Copper Valley ELECTRIC
A Touchstone Energy® Cooperative

June 05, 2025

Alaska Department of Environmental Conservation
Office of Air Quality

Submitted via email: DEC.AQ.airreports@alaska.gov; R10_Air_Permits@epa.gov

Re: Copper Valley Electric Association, CVEA Glennallen Diesel Plant Application for Renewal of Operating Permit No. AQ0287TVP05

To Whom It May Concern:

Copper Valley Electric Association (CVEA) submits this application to renew an Air Quality Control Operating Permit for the CVEA Glennallen Diesel Plant. The stationary source currently operates under Permit AQ0287TVP05 which expires on December 17, 2025. As required by 18 AAC 50.326 an application must be submitted no sooner than June 17, 2024 and no later than June 17, 2025.

Pursuant to AS 46.14.150, and 18 AAC 50.326, this application is timely. CVEA understands that completeness will be evaluated by the Alaska Department of Environmental Conservation (ADEC) according to the processes and elements established under 40 CFR 71.

The application accompanying this letter utilizes the application forms ADEC's required. A copy of the existing Title V permit is included in Attachment A. Emission calculations are included in the attached C.D. as an MS Excel file.

Consistent with 18 AAC 50.400(a)(9), CVEA understands that we will continue to pay an annual permit administrative fee and that no other fees are required with this submittal.

Sincerely,

Steve Williams

Copper Valley Electric Association

cc: jim.plosay@alaska.gov; glass.geoffrey@epa.gov

Copper Valley Electric
Glennallen Diesel Plant
Title V Renewal Application
AQ0287TVP05

June 2025

Prepared by:

HMH Consulting, LLC

Table of Contents

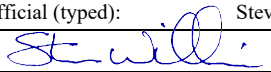
Form A1 – Stationary Source General Information

FORM A1
Stationary Source (General Information)

GENERAL INFORMATION			
1. Permittee:			
Permittee Name: Copper Valley Electric Association, Inc.			
Mailing Address Line 1: PO Box 45			
Mailing Address Line 2			
City: Glennallen		State: AK	Zip Code: 99588
2. Stationary Source Name: Glennallen Diesel Plant			
3. Stationary Source Physical Address:			
Physical Address Line 1: Mile 187 Glenn Highway			
Physical Address Line 2			
City: Glennallen		State: AK	Zip Code: 99588
4. Location:	Latitude: 62 07' 07"		Longitude: 145 31' 46"
5. Primary SIC Code: 4911	SIC Code Description: Electric Services		***Primary NAICS Code: 221112***
6. Current/Previous Title V Air Permit No.: AQ0287TVP05			Expiration Date: December 17, 2025
7. Does this application contain confidential data?	☐ Yes		☒ No

8. APPLICATION IS BEING MADE FOR:		
☐ Initial Title V Permit for this Stationary Source	☐ Modify Title V Permit (currently permitted)	☒ Title V Permit Renewal

9. CONTACT INFORMATION (Attach additional sheets if needed)					
Owner:			***Operator:***		
Name/Title: Copper Valley Electric Association, Inc.			Name/Title: Same		
Mailing Address Line 1: PO Box 45			Mailing Address Line 1:		
Mailing Address Line 2			Mailing Address Line 2		
City: Glennallen	State: AK	Zip Code: 99588	City:	State:	Zip Code:
Permittee's Responsible Official:			***Designated Agent:***		
Name/Title: Steve Williams, Power Generation Manager			Name/Title: Steve Williams, Power Generation Manager		
Mailing Address Line 1: PO Box 927			Mailing Address Line 1: PO Box 927		
Mailing Address Line 2			Mailing Address Line 2		
City: Valdez	State: AK	Zip Code: 99686	City: Valdez	State: AK	Zip Code: 99686
Stationary Source and Building Contact:			***Fee Contact:***		
Name/Title: Steve Williams, Power Generation Manager			Name/Title: Steve Williams, Power Generation Manager		
Mailing Address Line 1:PO Box 927			Mailing Address Line 1: PO Box 927		
Mailing Address Line 2			Mailing Address Line 2		
City: Valdez	State: AK	Zip Code: 99686	City: Valdez	State: AK	Zip Code: 99686
Phone: 907-831-0565	Email: swilliams@cvea.org		Phone: 907-831-0565	Email: swilliams@cvea.org	
Permit Contact:			***Person or Firm that Prepared Application:***		
Name/Title: Steve Williams, Power Generation Manager			Name/Title: Erin Billings, HMH Consulting, LLC		
Mailing Address Line 1: PO Box 927			Mailing Address Line 1: 200 W. 34th Ave. PMB 253		
Mailing Address Line 2			Mailing Address Line 2		
City: Valdez	State: AK	Zip Code: 99686	City: Anchorage	State: AK	Zip Code: 99503
Phone: 907-831-0565	Email: swilliams@cvea.org		Phone: 907-562-8100	Email: erin@hmhconsulting.org	

10. STATEMENT OF 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.		
Name of Responsible Official (typed):	Steve Williams	Title: Power Generation Manager
X Signature (blue ink): 		Date: June 05, 2025

Form A2 – Stationary Source Description

FORM A2
Stationary Source Description

Permit Number: AQ0287TVP05

1.	Stationary Source Description (a thorough description of the stationary source, its processes, raw materials, operating scenarios, and other specific information that may be necessary to determine the applicability of Title V requirements.) The information may include property area or map, number of employees, maximum capacity, and other primary emission-generating activities co-located or on adjacent properties. CVEA owns and operates the Glennallen Diesel Plant. The SIC code for this stationary source is 4911 - Electrical Services. The stationary source is a small diesel-powered electric generating facility that provides power to the communities of Glennallen and Valdez and is not connected to the Alaska Railbelt Grid. The maximum generating capacity of the facility is less than 12 MW and at least 10% of the power is used for residential purposes. The source consists of four diesel-electric generator sets (EU IDs 6-9) ranging from 1,285 kW to 2,865 kW. EU IDs 6 and 7 were installed in 1976 and EU IDs 8 and 9 were installed in 1999 and 2008, respectively. Other emission units at the Glennallen Diesel Plant include three small hot water heaters, a used oil shop heater, and a 50,000 gallon fuel tank.	
2.	Nonattainment area [yes/no; if yes, specify]	No
3.	Does the CAM rule [40 CFR Part 64] apply to any of the emissions units? [if yes, review the guidance provided for CAM in the Form A2 instructions for this item]	No
4.	Does the accidental release prevention regulation [40 CFR Part 68] apply to the facility? [if yes, provide the appropriate regulatory applicability document in detail.]	No

