fires and inert gas to reduce explosion risk. These conditions prohibit the Permittee from causing or allowing violations of these requirements. The Dutch Harbor Power Plant uses halon and is therefore subject to the federal regulations contained in 40 CFR 82.

Factual Basis: Because these regulations include adequate monitoring and reporting requirements and because the Permittee is not currently engaged in such activity, simply citing the regulatory requirements is sufficient to ensure compliance with this federal regulation. These conditions also incorporate applicable 40 CFR 82 requirements.

Condition 34, NESHAPs Applicability Determinations

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

Factual Basis: The Permittee has conducted an analysis of the stationary source and determined that it is not a major HAPs stationary source based on emissions. This condition requires the Permittee to notify the Department and Administrator if the stationary source becomes an affected source subject to a standard promulgated by EPA under 40 CFR part 63 and to keep records of applicability determinations and make those records available to the Department.

Condition 35, NSPS and NESHAP Reports

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

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

Conditions 36 through 38, Standard Terms and Conditions

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

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

Condition 39, Administration Fees

Legal Basis: This condition requires compliance with the applicable fee requirements in 18 AAC 50.400 through 403. Paying administration fees is required as part of obtaining and holding a permit with the Department or as a fee for a Department action. As stated in 18 AAC 50.326(j)(1), the provisions of 18 AAC 50.400 through 50.430 are applicable and 40 CFR 71.9 is not applicable.

Factual Basis: The regulations in 18 AAC 50.400 through 403 specify the amount, payment period, and the frequency of fees applicable to a permit action.

Conditions 40 and 41, Emission Fees

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

Factual Basis: The Department used the language in Standard Permit Condition I , adopted by reference under 18 AAC 50.346(b), for the permit.

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

The assessable emissions are the lesser of the stationary source's potential or projected emissions of each air pollutant at 10 tons per year or greater (AS 46.14.250(h)(1)).

The conditions allow the Permittee to calculate assessable emissions based on previous actual annual emissions. According to AS 46.14.250(h)(1), assessable emissions are based on each air pollutant. Therefore, fees shall be paid on any pollutant emitted whether or not the permit contains any limitation for that pollutant.

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

Condition 42, Dilution

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

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

Condition 43, Reasonable Precautions to Prevent Fugitive Dust

Legal Basis: This condition reiterates 18 AAC 50.045(d), which requires a person to use reasonable precautions when handling, storing or transporting bulk materials or engaging in an industrial activity. This requirement applies because the Permittee has an emission unit or activity listed under Table 7 of 18 AAC 50.346(c). 18 AAC 50.045 is included in the SIP approved by EPA. The listed emission units and activities in Table 7 are: coal-fired boilers; coal handling facilities; construction of gravel pads or roads that are part of a permitted stationary source or other construction that has the potential to generate fugitive dust that reaches ambient air; commercial/industrial/municipal solid waste, air curtain, and medical waste incinerators; sewage sludge incinerators not using wet methods to handle that ash; mines; urea manufacturing; soil remediation units; or dirt roads under the control of the operator with frequent vehicle traffic; and other emission units the Department finds are likely to generate fugitive dust.

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

Condition 44, Stack Injection

Legal Basis: 18 AAC 50.055 is included in the SIP approved by EPA. It is therefore an applicable requirement per 40 CFR 71.2.

This condition requires compliance with the applicable requirement in 18 AAC 50.055(g). It prohibits the Permittee from releasing materials other than process emissions, products of combustion, or materials introduced to control pollutant emissions from a stack (i.e. disposing of material by injecting it into a stack). Stack injection requirements apply to stacks of emissions units at a stationary source constructed or modified after November 1, 1982.

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

Condition 45, Air Pollution Prohibited

Legal Basis: 18 AAC 50.110 is included in the SIP approved by EPA. It is therefore an applicable requirement per 40 CFR 71.2.

This condition requires compliance with 18 AAC 50.110. The condition prohibits the Permittee from causing any emission which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property. The Department also included permit conditions for MR&R as required by 40 CFR 71.6(a)(3) and 71.6(c)(1).

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

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

Condition 46, Technology-Based Emission Standard

Legal Basis: The Permittee is required to take reasonable steps to minimize emissions if certain activities cause an exceedance of any technology-based emission standard in this permit. This condition requires compliance with the requirement in 18 AAC 50.235. Technology-Based Emission Standard requirements apply because the stationary source contains equipment subject to a technology-based emission standard, such as BACT, MACT, LAER, NSPS or any other similar standard for which the stringency of the standard is based on determinations of what is technologically feasible, considering relevant factors.

Factual Basis: The conditions of this permit list applicable technology-based emission standards and require excess emission reporting for each standard in accordance with Condition 62. Excess emission reporting under Condition 62 requires information on the steps taken to minimize emissions. Monitoring of compliance for this condition consists of the report required under Condition 62.