5. Attach plot plan. See Figures 1 and 2 for plan diagrams of the site and powerhouse.

6. Attach regional map. See Figures 3 through 5.

7. Attach USGS map. See Figure 6.

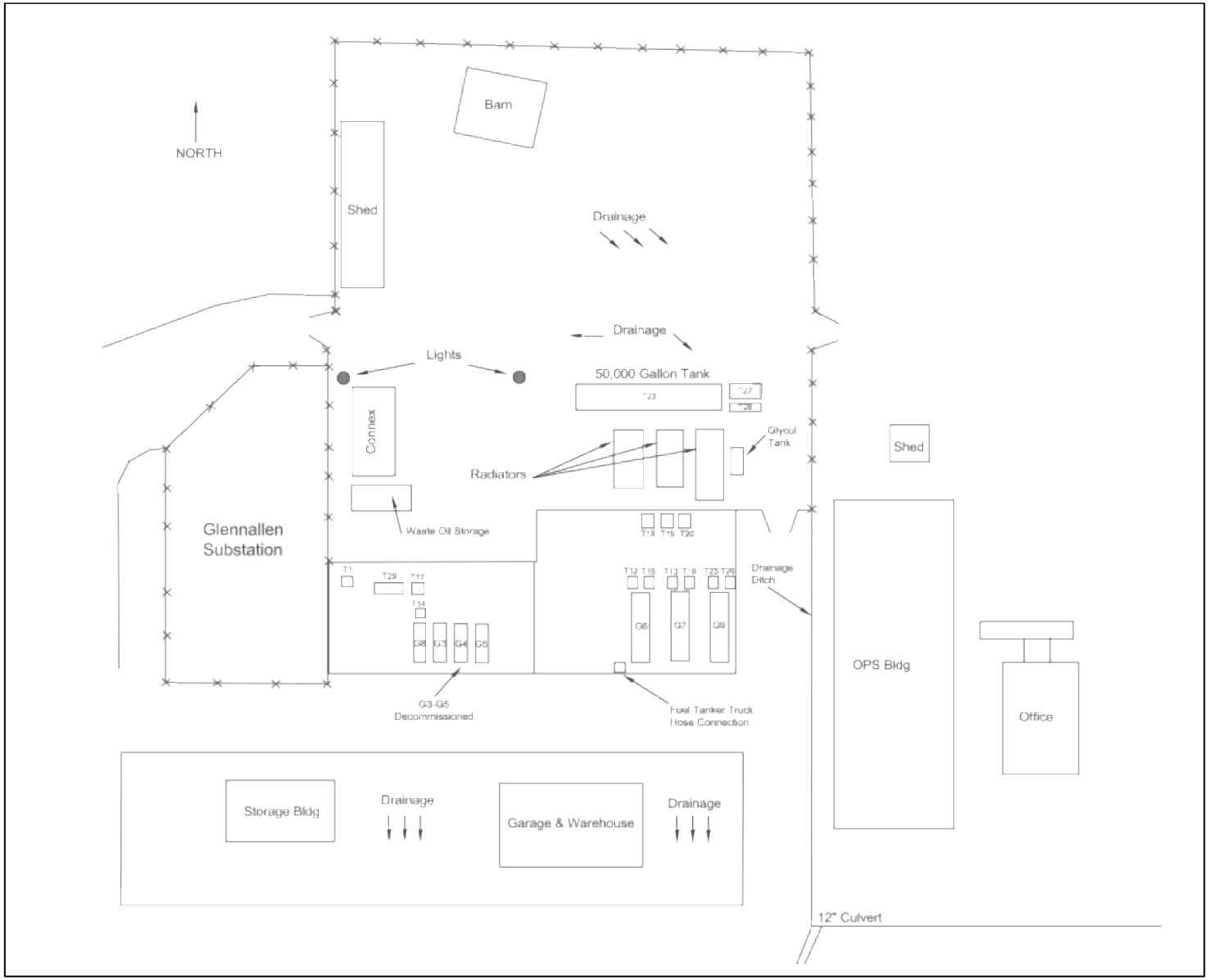


Figure 1: Plan View Diagram of Glennallen Diesel Plant Site

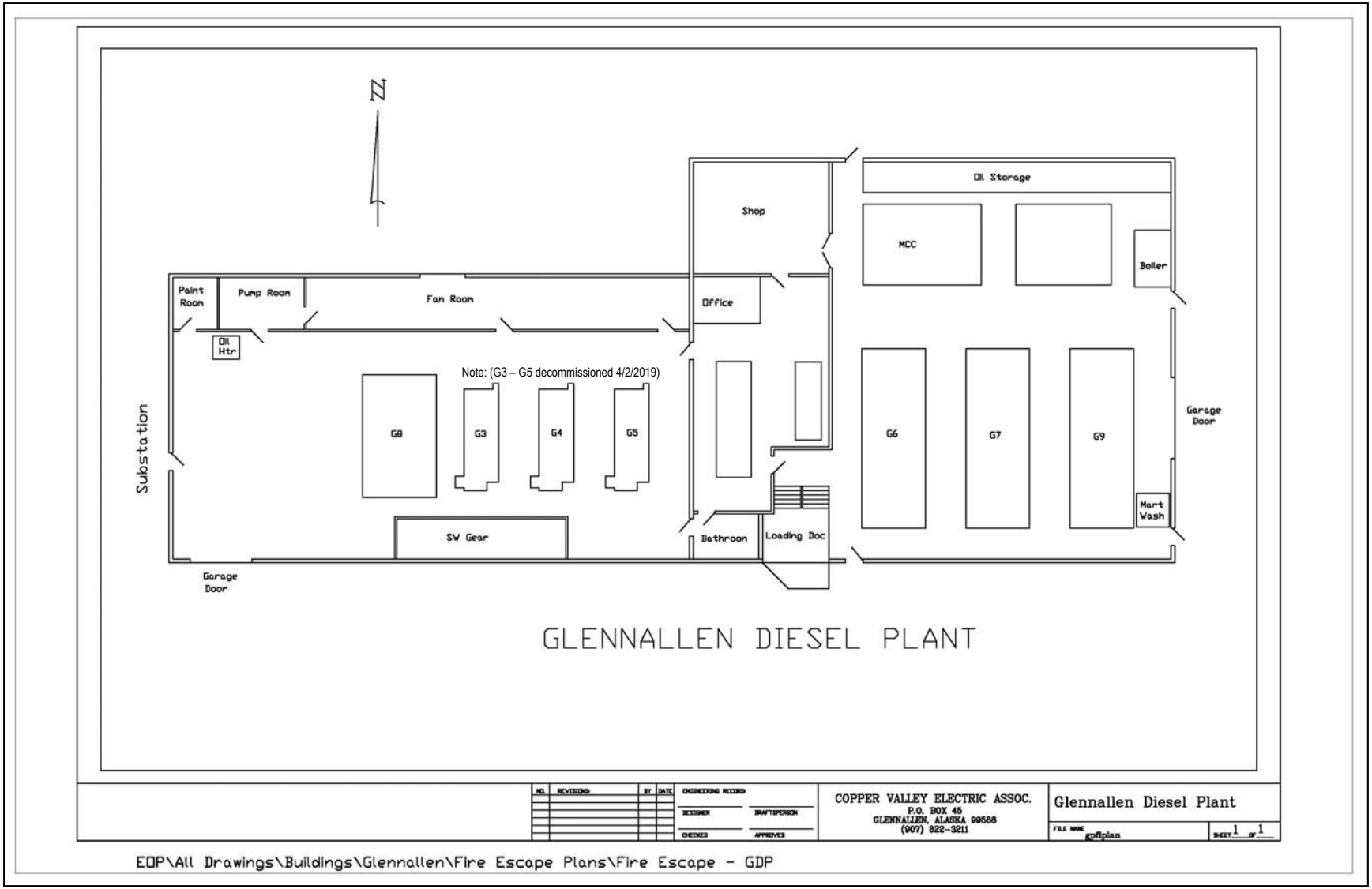


Figure 2: Glennallen Diesel Plant Powerhouse Diagram

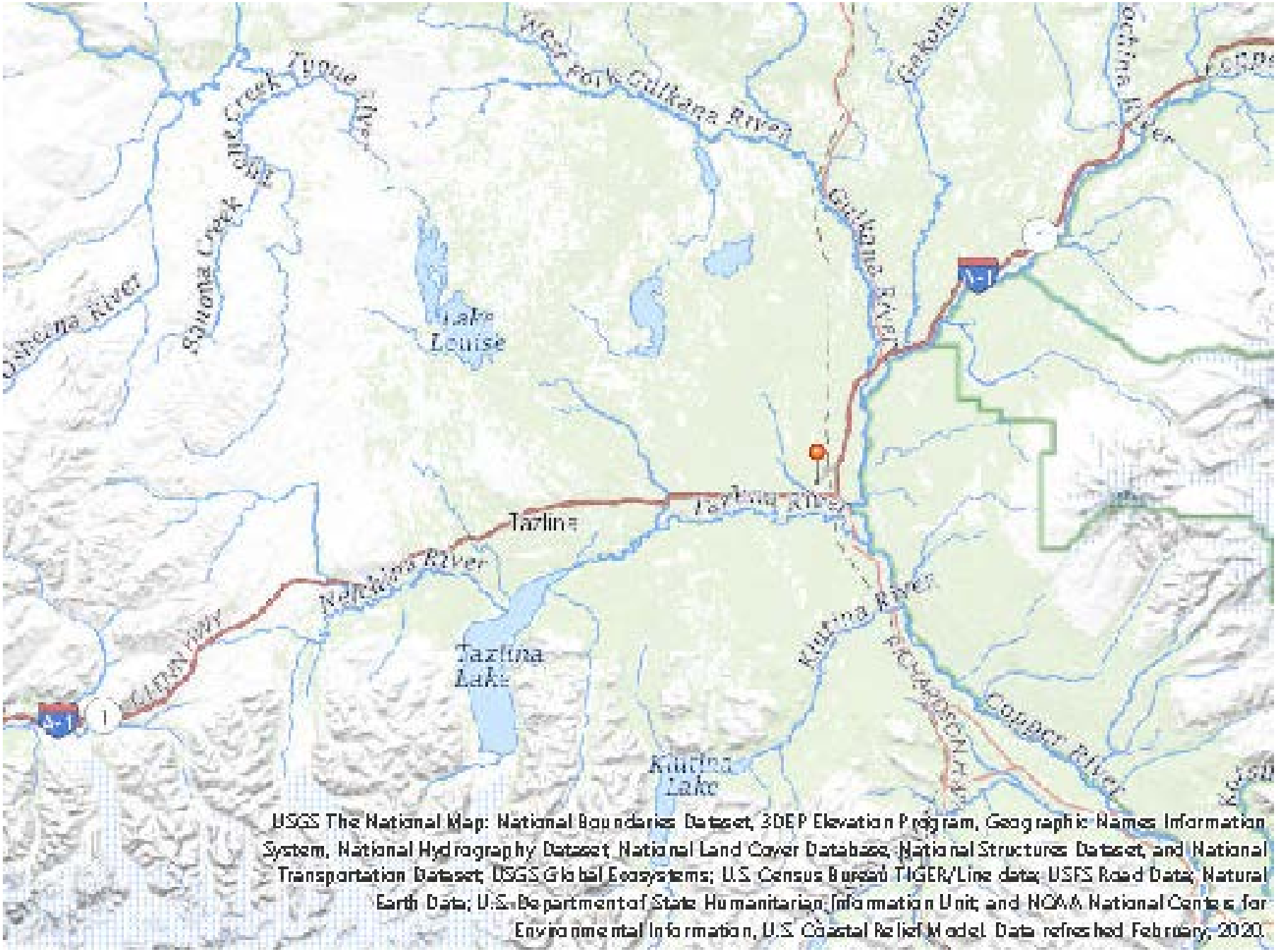


Figure 3: USGS Regional Map with a marker showing the location of Glennallen, AK.

Figure 4: Google map showing the location of the Glennallen Diesel Plant in relation to the city of Glennallen and the Glenn Highway.

Figure 5: Google Earth image of Glennallen, Alaska and the approximate location of the Glennallen Diesel Plant.

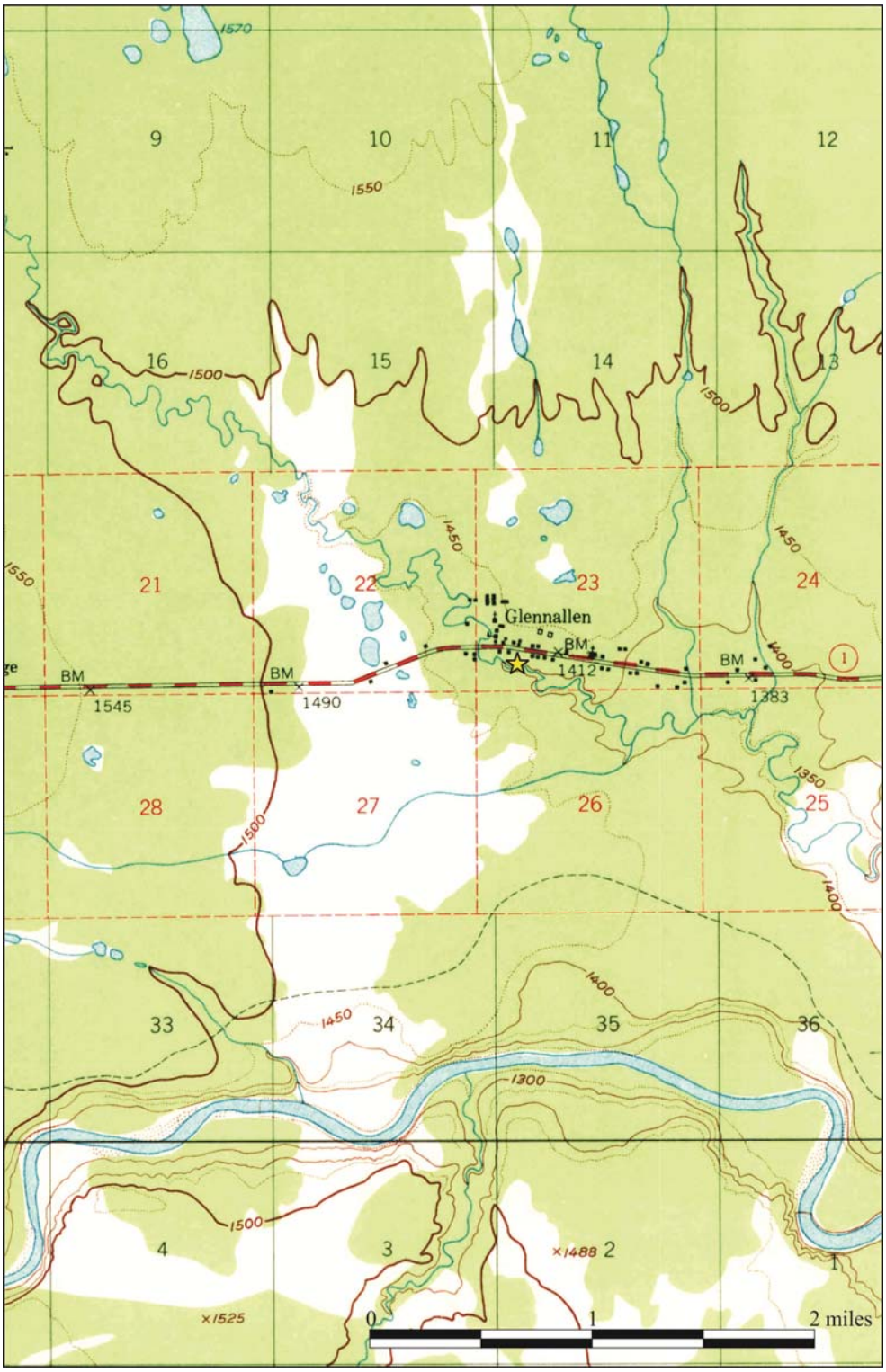


Figure 6: USGS Gulkana (A-4) Quadrangle, 1951 showing the city of Glennallen and the approximate location of the Glennallen Diesel Plant.

Form A3 – Operating Scenario Description

FORM A3
Operating Scenario Description

Permit Number: AQ0287TVP05

1.	Operating scenario ID	1
2.	Operating scenario description: No seasonal variation, 8760 hr/yr base operating scenario. Engine-specific limits apply. No alternative operating scenarios identified.	
3.	List the emissions units involved in this operating scenario.	EU IDs 6-9 and all Insignificant Emission Units
4.	Operating schedule: hours/day	24
	days/week	7
	weeks/year	52
5.	Seasonal variation (%): December - February	None
	March – May	None
	June - August	None
	September - November	None

6. Attach process flow diagram: No diagram included. None required.

Form A4 – Title V Air Operating Permit Renewal Application Information

FORM A4

Title V Air Operating Permit Renewal Application Information

Permit Number: AQ0287TVP05

1.	Permit Contact: Name	Steve Williams
	Title	Power Generation Manager
	Mailing Address Line 1	PO Box 927
	Mailing Address Line 2	Valdez, AK 99686
	Phone Number	907-831-0565
	Email	swilliams@cvea.org
2.	Were there any changes to stationary source General Information (Form A1)? If yes, complete and submit a Form A1.	Yes
3.	Were there any changes to the stationary source description (Form A2)? If yes, complete and submit a Form A2.	No
4.	Were there any off-permit changes? Reference any notifications provided to the Department, and attach copies of the notifications.	No
	If yes, integrate changes into renewal permit? [if no, explain]	NA
5.	Have any Alaska Title I permits been issued to the stationary source since the most recent Title V permit or revision issuance?	No
	If yes, integrate changes into renewal permit? [If yes, please list. If no, explain]	NA
6.	Will there be any changes to the operating scenario(s)? [if yes, describe and attach Form A3]	No
7.	Will there be any new, modified, or reconstructed emission units or air pollution control equipment? [if yes, attach appropriate forms from Form Series B, C, D, and E]	No
8.	Are the current emissions units correctly identified and defined in the permit? [if no, attach appropriate forms from Form Series B, C, D, and E]	Yes
9.	Does the CAM rule [40 CFR Part 64] apply to any of the emissions units? [if yes, review the guidance provided for CAM in the Form A4 instructions for this item]	No
10.	Does the accidental release prevention regulation [40 CFR Part 68] apply to the facility? [if yes, provide the appropriate regulatory applicability document in detail.]	No
11.	Are there any other new applicable requirements? [if yes, list the new applicable requirements, emissions units, and attach the appropriate Series E Form]	No

12.	Are there any requested changes in the assessable potential to emit other than those identified in item 9 above? [if yes, answer the following]	No
	Are the changes a result of having better emissions information such as a new emission factor from a recent source test? [if yes, complete and attach any applicable emissions forms from Series D. Attach additional information as necessary to fully document.]	NA
	Are the changes due to an increase in production? [if yes, complete and attach the applicable emissions form from Series D. Attach additional information as necessary to fully document.]	NA
13.	Is the stationary source in compliance with all of the conditions of the current permit? If yes, attach a compliance certification. If no, attach a compliance schedule and/or actions taken for any out-of-compliance emission units.	Yes
14.	Are there any requested changes to testing and/or monitoring conditions? [if yes, identify the condition, the requested change, and the reason. Attach additional information as necessary to fully document.]	No
15.	Are there any requested changes to monitoring conditions other than those being replaced by CAM? [if yes, identify the condition, the requested change, and the reason. Attach additional information as necessary to fully document.]	No
16.	Are there any requested changes to recordkeeping conditions? [if yes, identify the condition, the requested change, and the reason. Attach additional information as necessary to fully document.]	No
17.	Are there any requested changes to reporting conditions? [if yes, identify the condition, the requested change, and the reason. Attach additional information as necessary to fully document.]	No
18.	Are there any requested changes to the non-applicable requirements (i.e. permit shield)? [if yes, identify the emission unit, the requested change, and the reason in the appropriate Series B and/or D form. If the change applies stationary source-wide, complete the appropriate Series E form. Attach additional information as necessary to fully document.]	No
19.	Are there any other requested changes to any condition? [if yes, identify the condition, the requested change, and the reason. Attach	No

	additional information as necessary to fully document.]	

Statement of Certification:

Copper Valley Electric Association (CVEA), for the operation of the CVEA Glennallen Diesel Plant is currently in compliance with all applicable state and federal air quality regulations, as well as the conditions of its permit. As required by 40 CFR 71.5(c)(8)(ii)(A) and (iii)(A), CVEA hereby states that the stationary source will continue to comply with applicable requirements with which the source complies. For applicable requirements that will become effective during the permit term, CVEA will meet such requirements on a timely basis, as specified in 40 CFR 71.5(c)(8)(ii)(B). In accordance with 71.5(c)(9)(iii), CVEA will submit an annual compliance certification by March 31 of each year for all applicable requirements included in the Title V permit.

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.

Steve Williams
Name of Responsible Official

Power Generation Manager
Title

Signature (blue ink)

June 05, 2025
Date

Form B – Emission Unit Listing for this Application

FORM B
Emission Unit Listing For This Application

Permit Number: AQ0287TVP05

EMISSION UNIT LISTING: New, Modified, Previously Unpermitted, Replaced, Deleted					
Emission Unit ID Number	Emission Unit Name	Brief Emission Unit Description	Rating/Size	Construction Date	Notes
Emission Units To Be ADDED By This Application (New, Previously Unpermitted, or Replacement)					
	None.				
Emission Units To Be MODIFIED By This Application					
	None.				
Emission Units To Be DELETED By This Application					
	None.				

SIGNIFICANT EMISSION UNIT LISTING: Title V permitted emission units that have not been modified				
Emission Unit ID Number	Emission Unit Name	Brief Emission Unit Description	Rating/Size	Construction Date
6	DeLaval Enterprise Model DSR 46	Diesel Electric Generator Set	2,620 kW	1976
7	DeLaval Enterprise Model DSR 46	Diesel Electric Generator Set	2,620 kW	1976
8	Caterpillar Model 3516B	Diesel Electric Generator Set	1,285 kW	1999
9	EMD Model 16-710G4D Engine	Diesel Electric Generator Set	2,865 kW	2008

INSIGNIFICANT EMISSION UNIT LISTING: Insignificant Title V permitted emission units that have not been modified				
Emission Unit Name	Brief Emission Unit Description	Rating/Size	Construction Date	Basis for Insignificant Status
IEU #10 – Used Oil Shop Heater	OMNI by Econo Heat Model: OWH-250	0.25 MMBtu/hr	1999	18 AAC 50.326(g)(8)
IEU #13 – Fuel Storage Tank	Greer Tank	50,000 gallons	Pre-1999	18 AAC 50.326(e)
IEU #14 – Operations Building Hot Water Heater #1	Weil-McLain Model: UO-5E	0.172 MMBtu/hr	2017	18 AAC 50.326(g)(7)
IEU #15 – Operations Building Hot Water Heater #2	Weil-McLain Model: UO-5E	0.173 MMBtu/hr	2018	18 AAC 50.326(g)(7)
IEU #16 – Office Building Hot Water Heater	Burnham Model: MPO-IQ189-GL	0.3 MMBtu/hr	2012	18 AAC 50.326(g)(7)

NOTE:
IEUs were re-numbered in an effort to ensure that the nomenclature used to refer to each of these items comports with the EPA's Point Source Emission Inventory. The inventory that was submitted in 2024 (for the calendar year 2023 operating period) includes three IEUs (EU 10, 12, and 13). Operational characteristics do not match the confirmed nameplate data that is included in this application. We would like to ensure that information pertaining to these IEUs is consistent across all records, including the EPA's Point Source Emission Inventory. With that goal in mind, we recommend "removing" (or listing as out of operation) the EU 12, and adding IEUs 14, 15, and 16 as of the date of this application.

Form B1.1 – EU Detail Form—External Combustion Equipment, IEU 10

FORM B1
Emission Unit Detail Form – External Combustion Equipment (Boilers and Heaters)

Permit Number: AQ0287TVP05

1.	Emission Unit ID Number // Operating Scenario	EU #10
2.	Date installation/construction commenced	2006
3.	Date installed	2006
4.	Emission Unit serial number	NA/not visible on tag
5.	Special control requirements? [if yes, describe]	No
6.	Manufacturer	OMNI by ECONO Heat
7.	Description of emission unit, including type of boiler/heater and firing method: Used oil fired shop heater. Model 3831-P105-G350K	
8.	Rated design capacity (heat input, MMBtu/hr)	0.25 MMBtu/hr
9.	Maximum steam production rate (lbs/hr)	
10.	Maximum steam pressure (psi)	
11.	Maximum steam temperature (°F)	

12. Fuel usage: [for EACH fuel, enter]:

Fuel	Maximum hourly firing rate (specify units)
Used oil/diesel fuel	1.8 gal/hr

13.	Is waste heat utilized for any purpose? If yes, describe: No

Applicable Requirements Specific to Emission Unit (*attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Applicable Requirements*):

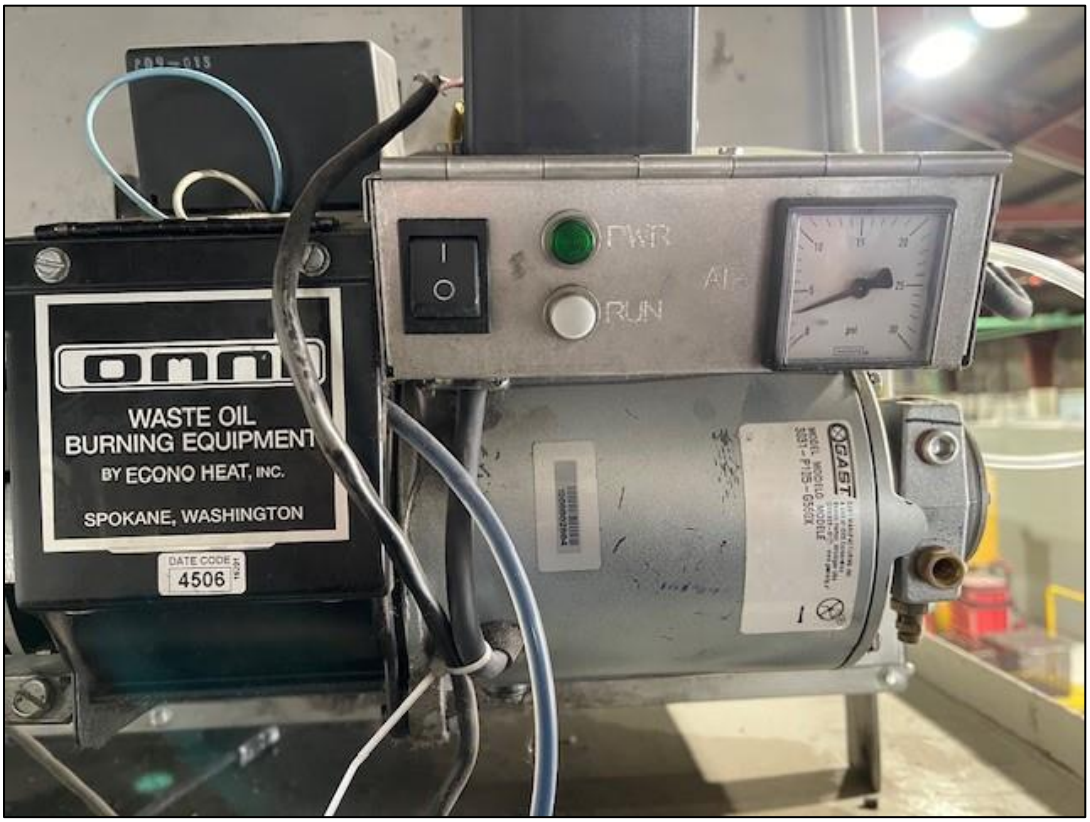
Permit and Condition Number	Applicable Requirement Citation[1]	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods Used to Demonstrate Compliance
AQ0287TVP05 Condition 14	18 AAC 50.050(a); 18 AAC 50.055(b); 18 AAC 50.055(c); 18 AAC 50.346(b)(4)	Visible Emissions, Particulate Matter, Sulfur compounds	20% opacity, 0.05 grains/dscf exhaust gas; 500 ppm SO_2	Yes	Condition 14.4

[1] Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

Non-applicable Requirements Specific to Emission Unit (*attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Permit Shield Request*):

Non-Applicable Requirements[1]	Reason for non-applicability and citation/basis
None.	