Condition 47, Open Burning

Legal Basis: 18 AAC 50.065 is included in the SIP approved by EPA. The condition requires the Permittee to comply with the regulatory requirements in 18 AAC 50.065 when conducting open burning at the stationary source. The state open burning regulation in 18 AAC 50.065 applies to the Permittee if the Permittee conducts open burning at the stationary source.

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

More extensive monitoring and recordkeeping is not warranted because the Permittee does not conduct open burning as a routine part of their business. Also, most of the requirements are prohibitions, which are not easily monitored.

Condition 48, Requested Source Tests

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

Factual Basis: This condition applies because this is a standard condition to be included in all operating permits, as specified in 18 AAC 50.345(a).

Conditions 49 through 51, Operating Conditions, Reference Test Methods, Excess Air Requirements

Legal Basis: Conditions 49 and 51 require compliance with the applicable requirements in 18 AAC 50.220(b) and (c)(3), which are included in the SIP approved by EPA. Condition 50 specifies source test methods, as required by 40 CFR 71.6(a)(3)(i) and 71.6(c)(1). These requirements apply because the Permittee is required by the permit to conduct source tests, or a source test may be requested by the Department. The Permittee is required to conduct source tests in the manner set out in Conditions 49 through 51.

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

Condition 52, Test Exemption

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

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

Conditions 53 through 56, Test Deadline Extension, Test Plans, Notifications and Reports

Legal Basis: These conditions require compliance with the applicable requirements in 18 AAC 50.345(m) through (o), which are included in the SIP approved by EPA. Condition 53 contains the requirement in 18 AAC 50.345(l). The requirements in 18 AAC 50.345(l) through (o) constitute standard conditions that must be included in each operating permit, as specified in 18 AAC 345(a). These requirements apply because the Permittee is required to conduct source tests as set out by this permit or as requested by the Department.

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

Condition 57, Particulate Matter Calculations

Legal Basis: This condition requires the Permittee to reduce particulate matter data in accordance with 18 AAC 50.220(f), which is included in the SIP approved by EPA. It applies when the Permittee tests for compliance with the particulate matter standards in 18 AAC 50.050 or 50.055.

Factual Basis: The condition incorporates a regulatory requirement for particulate matter source tests. This condition supplements specific monitoring requirements stated elsewhere in this permit.

Condition 58, Recordkeeping Requirements

Legal Basis: This condition requires the Permittee to keep records in accordance with 40 CFR 71.6(a)(3)(ii), which the Department adopted by reference under 18 AAC 50.040(j)(4).

Factual Basis: The condition restates the regulatory requirements for recordkeeping, and supplements the recordkeeping defined for specific conditions in the permit.

Condition 59, Certification

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

Factual Basis: The requirement in 18 AAC 50.345(j) is a standard condition that must be included in each operating permit, as specified in 18 AAC 50.345(a). This condition requires the Permittee to certify any permit application, report, affirmation, or compliance certification submitted to the Department. To ease the certification burden on the Permittee, the condition allows the excess emission reports to be certified with the operating report, even though it must still be submitted more frequently than the stationary source operating report. This condition supplements the reporting requirements of this permit.

Condition 60, Submittals

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

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

Condition 61, Information Requests

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

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

Condition 62, Excess Emission and Permit Deviation Reports

Legal Basis: This condition requires the Permittee to comply with the requirements in 18 AAC 50.235(a)(2) and 18 AAC 50.240(c). The condition specifies reporting requirements as required by 40 CFR 71.6(a)(3)(iii) and 71.6(c)(1). Also, the Permittee is required to notify the Department when emissions or operations deviate from the requirements of the permit.

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

The Department used the language in Standard Permit Condition III for the permit condition. The Department used the notification form in Standard Permit Condition IV for the notification requirements.

Condition 63, Operating Reports

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

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

The condition specifies that for the transition periods between an expiring permit and a renewal permit, the Permittee shall ensure that there is date-to-date continuity between the expired permit and the renewal permit such that the Permittee reports against the permit terms and conditions of the permit that was in effect during those partial date periods of the transition. No format is specified. The Permittee may provide one report accounting for each permit term or condition and the effective permit at that time. Alternatively, the Permittee may choose to provide two reports – one accounting for reporting elements of permit terms and conditions from the end date of the previous operating report until the date of expiration of the old permit, and a second operating report accounting for reporting elements of terms and conditions in effect from the effective date of the renewal permit until the end of the reporting period.

Condition 64, Annual Compliance Certification

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

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

Condition 64.2 provides clarification of transition periods between an expiring permit and a renewal permit to ensure that the Permittee certifies compliance with the permit terms and conditions of the permit that was in effect during those partial date periods involved in the transition. No format is specified: the Permittee may provide one report certifying compliance with each permit term or condition for each of the effective permits during the certification period, or may choose to provide two reports – one certifying compliance with permit terms and conditions from January 1 until the date of expiration of the old permit, and a second report certifying compliance with terms and conditions in effect from the effective date of the renewal permit until December 31.