1 Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]


PWR
RUN
WASTE OIL
BURNING EQUIPMENT
BY ECONO HEAT, INC.
SPOKANE, WASHINGTON
DATE CODE
4506
GAST

Form B1.2 – EU Detail Form—External Combustion Equipment, IEU 14

FORM B1
Emission Unit Detail Form – External Combustion Equipment (Boilers and Heaters)

Permit Number: AQ0287TVP05

1.	Emission Unit ID Number // Operating Scenario	EU #14
2.	Date installation/construction commenced	2017
3.	Date installed	2017
4.	Emission Unit serial number	NA/not visible on tag
5.	Special control requirements? [if yes, describe]	No
6.	Manufacturer	Weil-McLain
7.	Description of emission unit, including type of boiler/heater and firing method: Diesel-fired hot water heater used for comfort heat in the Operations Building. Model UO-5E.	
8.	Rated design capacity (heat input, MMBtu/hr)	0.172 MMBtu/hr
9.	Maximum steam production rate (lbs/hr)	
10.	Maximum steam pressure (psi)	
11.	Maximum steam temperature (°F)	

12. Fuel usage: [for EACH fuel, enter]:

Fuel	Maximum hourly firing rate (specify units)
No. 2 fuel oil	1.4 gal/hr

13.	Is waste heat utilized for any purpose? If yes, describe: No

Applicable Requirements Specific to Emission Unit (*attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Applicable Requirements*):

Permit and Condition Number	Applicable Requirement Citation[1]	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods Used to Demonstrate Compliance
AQ0287TVP05 Condition 14	18 AAC 50.050(a); 18 AAC 50.055(b); 18 AAC 50.055(c); 18 AAC 50.346(b)(4).	Visible Emissions, Particulate Matter, Sulfur Compounds.	20% opacity, 0.05 grains/dscf exhaust gas; 500 ppm SO_2.	Yes	Condition 14.4

[1] Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

Non-applicable Requirements Specific to Emission Unit (*attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Permit Shield Request*):

Non-Applicable Requirements[1]	Reason for non-applicability and citation/basis
Standards of 40 C.F.R. 63 Subpart JJJJJJ	This unit meets the definition of a hot water heater in 40 C.F.R. §63.11237, because the unit is rated less than 0.3 MMBtu/hr and produces hot water, not steam. Hot water heaters are not subject to the standards of Subpart JJJJJJ per 40 C.F.R. §63.11195(f).

1 Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]


CERTIFIED BY
WEIL-McLAIN
MAWP WATER ..... 50 PSI
MAXIMUM WATER TEMPERATURE ..... 250 F
MINIMUM RELIEF VALVE CAPACITY ..... 173 LB/HR or MBH
Canadian registration number 1642.9087YNT
AHRI CERTIFIED
Boiler Model U0 – 5E
Series No. 3
Type of Fuel No.2 Fuel Oil
Input 1.40 US/GPH
Heating Capacity 173,000 Btu/hr
Net Output (Water) 150 MBH (36.93 KW)
AFUE 87.0%
Installer to check properly installed burner. For use only with burners listed above.
Electrical Ratings – 120 Volts/60 Hz
Total Amps 7.7 14.8
Minimum Circuit Ampacity 8.3 15.4
Circuit Breaker 15 20
MEA Number 314 – 05 – E
Design certified under UL 726/CSA B140.7 – 05
523 S. New Street – Eden, North Carolina – 27288 – 3623
Minimum Combustible Clearances:
Front 2" from burner
Rear 2"
Top 12" from control pod (24" for service)
Right Side 2" (15" for burner door swing)
Left Side 2" (15" for burner door swing)
Flue 18" (single wall) 6" (double wall)
May be installed on combustible floor when leveling legs are used.
Certified for use with Type L Vent.
In Canada, Blocked Vent Shutoff Switch Kit (511 – 624 – 858) must be installed on chimney vent applications.
When allowed, may be direct vented using Field Controls Direct Vent Kit, Model Number FDVS – 40, and Vent Pipe, Model Number FVOP – 415. Vent runs are limited to 15 feet.
U.S. Patent Nos. D533,648; 7,669,535; D549,808; 7,497,728
CAUTION
DO NOT USE PETROLEUM COMPOUNDS IN BOILER
PATENT PENDING

Form B1.3 – EU Detail Form—External Combustion Equipment, IEU 15

FORM B1
Emission Unit Detail Form – External Combustion Equipment (Boilers and Heaters)

Permit Number: AQ0287TVP05

1.	Emission Unit ID Number // Operating Scenario	EU #15
2.	Date installation/construction commenced	2018
3.	Date installed	2018
4.	Emission Unit serial number	NA/not visible on tag
5.	Special control requirements? [if yes, describe]	No
6.	Manufacturer	Weil-McLain
7.	Description of emission unit, including type of boiler/heater and firing method: Diesel-fired hot water heater used for comfort heat in the Operations Building. Model UO-5E	
8.	Rated design capacity (heat input, MMBtu/hr)	0.173 MMBtu/hr
9.	Maximum steam production rate (lbs/hr)	
10.	Maximum steam pressure (psi)	
11.	Maximum steam temperature (°F)	

12. Fuel usage: [for EACH fuel, enter]:

Fuel	Maximum hourly firing rate (specify units)
No. 2 fuel oil	1.4 gal/hr

13.	Is waste heat utilized for any purpose? If yes, describe: No

Applicable Requirements Specific to Emission Unit (*attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Applicable Requirements*):

Permit and Condition Number	Applicable Requirement Citation[1]	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods Used to Demonstrate Compliance
AQ0287TVP05 Condition 14	18 AAC 50.050(a); 18 AAC 50.055(b); 18 AAC 50.055(c); 18 AAC 50.346(b)(4).	Visible Emissions, Particulate Matter, Sulfur Compounds.	20% opacity, 0.05 grains/dscf exhaust gas; 500 ppm SO_2.	Yes	Condition 14.4

[1] Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

Non-applicable Requirements Specific to Emission Unit (*attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Permit Shield Request*):

Non-Applicable Requirements[1]	Reason for non-applicability and citation/basis
Standards of 40 C.F.R. 63 Subpart JJJJJJ	This unit meets the definition of a hot water heater in 40 C.F.R. §63.11237, because the unit is rated less than 0.3 MMBtu/hr and produces hot water, not steam. Hot water heaters are not subject to the standards of Subpart JJJJJJ per 40 C.F.R. §63.11195(f).

[1] Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]


ULTRA OIL
CERTIFIED BY
WEIL-McLAIN
MAWP WATER 50 PSI
MAXIMUM WATER TEMPERATURE 250 F
MINIMUM RELIEF VALVE CAPACITY 173 LB/HR or MBH
Canadian registration number 1642.9087YNT
Boiler Model UO – 5E
CAUTION
DO NOT USE PETROLEUM-BASED COMPOUNDS IN BOILER SYSTEM. DAMAGE TO SYSTEM COMPONENTS CAN RESULT, CAUSING PROPERTY DAMAGE.
PATENT PENDING
6-20R3
CP76519456
210010AK

Form B1.4 – EU Detail Form—External Combustion Equipment, IEU 16

FORM B1
Emission Unit Detail Form – External Combustion Equipment (Boilers and Heaters)

Permit Number: AQ0287TVP05

1.	Emission Unit ID Number // Operating Scenario	EU #16
2.	Date installation/construction commenced	2012
3.	Date installed	2012
4.	Emission Unit serial number	65277583
5.	Special control requirements? [if yes, describe]	No
6.	Manufacturer	Burnham
7.	Description of emission unit, including type of boiler/heater and firing method: Diesel-fired hot water heater used for comfort heat in the Office Building. Model MPO-IQ189-GL.	
8.	Rated design capacity (heat input, MMBtu/hr)	0.3 MMBtu/hr
9.	Maximum steam production rate (lbs/hr)	
10.	Maximum steam pressure (psi)	
11.	Maximum steam temperature (°F)	

12. Fuel usage: [for EACH fuel, enter]:

Fuel	Maximum hourly firing rate (specify units)
No. 2 fuel oil	1.35 gal/hr

13.	Is waste heat utilized for any purpose? If yes, describe: No

Applicable Requirements Specific to Emission Unit (*attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Applicable Requirements*):

Permit and Condition Number	Applicable Requirement Citation[1]	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods Used to Demonstrate Compliance
AQ0287TVP05 Condition 14	18 AAC 50.050(a); 18 AAC 50.055(b); 18 AAC 50.055(c); 18 AAC 50.346(b)(4).	Visible Emissions, Particulate Matter, Sulfur Compounds.	20% opacity, 0.05 grains/dscf exhaust gas; 500 ppm SO_2.	Yes	Condition 14.4

[1] Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

Non-applicable Requirements Specific to Emission Unit (*attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Permit Shield Request*):

Non-Applicable Requirements[1]	Reason for non-applicability and citation/basis
Standards of 40 C.F.R. 63 Subpart JJJJJJ	This unit meets the definition of a hot water heater in 40 C.F.R. §63.11237, because the unit is rated less than 0.3 MMBtu/hr and produces hot water, not steam. Hot water heaters are not subject to the standards of Subpart JJJJJJ per 40 C.F.R. §63.11195(f).