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

Condition 65, Emission Inventory Reporting

Legal Basis: This condition requires the Permittee to submit emissions data to the state so the state is able to satisfy the federal requirement to submit emission inventory data from point sources as required under 40 CFR 51.321. The emission inventory requirement applies to sources defined as point sources in 40 CFR 51.20. The state must report all data elements in Table 2A of Appendix A to Subpart A of 40 CFR 51 to EPA.

Factual Basis: The emission inventory data is due to EPA 12 months after the end of the reporting year (40 CFR 51.30(a)(1) and (b)(1)). A due date of April 30 pressures the Department to have sufficient time to enter the data into EPA's electronic reporting system. Therefore, Permittees should consider submitting the emission inventory through Air Online Services, Permittee Portal.

The air emissions reporting requirements under 40 CFR Part 51, Subpart A apply to states; however, states rely on information provided by point sources to meet the reporting requirements of 40 CFR 51, Subpart A. In the past, the Department has made information requests to point sources, to which the point source is obligated to reply under 18 AAC 50.200. The information requests occur on a routine basis as established by Part 51 Subpart A and consume significant staff resources. To increase governmental efficiency and reduce costs associated with information requests that occur on a routine basis, it has been determined that a standard permit condition best fulfills the need to gather the information needed to satisfy the requirements of Subpart A of 40 CFR 51.

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

The Department used the language in Standard Operating Permit Condition XV for the permit condition, but corrected the emissions threshold amount for lead (Pb) from 5 tpy to 0.5 tpy actual emissions.

Condition 66, Permit Applications and Submittals

Legal Basis: 40 CFR 71.10(d)(1), adopted by the Department under 18 AAC 50.040(j)(7), requires submission of a copy of each permit application to EPA.

Factual Basis: With one minor exception, the Department used the language in Standard Operating Permit Condition XIV for the permit. The condition directs the applicant to send copies of all application materials required to be submitted to the Department directly to the EPA, in electronic format, if practicable. This condition shifts the burden of compliance from the Department to ensure that copies of application materials are submitted to EPA by transferring that responsibility to the Permittee. The Department revised the standard condition language to provide the current address provided by EPA.

Conditions 67 through 69, Permit Changes and Revisions Requirements

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

Factual Basis: 40 CFR 71.6(a)(12) and (13) specify changes that may be made without a permit revision, and 40 CFR 71.6(a)(8) states permit revisions are not required for some emissions trading and similar programs.

The Permittee did not request trading of emission increases and decreases as described in 40 CFR 71.6(a)(13)(iii).

Condition 70, Permit Renewal

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

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

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

Conditions 71 through 76, General Compliance Requirements

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

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

Conditions 77 and 78, Permit Shield

Legal Basis: These conditions require compliance with the requirements in 40 CFR 71.6(f), which the Department has adopted by reference under 18 AAC 50.040(j)(4). These requirements apply because the Permittee has requested that the Department shield the stationary source from specific non-applicable requirements listed under this condition.

Factual Basis: Table E of Operating Permit No. AQ0215TVP04 shows the permit shield that the Department granted to the Permittee. The Department based the determinations on the permit application, past operating permit, likelihood for the source to become subject during the life of the permit, Title I permits and inspection reports.

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

AIR QUALITY OPERATING PERMIT
RESPONSE TO COMMENTS

Permittee Name: City of Unalaska, Department of Public Utilities
Permit No.: AQ0215TVP04
Public Comment Closing Date: July 12, 2018
Source Name: Dutch Harbor Power Plant

The Alaska Department of Environmental Conservation (ADEC) received comments from the City of Unalaska, Department of Public Utilities during the public comment period for Operating Permit AQ0215TVP04. The comments appear below exactly as submitted. This document provides ADEC's responses to the comments.

1. Section 1

From City of Unalaska: Please make the following changes to the Identification table in Section 1:

- Responsible Official (R.O.): Thomas Thomas, City Manager.
- Stationary Source and Building Contact: Andy McCracken, Powerhouse Supervisor.

Response from ADEC: *ADEC does not have a record of a Responsible Official Add/Change Form for Thomas Thomas. This form must be received and approved by ADEC prior to listing Thomas Thomas as the Responsible Official. Therefore, ADEC is not making the change at this time. If the form is submitted and approved by ADEC, the change can be made using the Administrative Amendment procedures under 40 CFR 71.7(d). The form can be found at http://dec.alaska.gov/air/air-permit/general-permits/ under the FORMS tab. Additionally, if ADEC receives and approves the required form prior to final permit issuance, ADEC can include the change in the final permit without any further submittals by the Permittee.*

The Stationary Source and Building Contact is revised as requested.

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2. Condition 22

From City of Unalaska: Clarifications and Revisions to Condition 22, ORL to Avoid PSD Review for PM-10

- Please correct the redundancy between Conditions 22 and 22.1, as follows:
  "22. The Permittee shall limit emissions of PM-10 from EU IDs 13-15 to no more than 22.3 tons per year by complying with the following:
  22.1 ~~Limit the total emissions of EU IDs 13-15 to no more than 22.3 tons per year;"~~

- It is unclear whether Condition 22.1(f) is intended to be a routine source testing requirement, as opposed to a one-time-only source test. We note that the Department's justification for this request is that EU ID 13 or 14 have been source tested for NOx and CO, but not for PM-10, whereas other units under other ORLs and BACT Limits have been tested in the past. Thus, we are led to believe this would be a one-time test. We would prefer to conduct a source test of PM-10 emissions from either EU ID 13 or 14 only once. Please clarify the Department's intent.

- Please clarify the following statement in Condition 22.1(f)(B): "within ±10 percent at 50, 75, and 100% of peak load." We understand that the Department typically requires source test load increments to be based upon the maximum capacity of a given engine. However, the Department uniquely includes the term "peak load" which in the electric power industry refers to the maximum demand for a given period of time. Peak load can be measured on a daily basis (i.e.: maximum daily demand), monthly basis, or annually. It may be that the Department meant to implement source testing at load increments that are based upon the maximum operating capacity of the engines. In this case, please revise Condition 22.l(f)(B) as follows: "within ±10 percent ~~at~~ of 50, 75, and 100 ~~of peak load~~ of the maximum rated capacity of the engine."

  Please also note that in this condition, "at" should be changed to "of."

- The Department has included a requirement to apply for a minor permit to revise Table D in the event that "source test results show an emission factor greater than that in Table D" [Condition 22.l(f)(iii)]. However, the same objective can be achieved without a minor permit, simply by adding permit language that would allow it. We recommend that the Department replace Condition 22.l(f)(iii) to allow the emission factor yielded by the source test to be used in calculating the rolling sum of PM-10 emissions in lieu of the factor in Table D, as follows:

  "iii. Within 45 days of the source tests conducted in Condition 22.1(f), calculate the 12-month rolling PM-10 emissions for the stationary source using the emission factor determined in the source test.

  iv. Report in the first operating report due after the source test, the source test results and 12-month rolling PM-10 emissions."

  This language shown above was adapted from another permit issued previously by the Department for a different source, under similar circumstances. This practice would fit the purpose the Department intended to achieve with the proposed condition, while saving resources and time for both DHPP and ADEC.

Response from ADEC:

Conditions 22 and 22.1 of the operating permit are Conditions 23 and 23.1 of Minor Permit AQ0215MSS03, as noted in the citations for these conditions. The minor permit conditions are applicable requirements that must be included in the operating permit. If the Permittee wishes to have these minor permit conditions revised they must submit a minor permit application under 18 AAC 50.508(6). Therefore, the conditions remain as written in the draft operating permit.

Condition 22.1(f) requires a source test within one year of the issue date of the operating permit and no additional testing is mentioned. This is a one-time requirement for Operating Permit AQ0215TVP04. The need for further testing will be evaluated the next time the operating permit is renewed.

ADEC revised Condition 22.1(f)(i)(B) to specify "maximum possible" and "maximum achievable load" rather than "peak load".

The requirements and conditions of Minor Permit AQ0215MSS03 remain valid and enforceable regardless of the language of Operating Permit AQ0215TVP04. Therefore, the emission factors in Minor Permit AQ0215MSS03 must be revised if they are greater than those initially provided in the permit. ADEC revised Condition 22.1(f)(iii) to state Table 4 of Minor Permit AQ0215MSS03 must be revised rather than Table D of the operating permit. Table D of the operating permit would need to be revised to include the updated emission factors after the minor permit is revised. If the Permittee wishes to have these minor permit conditions revised, they must submit a minor permit application under 18 AAC 50.508(6).

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3. 40 CFR 60 Subparts A and IIII

From City of Unalaska:

- The Department has omitted several conditions from the Subpart A section, especially: the 30-day timeline for submitting a notification of reconstruction (AQ0215TVP03, Condition 22.1); a requirement to notify EPA in the event of a modification (AQ0215TVP03, Condition 22.3); and the requirements for startup, shutdown and malfunction (AQ0215TVP03, Condition 23). Are these requirements no longer applicable?
- The Department has removed the footnotes referring to the definitions of "construction," "modification," and "reconstruction" that were previously included in Condition 28 of AQ0215TVP03. Because of the importance of these terms, citing the definition is beneficial for understanding how these terms would apply in a given case. It would be helpful to include the references.
- Please correct the redundancy between Conditions 27.6 and 27.10. Condition 27.6 specifically mentions the not-to-exceed requirements, while Condition 27.10 generally requires compliance with 40 CFR 60.4212(a)-(e). The former is included within the later.
- Conditions 27.7a and 27.12 apply only if EU IDs 15 and 16 are equipped with diesel particulate filters (DPFs). There are no DPFs on EU IDs 15 and 16. These conditions should be removed and a note may be added to the statement of basis (SOB) about the MR&R that applies to DPFs.