1 Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]


143008AK
LOW PRESSURE BOILER 09/2011
MODEL NUMBER: MPO-IQ189-GL
SERIAL NUMBER: 65277583
CERTIFIED BY
U.S. Boiler Company, Inc.
MAX. WATER TEMP: 250°F
MAWP, WATER: 50 PSI
MINIMUM RELIEF VALVE
CAPACITY 129 MBH OR LBS/HR
THIS BOILER EXCEEDS THE
MINIMUM EFFICIENCY REQUIREMENT
SPECIFIED IN ASHRAE
STANDARD 90.1
ETL LISTED
Conforms To
UL726
9700609
FIRING RATE
LT. OIL (NO.2): 1.35 GPH
GROSS OUTPUT: MBH
D.O.E. HTG. CAP: 167 MBH
NET I=B=R RATINGS
WATER: 145 MBH
ELECTRICAL RATING
120V/60HZ LESS THAN 12 AMPS
BOILER CASTINGS
ENERGY STAR

Form B2.1 – EU Detail Form—Internal Combustion Equipment, EU IDs 6 & 7

FORM B2

Emission Unit Detail Form - Internal Combustion Equipment (Engines and Turbines)

Permit Number: AQ0287TVP05

1.	Emission Unit ID Number // Operating Scenario	EUs 6 and 7
2.	Date installation/construction commenced[1]	1976
3.	Date installed	~1976
4.	Emission Unit serial number	75011-2737 and 75012-2738
5.	Special control requirements? [if yes, describe]	No
6.	Manufacturer and model number	DeLaval Enterprise Model DSR46 Engine
7.	Type of combustion device	Liquid fuel-fired CI RICE
8.	Rated design capacity (horsepower rating for engines)	
9.	Rated design capacity (heat input, MMBtu/hr rating for turbines)	
10.	If used for power generation, electrical output (kW)	2,620 kWe

1. See page 2 of the Form B instructions regarding installation/construction date and consult regulations under 40 C.F.R. 60 (NSPS) and 40 C.F.R. 63 (NESHAP) for applicability dates, e.g.,
- NSPS Subparts IIII and JJJJ, and NESHAP Subpart ZZZZ for engines, and
- NSPS Subparts GG and KKKK, and NESHAP Subpart YYYY for turbines.
Note that other regulations may apply in addition to the regulations cited.

11. Fuel usage: [for EACH fuel, enter]:

Fuel	Maximum hourly firing rate (specify units)
Diesel Fuel	178.2 gal/hr

12.	Describe any specific modifications to the emission unit that must be addressed in the permit: N/A

Applicable Requirements Specific to Emission Unit (*attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Applicable Requirements*):

Permit and Condition Number	Applicable Requirement Citation[1]	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods Used to Demonstrate Compliance
AQ0287TVP05 Condition 1.1	18 AAC 50.055(a)(1)	Visible emissions	20% opacity	Yes	Conditions 2 through 4
AQ0287TVP05 Condition 5	18 AAC 50.055 (b)(1)	Particulate matter	0.05 gr/dscf PM	Yes	Conditions 5.1, and 6 through 8
AQ0287TVP05 Condition 9	18 AAC 50.055(c)	Sulfur compound emissions	500 ppm SO_2	Yes	Conditions 9 through 11
AQ0287TVP05 Condition 12	AQ00287MSS02 Condition 4	NOx PSD Avoidance Limit	374 TPY NOx per 12 consecutive months	Yes	Condition 13.1, 13.2(a), and 13.3 through 13.6
AQ0287TVP05 Condition 19	40 CFR 63.6665, Subpart ZZZZ	NESHAP Subpart A	General Requirements	Yes	Condition 19
AQ0287TVP05 Condition 20	40 CFR 63, Subpart ZZZZ	Work Practices and Management Standards	Prescribed engine maintenance	Yes	Condition 20.2

[1] Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

Non-applicable Requirements Specific to Emission Unit (*attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Permit Shield Request*):

Non-Applicable Requirements[1]	Reason for non-applicability and citation/basis
AQ0287TVP05 Condition 20.2	EU IDs 6 and 7 qualify for the exemption from emission reduction standards and associated MR&R. EU IDs 6 and 7 operate in an isolated grid in Alaska that is not connected to the statewide electrical grid referred to as the Alaska Railbelt Grid, the total electrical capacity of the Glennallen Diesel Plant is less than 12 megawatts, and the source distributes more than 10% of the power generated for residential purposes. As such, these engines are subject only to the work practice and management standards allowed under 40 CFR 63.6603(b)(2)(i-iii).

[1] Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

Form B2.2 – EU Detail Form—Internal Combustion Equipment, EU ID 8

FORM B2

Emission Unit Detail Form - Internal Combustion Equipment (Engines and Turbines)

Permit Number: AQ0287TVP05

1.	Emission Unit ID Number // Operating Scenario	EU 8
2.	Date installation/construction commenced[1]	1999
3.	Date installed	~1999
4.	Emission Unit serial number	1NW00117
5.	Special control requirements? [if yes, describe]	No
6.	Manufacturer and model number	Caterpillar Model 3516B
7.	Type of combustion device	Liquid fuel-fired CI RICE
8.	Rated design capacity (horsepower rating for engines)	
9.	Rated design capacity (heat input, MMBtu/hr rating for turbines)	
10.	If used for power generation, electrical output (kW)	1,285 kWe

1. See page 2 of the Form B instructions regarding installation/construction date and consult regulations under 40 C.F.R. 60 (NSPS) and 40 C.F.R. 63 (NESHAP) for applicability dates, e.g.,
- NSPS Subparts IIII and JJJJ, and NESHAP Subpart ZZZZ for engines, and
- NSPS Subparts GG and KKKK, and NESHAP Subpart YYYY for turbines.
Note that other regulations may apply in addition to the regulations cited.

11. Fuel usage: [for EACH fuel, enter]:

Fuel	Maximum hourly firing rate (specify units)
Diesel Fuel	87.4 gal/hr

12.	Describe any specific modifications to the emission unit that must be addressed in the permit: N/A

Applicable Requirements Specific to Emission Unit (*attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Applicable Requirements*):

Permit and Condition Number	Applicable Requirement Citation[1]	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods Used to Demonstrate Compliance
AQ0287TVP05 Condition 1.1	18 AAC 50.055(a)(1)	Visible emissions	20% opacity	Yes	Conditions 2 through 4
AQ0287TVP05 Condition 5	18 AAC 50.055 (b)(1)	Particulate matter	0.05 gr/scf PM	Yes	Conditions 5.1, and 6 through 8
AQ0287TVP05 Condition 9	18 AAC 50.055(c)	Sulfur compound emissions	500 ppm SO_2	Yes	Conditions 9 through 11
AQ0287TVP05 Condition 12	AQ00287MSS02 Condition 4	NOx PSD Avoidance Limit	374 TPY NOx per 12 consecutive months	Yes	Condition 13.1, 13.2(a), and 13.3 through 13.6
AQ0287TVP05 Condition 19	40 CFR 63.6665, Subpart ZZZZ	NESHAP Subpart A	General Requirements	Yes	Condition 19
AQ0287TVP05 Condition 20	40 CFR 63, Subpart ZZZZ	Work Practices and Management Standards	Prescribed engine maintenance	Yes	Condition 20.2

[1] Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

Non-applicable Requirements Specific to Emission Unit (*attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Permit Shield Request*):

Non-Applicable Requirements[1]	Reason for non-applicability and citation/basis
AQ0287TVP05 Condition 20.2	EU ID 8 qualifies for the exemption from emission reduction standards and associated MR&R. EU ID 8 operates in an isolated grid in Alaska that is not connected to the statewide electrical grid referred to as the Alaska Railbelt Grid, the total electrical capacity of the Glennallen Diesel Plant is less than 12 megawatts, and the source distributes more than 10% of the power generated for residential purposes. As such, these engines are subject only to the work practice and management as allowed under 40 CFR 63.6603(b)(2)(i-iii).

[1] Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

Form B2.3 – EU Detail Form—Internal Combustion Equipment, EU ID 9

FORM B2

Emission Unit Detail Form - Internal Combustion Equipment (Engines and Turbines)

Permit Number: AQ0287TVP05

1.	Emission Unit ID Number // Operating Scenario	EU 9
2.	Date installation/construction commenced[1]	2008
3.	Date installed	~2008
4.	Emission Unit serial number	08-81-1043
5.	Special control requirements? [if yes, describe]	No
6.	Manufacturer and model number	EMD Model 16-710G4D Engine
7.	Type of combustion device	Liquid fuel-fired CI RICE
8.	Rated design capacity (horsepower rating for engines)	
9.	Rated design capacity (heat input, MMBtu/hr rating for turbines)	
10.	If used for power generation, electrical output (kW)	2,865 kWe

1. See page 2 of the Form B instructions regarding installation/construction date and consult regulations under 40 C.F.R. 60 (NSPS) and 40 C.F.R. 63 (NESHAP) for applicability dates, e.g.,
- NSPS Subparts IIII and JJJJ, and NESHAP Subpart ZZZZ for engines, and
- NSPS Subparts GG and KKKK, and NESHAP Subpart YYYY for turbines.
Note that other regulations may apply in addition to the regulations cited.

11. Fuel usage: [for EACH fuel, enter]:

Fuel	Maximum hourly firing rate (specify units)
Diesel Fuel	194.9 gal/hr

12.	Describe any specific modifications to the emission unit that must be addressed in the permit: N/A

Applicable Requirements Specific to Emission Unit (*attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Applicable Requirements*):

Permit and Condition Number	Applicable Requirement Citation[1]	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods Used to Demonstrate Compliance
AQ0287TVP05 Condition 1.1	18 AAC 50.055(a)(1)	Visible emissions	20% opacity	Yes	Conditions 2 through 4
AQ0287TVP05 Condition 5	18 AAC 50.055 (b)(1)	Particulate matter	0.05 gr/scf PM	Yes	Conditions 5.1, and 6 through 8
AQ0287TVP05 Condition 9	18 AAC 50.055(c)	Sulfur compound emissions	500 ppm SO_2	Yes	Conditions 9 through 11
AQ0287TVP05 Condition 12	AQ00287MSS02 Condition 4	NOx PSD Avoidance Limit	374 TPY NOx per 12 consecutive months	Yes	Condition 13.1, 13.2(b), and 13.3 through 13.6
AQ0287TVP05 Condition 15	40 CFR 60.4218	40 CFR 60 Subpart A	General Provisions	Yes	Compliance based on records review and reasonable inquiry
AQ0287TVP05 Condition 16	40 CFR 60.12	40 CFR 60 Subpart A	General Provisions	Yes	Compliance based on records review and reasonable inquiry
AQ0287TVP05 Condition 17	40 CFR 60 Subpart IIII	Engine Emission Standards	NOx + THC = 7.8 g/kw-h, CO = 5.0 g/kw-h, PM = 0.27 g/kw-h	Yes	Condition 17.1-17.9
AQ0287TVP05 Condition 20	40 CFR 63, Subpart ZZZZ	Work Practices and Management Standards	Prescribed engine maintenance	Yes	Condition 20.1

[1] Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

Non-applicable Requirements Specific to Emission Unit (*attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Permit Shield Request*):

Non-Applicable Requirements[1]	Reason for non-applicability and citation/basis
None.	