Response from ADEC:

Table 8 to Subpart IIII states, "Except that §60.7 only applies as specified in §60.4214(a)." 40 CFR 60.4214(a) does not apply to EU ID 17 and only 40 CFR 60.4214(a)(2) remains applicable for EU IDs 15 and 16. Therefore, 40 CFR 60.7(a)(1), 60.7(a)(4), and 60.7(b) are not applicable requirements and not included in the permit.

The operating permit contains the requirements of 40 CFR 60 Subpart IIII that are currently applicable to EU IDs 15 through 17. Therefore, the definitions of "construction," "modification," and "reconstruction" are not required for the operating permit. If any engines are modified or reconstructed, or if a new engine is installed, the Permittee must review Subpart IIII to determine if there are any newly applicable requirements in the subpart, and the definitions are specified in the subpart. For the reasons noted above, the condition remains as written in the draft operating permit.

Condition 27.6 specifies that the limits to be met when source testing is conducted are the not-to-exceed limits, while Condition 27.10 specifies the test methods to be followed when conducting source tests. Additionally, Condition 27.6 is 40 CFR 60.4204(d) and 60.4205(e) of Subpart IIII and Condition 27.10 is 40 CFR 60.4212(a) through (e), which are all applicable requirements. Therefore, the conditions remain as written in the draft operating permit.

Conditions 27.7a and 27.12 of the draft operating permit are removed as requested because EU IDs 15 and 16 are not equipped with diesel particulate filters. An explanation is also added to the statement of basis.

ATTACHMENT "B" – FORM OF AGREEMENT

CITY OF UNALASKA

Consulting Services Agreement

DUTCH HARBOR POWER PLANT TITLE V OPERATING PERMIT ASSISTANCE
PM-10 TESTING

PROJECT FILE NO. 41-169

Prepared By:

City of Unalaska
P.O. Box 610
Unalaska, Alaska 99685
907.581.1260

TABLE OF CONTENTS

AGREEMENT FOR CONSULTING SERVICES

THIS AGREEMENT is entered into this _____**, 2019,** by and between **_____,** (hereinafter called "Consultant"), and the **CITY OF UNALASKA** (hereinafter called "City").

WITNESSETH THAT:

WHEREAS City desires to engage Consultant to render consulting and related services for the performance of Dutch Harbor Power Plant Title V Permitting Assistance – PM-10 Testing; and

WHEREAS Consultant represents that it has the experience and ability to perform such services; and

WHEREAS the parties hereto desire to enter into a basic agreement setting forth the terms under which Consultant will, as requested, perform such work.

NOW THEREFORE the parties hereto do mutually agree as follows:

1. Employment of Consultant

   Consultant agrees to provide professional services in accordance with the provisions of this Agreement. A written description of the work to be performed, schedule and compensation is set out in **Exhibits A-C** of this Agreement.

2. Performance

   Consultant agrees to perform the work described in **Exhibit A- Scope of Services**; however, the Consultant is not authorized to perform any work or incur any expense which would cause the amount for which he is entitled to be paid under this Agreement to exceed the amount set forth in **Exhibit C – Fee Proposal** without the prior written approval of the City. All services shall be rendered in accordance with the schedule set forth in **Exhibit B – Contract Schedule**.

   The work shall include but not be limited to the following: furnishing all equipment, transportation, per diem, travel, and supplies to perform all scopes of work authorized in connection with the **City of Unalaska Dutch Harbor Power Plant Title V Permitting Assistance – PM 10 Testing Project.**

3. Fee

   After receipt of a periodic billing for said services, the City agrees to pay Consultant as compensation for the services under this Agreement such sums of money as set forth in **Exhibit C** of this Agreement. The amount payable to the Consultant shall not exceed the amount specified in **Exhibit C**.

4. Payments

   City agrees to make monthly payments to Consultant as services are performed and costs are incurred, provided Consultant submits a proper invoice for each payment, in such form accompanied by such evidence in support thereof as may be reasonably required by the City.

City may, at its option, withhold ten percent (10%) from each monthly payment pending satisfactory completion of the work by Consultant. All invoices are otherwise due and payable within thirty (30) days of receipt by City. City shall pay Consultant for the services identified in **Exhibit A** the **Not to Exceed Total Fee of $_____**. The Not to Exceed Total Fee is based on the distribution of the Not to Exceed Total Fee between tasks set forth in **Exhibit A.** The portion of the Not to Exceed Total Fee billed and paid for Consultant's services shall be equal to the proportion of services actually completed for each task set forth in **Exhibit A** during the billing period to the fee total specified for that task.

5. Personnel

Consultant agrees to furnish all personnel necessary for expeditious and satisfactory performance of this Agreement, each to be competent, experienced, and well qualified for the work assigned. No person objected to by the City shall be employed by Consultant for work hereunder.

6. Independent Contractor Status

In performing under this Agreement, Consultant acts as an independent contractor and shall have responsibility for and control over the details and means for performing the consulting services required hereunder.

7. Indemnification

Consultant shall defend and save harmless City or any employee, officer, insurer, or elected official thereof from and against losses, damages, liabilities, expenses, claims, and demands but only to the extent arising out of any negligent act or negligent omission of Consultant while performing under the terms of this contract.