[1] Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

Form B4 – EU Detail Form—Volatile Liquid Storage Tanks, IEU 13

FORM B4
Emission Unit Detail Form – Volatile Liquid Storage Tanks

Permit Number: AQ0287TVP05

1.	Emission Unit ID Number // Operating Scenario	IEU 13
2.	Date installation/construction commenced	Pre-1999
3.	Date installed	Pre-1999
4.	Special control requirements? [if yes, describe]	No
5.	Rated capacity (gallons)	50,000 gallons
6.	Tank Length (ft)	60.67 ft.
7.	Tank diameter (ft)	12 ft.
8.	Tank age (years)	
9.	Submerged fill pipe?	
10.	Type of tank (specify)	Horizontal
11.	Underground?	
	If underground, specify type of tube and vapor return.	
12.	Above ground vapor control information:	
	Pipe material	
	Pipe size	
	Piping drainage (continuous drain downward or condensate collection tank – if condensate collection, attach a description)	
	Isolation valve installed in piping?	
13.	Pressure vacuum relief valves:	
	Vent pressure settings (psia)	
	Months in which relief valves removed (specify)	
14.	Pressure conservation vent? [if yes, specify pressure setting – psia]	
15.	Fixed roof tanks:	
	Roof color	
	Shell color	Silver
	Average vapor space height (ft)	
	Shell condition (specify)	Good

	Emission Unit ID Number	13
16	Floating roof tanks:	
	Type of construction (specify)	
	Condition (specify)	
	Tank color	
	Deck type (specify)	
17.	External floating roof tanks, seal type (specify)	
18.	Internal floating roof tanks:	
	Seal type (specify)	
	Number of columns	
	Effective column diameter (ft)	
	Total deck seam length (ft)	
	Deck fitting types – access hatch	
	bolted cover, gasketed	
	unbolted cover, gasketed	
	unbolted cover, ungasketed	
	Deck fitting types - Automatic gauge float well	
	bolted cover, gasketed	
	unbolted cover, gasketed	
	unbolted cover, ungasketed	
	Deck fitting types – column well	
	Built up column – sliding cover, gasketed	
	Built up column – sliding cover, ungasketed	
	Pipe column – flexible fabric sleeve seal	
	Pipe column – – sliding cover, gasketed	
	Pipe column – – sliding cover, ungasketed	
	Deck fitting types – ladder well	
	sliding cover, gasketed	
	sliding cover, ungasketed	

	Emission Unit ID Number	13
	Deck fitting types – smple well or pipe	
	Slotted pipe – sliding cover, gasketed	
	Slotted pipe – sliding cover, ungasketed	
	Sample well – slit fabric seal, 10% open area	
	Stub drain – 1-inch diameter	
	Deck fitting type – roof leg or hanger will	
	Adjustable	
	fixed	
	Deck fitting type – vacuum breaker	
	Weighted mechanical actuation, gasketed	
	Weighted mechanical actuation, ungasketed	
19.	Maximum liquid loading rate (gal/hr)	
20.	Submerged fill at out-loading (describe)	
21.	Material(s) stored	
	Type of material	ULSD Fuel
	Normal annual throughput (gal/yr)	~5,000 gallons/yr, based on the past 5 years actual fuel throughput
	Normal turnovers per year	0.1
	Density (lbs/gal)	7.0 lb/gal (ISO conditions)
	Molecular weight	
	Average storage temperature (°F)	60 degrees Fahrenheit (ISO conditions)
	Vapor pressure (psi)	0.4 mm Hg, or 0.053 kPa

FORM B4

Emission Unit Detail Form – Volatile Liquid Storage Tanks

Applicable Requirements Specific to Emission Unit (*attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Applicable Requirements*):

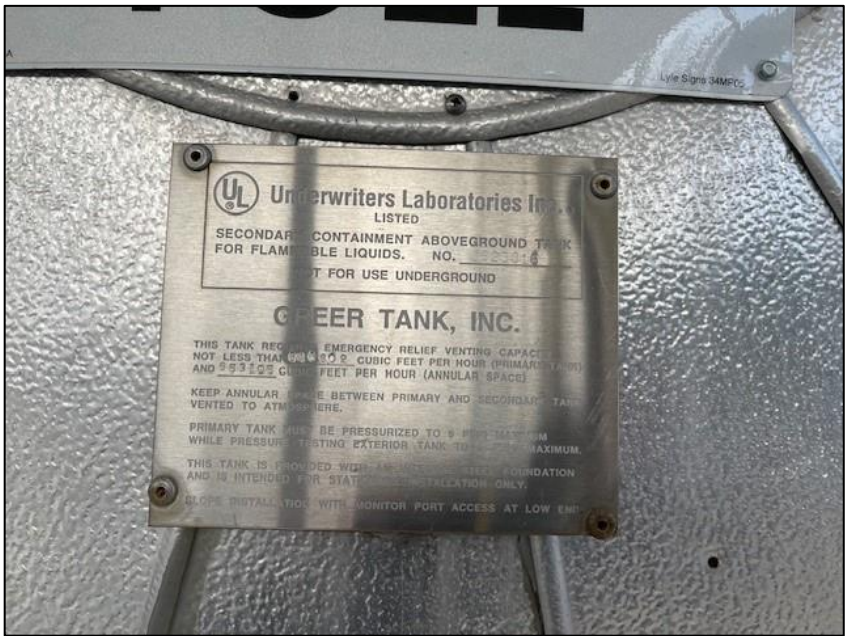
Permit and Condition Number	Applicable Requirement Citation[1]	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods Used to Demonstrate Compliance
None.					

[1] Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

Non-applicable Requirements Specific to Emission Unit (*attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Permit Shield Request*):

Non-Applicable Requirements[1]	Reason for non-applicability and citation/basis
None.	

1 Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]


Underwriters Laboratories Inc.
LISTED
FOR USE UNDERGROUND
CHEER TANK, INC.

Forms D1 & D2 – Please see attached MS Excel File for Emission Calculations and EPA Tanks 5.1 Export Files

Form E1 – Stationary Source-Wide Applicable Requirements

FORM E1

Stationary Source-Wide Applicable Requirements

Permit Number: AQ0287TVP05

Stationary Source-Wide Applicable Requirements (*attach additional sheets as needed*):

Permit and Condition Number	Applicable Requirement Citation[1]	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Used to Determine Compliance
AQ0287TVP05 Condition 18	18 AAC 50.040(b)(1), 50.040(b)(2)(F), & 50.326(j)	NESHAP Subparts A&M	Work Practice	Yes	Compliance based upon reasonable inquiry.
AQ0287TVP05 Conditions 21-23	18 AAC 50.040(d) & 50.326(j)	Protection of Stratospheric Ozone	Work Practice	Yes	Compliance based upon reasonable inquiry.
AQ0287TVP05 Conditions 24-28	18 AAC 50.040(c)(1), 50.040(j), 50.326(j), 71.6(a)(3)(iii)	General NSPS and NESHAP Requirements	Work Practice	Yes	Compliance based upon reasonable inquiry.
AQ0287TVP05 Conditions 29-31	18 AAC 50.326(j)(3), 50.345(a), (e), (f) & (g)	Standard Terms and Conditions	Work Practice	Yes	Compliance based upon reasonable inquiry.
AQ0287TVP05 Condition 32	18 AAC 50.326(j)(1), 50.400, & 50.403	Administrative Fees	Work Practice	Yes	Compliance based upon reasonable inquiry.
AQ0287TVP05 Conditions 33-34	18 AAC 50.040(j)(4), 50.035, 50.326(j)(1) & (3), 50.346(b)(1), 50.410, & 50.420	Assessable Emissions & Estimates	Work Practice	Yes	Conditions 33.1 and 33.2 and 34.1 – 34.4.
AQ0287TVP05 Condition 35	18 AAC 50.045(a)	Dilution	Prohibition	Yes	Compliance based upon reasonable inquiry.

Permit and Condition Number	Applicable Requirement Citation[1]	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Used to Determine Compliance
AQ0287TVP05 Condition 36	18 AAC 50.045(d), 50. 326(j)(3), & 50.346(c)	Reasonable Precautions to Prevent Fugitive Dust	Work Practice	Yes	Conditions 36.1 & 36.2.
AQ0287TVP05 Condition 37	18 AAC 50.055(g)	Stack Injection	Prohibition	Yes	Compliance based upon reasonable inquiry.
AQ0287TVP05 Condition 38	18 AAC 50.040(j)(4), 50.110, 50.326(j)(3) & 50.346(a)	Air Pollution Prohibited	Prohibition	Yes	Conditions 38.1-38.3.
AQ0287TVP05 Condition 39	18 AAC 50.235(a), 50.326(j)(4), & 50.040(j)(4)	Technology-Based Emission Standard	Work Practice	Yes	Conditions 39.1-39.2
AQ0287TVP05 Condition 40	18 AAC 50.065, 50.040(j), & 50.326(j)	Open Burning	Work Practice	Yes	Conditions 40.1 & 40.2.
AQ0287TVP05 Conditions 41-50	18 AAC 50.220(a), (b) & (c)(1)(A) – (F), (c)(2), (c)(3), & (f), 50.030, 50.345(a), & (k)-(o), 50.040(a) – (c) & 50.990(102)	General Source Testing and Monitoring Requirements	Work Practice	Yes	Compliance based upon reasonable inquiry.

FORM E1

Stationary Source-Wide Applicable Requirements

Permit and Condition Number	Applicable Requirement Citation[1]	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Used to Determine Compliance
AQ0287TVP05 Condition 51	18 AAC 50.040(a)(1) & 50.326(j)	Recordkeeping Requirements	Work Practice	Yes	Conditions 51.1 and 51.2.
AQ0287TVP05 Condition 52	18 AAC 50.345(a) & (j), 50.205, 50.326(j)(3), & 50.346(b)(10)	Certification	Work Practice	Yes	Condition 52.1.
AQ0287TVP05 Condition 53	18 AAC 50.326(j)(3) & 50.346(b)(10)	Submittals	Work Practice	Yes	Condition 53.1.
AQ0287TVP05 Condition 54	18 AAC 50.345(a) & (i), 50.200, & 50.326(a) & (j)	Information Requests	Work Practice	Yes	Compliance based upon reasonable inquiry.
AQ0287TVP05 Condition 55	18 AAC 50.235(a)(2), 50.240(c), 50.326(j)(3), & 50.346(b)(2) & (3)	Excess Emissions and Permit Deviation Reports	Work Practice	Yes	Conditions 55.1 – 55.3.
AQ0287TVP05 Condition 56	18 AAC 50.346(b)(6) & 50.326(j)(3)	Operating Permits	Work Practice	Yes	Conditions 56.1 – 56.5.
AQ0287TVP05 Condition 57	18 AAC 50.205, 50.345(a) & (j), & 50.326(j)	Annual Compliance Certification	Work Practice	Yes	Conditions 57.1 – 57.3.

FORM E1

Stationary Source-Wide Applicable Requirements

Permit and Condition Number	Applicable Requirement Citation[1]	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Used to Determine Compliance
AQ0287TVP05 Condition 58	18 AAC 50.040(j)(4), 50.326(j)(3), 50.346(b)(8) & 50.200	Emission Inventory Reporting	Work Practice	Yes	Conditions 58.1 – 58.5
AQ0287TVP05 Condition 59	18 AAC 50.040(j)(7), 50.326(a) & (j)(3), & 50.346(b)(7)	Permit Applications and Submittals	Work Practice	Yes	Conditions 59.1 - 59.4.
AQ0287TVP05 Condition 60	18 AAC 50.040(j)(4) & 50.326(j)	Emissions Trading	Work Practice	Yes	Compliance based upon reasonable inquiry.
AQ0287TVP05 Condition 61	18 AAC 50.040(j)(4) & 50.326(j)	Off Permit Changes	Work Practice	Yes	Conditions 61.1 – 61.4.
AQ0287TVP05 Condition 62	18 AAC 50.040(j)(4) & 50.326(j)	Operational Flexibility	Work Practice	Yes	Conditions 62.1 and 62.2.
AQ0287TVP05 Condition 63	18 AAC 50.040(j)(3), 50.326(c) & (j)(2)	Permit Renewal	Work Practice	Yes	Compliance based upon reasonable inquiry.
AQ0287TVP05 Conditions 64-69	18 AAC 50.040(j), 50.326(j) & 50.345(a), (b), (c), (d) & (h)	General Compliance Requirements	Work Practice	Yes	Compliance based upon reasonable inquiry.

1 Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

Attachment A – Title V Operating Permit AQ0287TVP05, Glennallen Diesel Plant

DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR QUALITY OPERATING PERMIT

Permit No. AQ0287TVP05

Issue Date: Final - December 17, 2020
Expiration Date: December 17, 2025

The Alaska Department of Environmental Conservation, under the authority of AS 46.14 and 18 AAC 50, issues an operating permit to the Permittee, **Copper Valley Electric Association, Inc.**, for the operation of the **Glennallen Diesel Plant**.

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 January 16, 2021.

Upon effective date of this permit, Operating Permit No. AQ0287TVP04 expires.

James R. Plosay, Manager
Air Permits Program

Table of Contents

Abbreviations and Acronyms

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
CAA or The Act .Clean Air Act
CDX.....Central Data Exchange
CEDRI .....Compliance and Emissions Data Reporting Interface
CFR .....Code of Federal Regulations
CI .....compression ignition
CO .....carbon monoxide
dscf .....dry standard cubic foot
EPA .....US Environmental Protection Agency
EU.....emissions unit
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
ICE.....internal combustion engine
ID.....emissions unit identification number
kW .....kilowatts
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
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
NOx.....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
RICE .....reciprocating internal combustion engine
SIC. .....Standard Industrial Classification
SIP.....State Implementation Plan
SO_2 .....sulfur dioxide
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:		Copper Valley Electric Association, Inc. PO Box 45 Glennallen, AK 99588
Stationary Source Name:		Glennallen Diesel Plant
Location:		62º 07′ 07" North; 145º 31′ 46" West
Physical Address:		Mile 187, Glenn Highway Glennallen, AK 99588
Owner and Operator:		Copper Valley Electric Association, Inc. PO Box 45 Glennallen, AK 99588
Permittee's Responsible Official and Designated Agent:		Wayne McKinzey, Director of Power Supply PO Box 927 Valdez, AK 99686
Stationary Source and Building Contact:		Wayne McKinzey, Director of Power Supply PO Box 927 Valdez, AK 99686 (907) 835-7015 mckinzey@cvea.org
Fee and Permit Contact:		Wayne McKinzey, Director of Power Supply PO Box 927 Valdez, AK 99686 (907) 835-7015 mckinzey@cvea.org
Process Description:	SIC Code	4911- Electrical Services
	NAICS Code:	221112 - Fossil Fuel Electric Power Generation

[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
6	Engine/Generator Set	DeLaval Enterprise Model DSR 46	Diesel	2,620 kW	1976
7	Engine/Generator Set	DeLaval Enterprise Model DSR 46	Diesel	2,620 kW	1976
8	Engine/Generator Set	Caterpillar Model 3516B	Diesel	1,285 kW	1999
9	Engine/Generator Set	EMD Model 16-710G4D	Diesel	2,865 kW	2008

[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 6 through 9 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 6 through 9, monitor, record, and report in accordance with Conditions 2 through 4.

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

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

Liquid Fuel-Burning Equipment

2. Visible Emissions Monitoring. When required by Condition 1.1, or in the event of replacement[1] during the permit term, the Permittee shall observe the exhaust of EU IDs 6 through 9 for visible emissions using the Method 9 Plan under Condition 2.2.

2.1. The Permittee may, for each unit, elect to continue the visible emissions monitoring schedule specified in Conditions 2.2.b through 2.2.e that remains in effect from a previous permit.

2.2. **Method 9 Plan.** For all observations in this plan, observe the emissions unit exhaust following 40 CFR 60, Appendix A-4, Method 9 for 18 minutes to obtain 72 consecutive 15-second opacity observations.[2]

a. First Method 9 Observation. Except as provided in Condition 2.1, observe the exhausts of EU IDs 6 through 9 according to the following criteria:

(i) Except as provided in Condition 2.2.a(ii), for any of EU IDs 6 through 9, observe exhaust within six months after the effective date of this permit.

(ii) For any unit replaced, observe exhaust within 60 days of the newly installed emissions unit becoming fully operational.[3] Except as provided in Condition 2.2.e, after the first Method 9 observation:

(A) For EU IDs 6 through 9, continue with the monitoring schedule of the replaced emissions unit.

[1] "*Replacement*," as defined in 40 C.F.R. 51.166(b)(32).
[2] Visible emissions observations are not required during emergency operations.
[3] "*Fully operational*" means upon completion of all functionality checks and commissioning after unit installation. "*Installation*" is complete when the unit is ready for functionality checks to begin.

b. Monthly Method 9 Observations. After the first Method 9 observation conducted under Condition 2.2.a, perform observations at least once in each calendar month that the emissions unit operates.

c. Semiannual Method 9 Observations. After at least three monthly observations under Condition 2.2.b, unless a six-consecutive-minute average opacity is greater than 15 percent and one or more individual observations are greater than 20 percent, perform semiannual observations:

(i) no later than seven months, but no earlier than five months, after the preceding observation; or

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

d. Annual Method 9 Observations. After at least two semiannual observations under Condition 2.2.c, unless a six-consecutive-minute average opacity is greater than 15 percent and one or more individual observations are greater than 20 percent, perform annual observations:

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

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

e. Increased Method 9 Frequency. If a six-consecutive-minute average opacity is observed during the most recent set of observations to be greater than 15 percent and one or more observations are greater than 20 percent, then increase or maintain the observation frequency for that emissions unit to at least monthly intervals as described in Condition 2.2.b, and continue monitoring in accordance with the Method 9 Plan.

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

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

3.1. For all Method 9 Plan observations,

a. the observer shall record the following:

(i) the name of the stationary source, emissions unit and location, emissions unit type, observer's name and affiliation, and the date on the Visible Emissions Observation Form in Section 11;

(ii) the time, estimated distance to the emissions location, sun location, approximate wind direction, estimated wind speed, description of the sky condition (presence and color of clouds), plume background, and operating rate (load or fuel consumption rate or best estimate, if unknown) on the sheet at the time opacity observations are initiated and completed;

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

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

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

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

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

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

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

(iv) record the average opacity on the sheet.

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

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

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

4.1. In the first operating report required in Condition 56 under this permit term, the Permittee shall state the intention to either continue the visible emissions monitoring schedule in effect from the previous permit or reset the visible emissions monitoring schedule.

4.2. Include in each operating report required under Condition 56 for the period covered by the report:

a. for all Method 9 Plan observations,

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

(ii) a summary to include:

(A) number of days observations were made;

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

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

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

4.3. Report under Condition 55:

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

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

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

Particulate Matter (PM) Emissions Standard

5. Industrial Process and Fuel-Burning Equipment PM Emissions. The Permittee shall not cause or allow particulate matter emitted from EU IDs 6 through 9 listed in Table A to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.

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

5.1. For EU IDs 6 through 9, monitor, record and report in accordance with Conditions 6 through 8.

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

PM MR&R

Liquid Fuel-Fired Engines and Turbines

6. PM Monitoring. The Permittee shall conduct source tests on EU IDs 6 through 9, to determine the concentration of PM in the exhaust of each emissions unit as follows:

6.1. If the result of any Method 9 observation conducted under Condition 2.2 for any of EU IDs 6 through 9 is greater than the criteria of Conditions 6.2.a or 6.2.b, the Permittee shall, within six months of that Method 9 observation, either:

a. take corrective action and observe the emissions unit exhaust under load conditions comparable to those when the criteria were exceeded, following 40 CFR 60, Appendix A-4 Method 9 for 18 minutes to obtain 72 consecutive 15-second opacity observations, to show that emissions are no longer greater than the criteria of Condition 6.2; or

b. except as exempted under Condition 6.4, conduct a PM source test according to requirements set out in Section 6.

6.2. Take corrective action or conduct a PM source test, in accordance with Condition 6.1 if any Method 9 observation under Condition 2.2 results in an 18-minute average opacity greater than

a. 20 percent for an emissions unit with an exhaust stack diameter that is equal to or greater than 18 inches; or

b. 15 percent for an emissions unit with an exhaust stack diameter that is less than 18 inches, unless the Department has waived this requirement in writing.

6.3. During each one-hour PM source test run under Condition 6.1.b, observe the emissions unit exhaust for 60 minutes in accordance with Method 9 and calculate the highest 18-consecutive-minute average opacity measured during each one-hour test run. Submit a copy of these observations with the source test report.

6.4. The PM source test requirements in Condition 6.1.b are waived for an emissions unit if:

a. a source test on that unit has shown compliance with the PM standard during this permit term; or

b. corrective action was taken to reduce visible emissions and two consecutive 18-minute Method 9 visible emissions observations (as described in Condition 2.2) conducted thereafter within a six-month period show visible emissions less than the threshold in Condition 6.2.

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

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

7.1. Keep records of the results of any source test and visible emissions observations conducted under Condition 6.

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

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

8.1. Notify the Department of any Method 9 observation results that are greater than the threshold of either Condition 6.2.a or 6.2.b within 30 days of the end of the month in which the observations occurred. Include the dates, EU ID(s), and results when an observed 18-minute average opacity was greater than an applicable threshold in Condition 6.2.

8.2. In each operating report under Condition 56, include:

a. a summary of the results of any PM source test and visible emissions observations conducted under Condition 6; and

b. copies of any visible emissions observation results greater than the thresholds of Condition 6.2, if they were not already submitted.

8.3. Report in accordance with Condition 55:

a. anytime the results of a PM source test exceed the PM emissions standard in Condition 5; or

b. if the requirements under Condition 6.1 were triggered and the Permittee did not comply on time with either Condition 6.1.a or 6.1.b. Report the deviation within 24 hours of the date compliance with Condition 6.1 was required.

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

Sulfur Compound Emissions Standard

9. Sulfur Compound Emissions. The Permittee shall not cause or allow sulfur compound emissions, expressed as SO_2, from EU IDs 6 through 9 to exceed 500 ppm averaged over three hours.

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

Sulfur Compound MR&R

Fuel Oil[4](EU IDs 6 through 9)

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

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

a. For each shipment of fuel:

(i) If the fuel grade requires a sulfur content 0.5 percent by weight ($wt\%S_{fuel}$) or less, keep receipts that specify fuel grade and amount; or

[4] *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.

(ii) If the fuel grade does not require a sulfur content 0.5 wt%S_{fuel} or less, keep receipts that specify fuel grade and amount, and

(A) test the fuel for sulfur content; or

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

b. Test the sulfur content of the fuel in each storage tank that supplies fuel to EU IDs 6 through 9 at least monthly.

10.2. Fuel testing under Condition 10.1.a or 10.1.b 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).

10.3. If a shipment of fuel contains greater than 0.75 wt%S_{fuel} or if the results of a fuel sulfur content test indicate that the fuel contains greater than 0.75 wt%S_{fuel}, the Permittee shall calculate 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)(3).