8. Assignment

Consultant shall not assign this Agreement or any of the monies due or to become due hereunder without the prior written consent of City.

9. Subcontracting

Consultant may not subcontract its performance under this Agreement without prior written consent of City. Any subcontractor must agree to be bound by terms of this Agreement.

10. Designation of Representatives

The Parties agree, for the purposes of this Agreement, the City shall be represented by and may act only through the Director of Public Utilities or such other person as he may designate in writing. Consultant shall advise City in writing of the name of its representative in charge of the administration of this Agreement, who shall have authority to act for and bind Consultant in connection with this Agreement.

11. Termination

Either party shall have the right to terminate this Agreement in whole or in part at any time and for reasonable cause, by delivery of thirty (30) days written notice, specifying the extent and effective date thereof. After receipt of such notice, Consultant shall stop work hereunder to the extent and on the date specified in such notice, terminate all subcontracts and other commitments to the extent they relate to the work terminated, and deliver to City all designs, computations, drawings, specifications and other material and information prepared or developed hereunder in connection with the work terminated.

In the event of any termination pursuant to this clause, Consultant shall be entitled to be paid as provided herein for direct labor hours expended and reimbursable costs incurred prior to the termination pursuant to Section 3 hereof, and for such direct labor hours and reimbursable costs as may be expended or incurred thereafter with City's approval in concluding the work terminated, it being understood that Consultant shall not be entitled to any anticipated profit on services not performed. Except as provided in this clause, any such termination shall not alter or affect the rights or obligations of the parties under this Agreement.

12. Ownership and Use of Documents

Consultant agrees that all original design reproducible drawings, all pertinent calculations, specifications, reports, data and other documents prepared for the City hereunder are the property of the City and the City shall have the right, without payment of additional compensation, to disclose, reproduce and use such documents for this project

13. Insurance

A. During the term of the contract, the Contractor shall obtain and maintain in force the insurance coverage specified in these requirements. Such coverage shall be with an insurance company rated “Excellent” or “Superior” by A. M. Best Company, or a company specifically approved by the City.

B. The contractor shall carry and maintain throughout the life of this contract, at its own expense, insurance not less than the amounts and coverage herein specified, and the City of Unalaska, its employees and agents shall be named as additional insured under the insurance coverage so specified and where allowed, with respect to the performance of the work. There shall be no right of subrogation against the City or its agents performing work in connection with the work, and this waiver of subrogation shall be endorsed upon the policies. Insurance shall be placed with companies acceptable to the City of Unalaska; and these policies providing coverage thereunder shall contain provisions that no cancellation or material changes in the policy relative to this project shall become effective except upon *30* days prior *written* notice thereof to the City of Unalaska.

C. Prior to commencement of the work, the contractor shall furnish certificates to the City of Unalaska, in duplicate, evidencing that the Insurance policy provisions required hereunder are in force. Acceptance by the City of Unalaska of deficient evidence does not constitute a waiver of contract requirements.

D. The contractor shall furnish the City of Unalaska with certified copies of policies upon request. The minimum coverages and limits required are as follows:

1. Workers' Compensation insurance in accordance with the statutory coverages required by the State of Alaska and Employers Liability insurance with limits not less than $1,000,000 and, where applicable, insurance in compliance with any other statutory obligations, whether State or Federal, pertaining to the compensation of injured employees assigned to the work, including but not limited to Voluntary Compensation, Federal Longshoremen and Harbor Workers Act, Maritime and the Outer Continental Shelf's Land Act.

2. Commercial General Liability with limits not less than $1,000,000 per Occurrence and $2,000,000 Aggregate for Bodily Injury and Property Damage, including coverage for Premises and Operations Liability, Products and Completed Operations Liability, Contractual Liability, Broad Form Property Damage Liability and Personal Injury Liability.

3. Commercial Automobile Liability on all owned, non-owned, hired and rented vehicles with limits of liability of not less than $1,000,000 Combined Single Limit for Bodily Injury and Property Damage per each accident or loss.

4. Umbrella/Excess Liability insurance coverage of not less than $1,000,000 per occurrence and annual aggregate providing coverage in excess of General Liability, Auto Liability, and Employers Liability.

5. If work involves use of aircraft, Aircraft Liability insurance covering all owned and non-owned aircraft with a per occurrence limit of not less than $1,000,000.

6. If work involves use of watercraft, Protection and Indemnity insurance with limits not less than $1,000,000 per occurrence.

7. Professional Liability insurance with limits of not less than $1,000,000 per claim and $1,000,000 aggregate, subject to a maximum deductible $10,000 per claim. The City of Unalaska has the right to negotiate increase of deductibles subject to acceptable financial information of the policyholder.

E. Any deductibles or self-insured retentions must be declared to and approved by the City. At the option of the City, either the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the City, its officers, officials, employees and volunteers; or the contractor shall provide a financial guarantee satisfactory to the City guaranteeing payment of losses and related investigations, claim administration and defense expense.

F. All insurance policies as described above are required to be written on an "occurrence" basis. In the event occurrence coverage is not available, the contractor agrees to maintain "claims made" coverage for a minimum of two years after project completion.

G. If the contractor employs subcontractors to perform any work hereunder, the contractor agrees to require such subcontractors to obtain, carry, maintain, and keep in force during the time in which they are engaged in performing any work hereunder, policies of insurance which comply with the requirements as set forth in this section and to furnish copies thereof to the City of Unalaska. This requirement is applicable to subcontractors of any tier.

14. Claims Recovery

Claims by City resulting from Consultant's failure to comply with the terms of and specifications of this contract and/or default hereunder may be recovered by City by withholding the amount of such claims from compensation otherwise due Consultant for work performed or to be performed. City shall notify Consultant of any such failure, default or damage therefrom as soon as practicable and no later than 10 days after discovery of such event by written notice. Nothing provided herein shall be deemed as constituting an exclusive remedy on behalf of City, nor a waiver of any other rights hereunder at law or in equity. Design changes required as a result of failure to comply with the applicable standard of care shall be performed by the Consultant without additional compensation.

15. Performance Standard

Services performed under this Agreement will be performed with reasonable care or the ordinary skill of the profession practicing in the same or similar location and under similar circumstances and shall comply with all applicable codes and standards.

16. Compliance with Applicable Laws

Consultant shall in the performance of this Agreement comply with all applicable federal, state, and local laws, ordinances, orders, rules, and regulations applicable to its performance hereunder, including without limitation, all such legal provisions pertaining to social security, income tax withholding, medical aid, industrial insurance, workers' compensation, and other employee benefit laws. Consultant also agrees to comply with all contract provisions pertaining to grant or other funding assistance which City may choose to utilize to perform work under this Agreement. The Consultant and all subcontractors must comply with state laws related to local hire and prevailing wages.

17. Records and Audit

Consultant agrees to maintain sufficient and accurate records and books of account, including detailed time records, showing all direct labor hours expended and all reimbursable costs incurred and the same shall be subject to inspection and audit by City at all reasonable times. All such records and books of account pertaining to any work performed hereunder shall be retained for a period of not less than six (6) years from the date of completion of the improvements to which the consulting services of this Agreement relate.

18. Reporting of Progress and Inspection

Consultant agrees to keep City informed as to progress of the work under this Agreement by providing monthly written progress reports, and shall permit City to have reasonable access to the work performed or being performed, for the purpose of any inspection City may desire to undertake.

19. Form of City Approval

Except as otherwise provided in this Agreement, City's requests and approvals, and Consultant’s cost estimates and descriptions of work to be performed, may be made orally where necessary, provided that the oral communication is confirmed immediately thereafter in writing.

20. Duration of Agreement

This agreement is effective for a period of one (1) year from the date first shown above. The agreement may be extended by the mutual written agreement of City and Consultant.

21. Inspections by City

The City has the right, but not the duty, to inspect, in the manner and at reasonable times it considers appropriate during the period of this Agreement, all facilities and activities of the Consultant as may be engaged in the performance of this Agreement.

22. Endorsements on Documents

Endorsements and professional seals, if applicable, must be included on all final plans, specifications, estimates, and reports prepared by the Consultant. Preliminary copies of such documents submitted for review must have seals affixed without endorsement (signature).

23. Notices

Any official notice that either party hereto desires to give the other shall be delivered through the United States mail by certified mail, return receipt requested, with postage thereon fully prepaid and addressed as follows:

To City:	To Consultant:
Dan Winters, Director of Public Utilities	_____
City of Unalaska	_____
Box 610	_____
Unalaska, Alaska 99685	_____

The addresses hereinabove specified may be changed by either party by giving written notice thereof to the other party pursuant to this paragraph.

24. Venue/Applicable Law

The venue of any legal action between the parties arising as a result of this Agreement shall be laid in the Third Judicial District of the Superior Court of the State of Alaska and this contract shall be interpreted in accordance with the laws of the State of Alaska.

25. Attorney's Fees

In the event either party institutes any suit or action to enforce its right hereunder, the prevailing party shall be entitled to recover from the other party its reasonable attorney's fees and costs in such suit or action and on any appeal therefrom.

26. Waiver

No failure on the part of City to enforce any covenant or provisions herein contained, nor any waiver of any right hereunder by City, unless in writing and signed by the parties sought to be bound, shall discharge or invalidate such covenants or provisions or affect the right of City to enforce the same or any other provision in the event of any subsequent breach or default.

27. Binding Effect

The terms, conditions and covenants contained in this Agreement shall apply to, inure to the benefit of, and bind the parties and their respective successors.

28. Entire Agreement/Modification

This agreement, including Exhibits A-C, and the Consultant's proposal dated _____ constitutes the entire Agreement between the parties with respect to the subject matter

hereof, and all prior negotiations and understandings are superseded and replaced by this Agreement and shall be of no further force and effect. No modification of this Agreement shall be of any force or effect unless reduced to writing, signed by both parties and expressly made a part of this Agreement.