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

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

11.1. If SO_2 emissions calculated under Condition 10.3 exceed 500 ppm, the Permittee shall report in accordance with Condition 55. When reporting under this condition, include the calculation under Condition 10.3.

11.2. The Permittee shall include in the operating report required by Condition 56 for each month covered by the report:

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

b. for any fuel received with a fuel sulfur content greater than 0.5 wt%S_{fuel}, the fuel sulfur content of the shipment;

c. the results of all fuel sulfur analyses conducted under Condition 10.1.a or Condition 10.1.b and documentation of the method(s) used to complete the analyses; and

d. for any fuel received with a sulfur content greater than 0.75 wt%S_{fuel}, the SO_2 emissions in ppm calculated under Condition 10.3.

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

Preconstruction Permit [5] Requirements

Requirements to Protect Ambient Air Quality

12. Limit the fuel oil sulfur content to no greater than 0.5 percent by weight.

[Condition 5, Minor Permit AQ0287MSS02, 5/13/2014]
[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)(1)]

12.1. Monitor, record, and report in accordance with Conditions 10.1.a, 10.2, 11.2.a, and 11.2.b.

12.2. Report in accordance with Condition 55 whenever the fuel oil sulfur content exceeds the limit in Condition 12.

[Conditions 5.1 & 5.2, Minor Permit AQ0287MSS02, 5/13/2014]
[40 CFR 71.6(a)(3)]

Owner Requested Limit to Avoid PSD Requirements

13. **PSD Avoidance Limits**. Limit NOx emissions from EU IDs 6 through 9 listed in Table A to no greater than 374 tpy.

[Condition 4, Minor Permit AQ0287MSS02, 5/13/2014]
[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)(1)]

13.1. Continuously monitor the operation of EU IDs 6 through 9 using a kilowatt-hour (kWh) meter for each unit.

13.2. No later than the end of each calendar month, calculate the total NOx emissions from EU IDs 6 through 9 for the previous month, based on the operation of each unit (kWh) during that month and the following emission factors.

[Conditions 4.1 & 4.2, Minor Permit AQ0287MSS02, 5/13/2014]
[40 CFR 71.6(a)(3)]

a. EU IDs 6 through 8: 0.032 lb/kWh, and

b. EU ID 9: 0.0270 lb/kWh

[Conditions 4.2a & 4.2b, Minor Permit AQ0287MSS02, 5/13/2014]

13.3. No later than the end of each calendar month, calculate the total NOx emissions from EU IDs 6 through 9 for the 12 month rolling period ending with the previous month, based on the monthly emissions calculated under Condition 13.2.

13.4. Include the records and calculations required under Conditions 13.2 and 13.3 in the operating report required in Condition 56.

13.5. If the 12 month rolling total NOx emissions in Condition 13.3 exceeds 374 tons, report as excess emissions in accordance with Condition 55.

[5] *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.

13.6. If the 12 month rolling total NOx emissions in Condition 13.3 exceeds 337 tons, then within 180 days of discovery, conduct source tests on EU ID 9 and any one of EU IDs 6 or 7 to verify their NOx emission rates.

[Conditions 4.3 & 4.6, Minor Permit AQ0287MSS02, 5/13/2014]
[40 CFR 71.6(a)(3)]

a. Conduct the source tests at four loads in the operating range of the emission units, including the minimum and maximum operating loads of the emission units. Monitor and record the fuel consumption and average load during each test. List the average operating parameters for each run in the source test result.

b. From each source test, determine the NOx emission factor using exhaust properties determined by either Method 19 or Method 1-4, for each load. If using Method 19, then use the higher heating value throughout the analysis.

c. Within 45 days of the source test conducted in Condition 13.6.a calculate the 12 month rolling NOx emissions for the stationary source. For an emission unit, use the worst-case emission factor determined in the source test.

d. Report the source test results in accordance with Section 6 and the 12 month rolling NOx emissions in the operating report required in Condition 56.

e. After completing the NOx emission source tests for the tested emission units, determine the stationary source potential-to-emit (PTE) by summing the PTE for each emission unit. Attach the PTE calculations and results to the first stationary source operating report due after completion of the NOx emission source tests.

f. If the PTE determined in Condition 13.6.e exceeds the limit in Condition 13, report in accordance with Condition 55.

[Conditions 4.6a through 4.6f, Minor Permit AQ0287MSS02, 5/13/2014]

Insignificant Emissions Units

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

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

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

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

[18 AAC 50.055(b)(1)]

14.3. **Sulfur 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)]

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

a. Submit the compliance certifications of Condition 57 based on reasonable inquiry;

b. Comply with the requirements of Condition 38; and

c. Report in the operating report required by Condition 56 if an emissions unit has historically been classified as insignificant because of actual emissions less than the thresholds of 18 AAC 50.326(e) and current actual emissions have become greater than any of those thresholds.

d. No other monitoring, recordkeeping or reporting is required for insignificant emissions units to demonstrate compliance with the emissions standards under Conditions 14.1, 14.2, and 14.3.

[18 AAC 50.040(j)(3), 50.32(j)(3), & 50.346(b)(4)]
[40 CFR 71.6(a)(1) & (3)]

Section 4. Federal Requirements

40 CFR Part 60 New Source Performance Standards

Subpart A

15. New Source Performance Standards (NSPS) Subpart A Notification. For any affected facility[6] or existing facility[7] regulated under NSPS requirements in 40 CFR 60, the Permittee shall furnish the Administrator written notification or, if acceptable to both the Administrator[8] 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]

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

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

15.2. 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.

[40 CFR 60.15(d)(1) through (7), Subpart A]

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

[7] *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.

[8] For Section 4 of this permit, the Department defines *Administrator* to mean the EPA Administrator and the Department.

16. 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 17. 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

17. NSPS Subpart IIII Applicability. For EU ID 9, comply with the following applicable requirements of NSPS Subpart IIII.

[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]

NSPS Subpart IIII Emission Standards

17.1. You must comply with the following emission standards:

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

a. THC + NOx: 7.8 g/kW-hr

b. CO: 5 g/kW-hr

c. PM: 0.27 g/kW-hr

[40 CFR 94.8, Table A-1, Subpart A]

17.2. 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), Subpart IIII]

17.3. Owners and operators of stationary compression ignition (CI) internal combustion engines (ICE) must operate and maintain stationary CI ICE that achieve the emission standards as required in Condition 17.1 over the entire life of the engine.

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

NSPS Subpart IIII Compliance Requirements

17.4. You must do all of the following, except as permitted under Condition 17.6:

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

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

b. Change only those emission-related settings that are permitted by the manufacturer; and

c. 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]

17.5. You must comply with the emission standards specified in Conditions 17.1 by purchasing an engine certified to the emission standards in Conditions 17.1 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 17.6.

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

17.6. 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]

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

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

NSPS Subpart IIII Testing Requirements

17.7. 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 Recordkeeping Requirements

17.8. Keep records of the information in Conditions 17.8.a through 17.8.c.

[40 CFR 71.6(a)(3)]
[40 CFR 60.4214(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]

NSPS Subpart IIII General Requirements

17.9. Table 8 to NSPS Subpart IIII shows which parts of the General Provisions in 40 CFR 60.1 through 60.19 apply to you.

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

40 CFR Part 61 National Emission Standards for Hazardous Air Pollutants

Subparts A & M

18. Comply with the applicable requirements set forth in 40 CFR 61.145, 61.146, 61.148, 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), 50.040(b)(2)(F), & 50.326(j)]
[40 CFR 61 Subparts A & M, & Appendix A]

40 CFR Part 63 National Emission Standards for Hazardous Air Pollutants

Subpart A

19. For EU IDs 6 through 8, 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

20. NESHAP Subpart ZZZZ Applicability. For EU IDs 6 through 9, comply with the following applicable requirements of NESHAP Subpart ZZZZ.

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

20.1. For EU ID 9, meet the requirements of 40 CFR 63 by meeting the requirements of Condition 17. No further requirements apply under 40 CFR 63.

[40 CFR 63.6590(c), Subpart ZZZZ]

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

20.2. For EU IDs 6 through 8, comply with the following:

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

[40 CFR 63.6603(a), 63.6603(b), and 63.6603(b)(2); Subpart ZZZZ]
[40 CFR 71.6(a)(1)]

(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; NESHAP Subpart ZZZZ]

b. Sources have the option to utilize an oil analysis program as described in Condition 20.2.b(i) in order to extend the specified oil change requirement in Condition 20.2.a(i).

[Table 2d, NESHAP Subpart ZZZZ]

(i) The oil analysis must be performed at the same frequency specified for changing the oil in Condition 20.2.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), Subpart ZZZZ]

c. You must minimize the engine's time spent at idle during startup and minimize the engine's startup time 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]

NESHAP Subpart ZZZZ General Requirements

d. You must be in compliance with the requirements under Condition 20 at all times.

e. 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

f. You must demonstrate continuous compliance with each requirement under Conditions 20.2.a through 20.2.c by:

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

(i) Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or

(ii) 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; 40 CFR 63 Subpart ZZZZ]

NESHAP Subpart ZZZZ Reporting Requirements

g. 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)(iii)]

h. You must report all deviations as defined in NESHAP Subpart ZZZZ in the monitoring report required by Condition 56.

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

NESHAP Subpart ZZZZ Recordkeeping Requirements

i. 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)(ii)]

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

k. 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.

l. 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)(ii)]

40 CFR Part 82 Protection of Stratospheric Ozone

Subparts F, G, & H

21. Subpart F – Recycling and Emissions Reduction. Comply with the applicable standards for recycling and emission reduction of refrigerants in 40 CFR 82 Subpart F.

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

22. Subpart G – Significant New Alternatives. Comply with the applicable prohibitions in 40 CFR 82.174.

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

23. Subpart H – Halon Emissions Reduction. Comply with the applicable prohibitions 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

24. NESHAP Applicability Determinations. 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 in 40 CFR 63.1(b).

[18 AAC 50.040(c)(1), 50.040(j), & 50.326(j)]

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

[40 CFR 71.6(a)(3)(ii)]
[40 CFR 63.1(b)(3), Subpart A]

25. If an existing 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).

[18 AAC 50.040(c)(1), 50.040(j), & 50.326(j)]

26. After the effective date of any relevant standard promulgated by the Administrator under 40 CFR 63, 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)(iii)]
[40 CFR 63.5(b)(4), Subpart A]

27. **Reports.** Except for previously submitted reports and federal reports and notices submitted through EPA's Central Data Exchange (CDX) and Compliance and Emissions Data Reporting Interface (CEDRI) online reporting system, attach to the operating report required by Condition 56 for the period covered by the report, a copy of any NSPS and NESHAPs reports submitted to the U.S. Environmental Protection Agency (EPA) Region 10. For reports previously submitted to ADEC or submitted through CDX/CEDRI, state in the operating report the date and a brief description of each of the reports submitted during the reporting period.

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

28. **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 71.6(c)(6)]

Section 5. General Conditions

Standard Terms and Conditions

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

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

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

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

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

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

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

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

33. **Assessable Emissions.** For each period from July 1 through the following June 30, the Permittee shall pay to the Department an annual emission fee based on the stationary source's assessable emissions, as determined by the Department under 18 AAC 50.410. The Department will assess fees per ton of each air pollutant that the stationary source emits or has the potential to emit in quantities 10 tons per year or greater. The quantity for which fees will