In witness whereof, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Agreement in duplicate on the respective date indicated below.

CONTRACTOR

By:_____
_____, Its _____

State of Alaska)
) ss.
Third Judicial District)

The foregoing instrument was acknowledged before me on the ____ day of _____, 2019, by _____, the _____ of _____, a _____ Corporation, on behalf of the corporation.

_____
Notary Public, State of Alaska
My Commission Expires _____

CITY OF UNALASKA, ALASKA

By:_____
Erin Reinders, City Manager

State of Alaska)
) ss.
Third Judicial District)

The foregoing instrument was acknowledged before me on the ____ day of _____, 2019, by Erin Reinders, City Manager for the City of Unalaska, a First Class Alaska Municipal Corporation, on behalf of the City of Unalaska.

_____
Notary Public, State of Alaska
My Commission Expires _____

CITY OF UNALASKA

EXHIBIT "A"

SCOPE OF SERVICES

The Consultant will work with the City to complete Dutch Harbor Power Plant Title V Permitting Assistance – PM -10 Testing. Each of the deliverables outlined below will be provided electronically as an Adobe Acrobat (PDF) file.

The Scope of Services for this Contract includes the following general tasks:

[This section will be filled in from the proposed work plan of the chosen respondent.]

CITY OF UNALASKA

EXHIBIT "B"

CONTRACT SCHEDULE

[This section will be filled in from the proposed work plan of the chosen respondent.]

THE STATE of ALASKA
GOVERNOR MICHAEL J. DUNLEAVY

Department of Environmental Conservation

DIVISION OF AIR QUALITY
Air Compliance Program

555 Cordova ST
Anchorage AK, 99501
Main: (907) 269-7577
Toll free: 866.241.2805
Fax: (907) 269-7508
www.dec.alaska.go

CERTIFIED MAIL: 7018 3090 0001 0864 8984
Return Receipt Request

October 9, 2019

Dan Winters, Director of Public Works
City of Unalaska, Dutch Harbor Power Plant
P.O. Box 610
Unalaska, AK 99685

Approval of Source Test Extension Deadline

Subject: Approval of the Source Test Extension for City of Unalaska, Dutch Harbor Power Plant, Operating Permit No. AQ0215TVP04, File No. 2542.16.006

Dear Mr. Winters:

The Alaska Department of Environmental Conservation (the Department) received a source test extension request from the City of Unalaska on August 29, 2019. Operating Permit AQ0215TVP04 Condition number 22.1(f) requires a performance test by September 14, 2019. However, Condition number 53 allows for the City of Unalaska to request an extension to the deadline. This letter presents you with the Department's decision to extend the source testing for particulate matter less than or equal to 10 microns in diameter (PM-10) on emission units 13 or 14, Wärtsilä 12V32C diesel fueled generators, in order to allow the City of Unalaska to contract with a source testing firm and to avoid source testing during extreme and potentially unsafe weather conditions. The requirement to perform PM-10 source testing as required by Operating Permit AQ0215TVP04 Condition 22.1(f) will not be extended beyond March 16, 2020. Source testing must commence on or before March 16, 2020. If source testing does not commence by March 16, 2020 the Department will consider the City of Unalaska to be non-compliant with Operating Permit AQ0215TVP04 Condition number 22.1(f) as of September 14, 2019, and the matter will be considered for formal enforcement.

If you have any questions regarding this decision, please do not hesitate to contact Alan Pefley by phone at (907) 269-6277 or via email at alan.pefley@alaska.gov.

Sincerely:

Jason Olds, Manager
Air Compliance Program

cc: P. Moses Coss, ADEC/APP, Fairbanks
Tom Turner, ADEC/APP, Anchorage
Jason Olds, ADEC/APP, Juneau

CITY OF UNALASKA

EXHIBIT "C"

FEE PROPOSAL

ATTACHMENT "C" – EVALUATION SCORE SHEET

Proposal Evaluation
[PROJECT NAME]

For each Technical Attribute rank each Respondent starting with 1,2,3,4,5 and 6 and so forth. 1 is best, 2 is next best, 3 is third best, etc.. Do not skip or repeat numbers.

Attributes	*Weight*	*%*	A	B	C	D		
Professional Qualifications	*40*	*40.0%*						
Experiences and References	*30*	*30.0%*						
Narrative	*30*	*30.0%*						

Do not edit. The below calculates the rankings you entered above as a percentage. Each successive rank is a difference of 5%.

Attributes	*Weight*	*%*	A	B	C	D		
Professional Qualifications	*40*	*40.0%*						
Experiences and References	*30*	*30.0%*						
Narrative	*30*	*30.0%*						
Total Weight	*100*	*100.0%*						
Ranking								

I certify that I have no conflicts of interest and that I have strictly adhered to the procedures described in the Request for Qualifications.

Evaluator Signature:

Date: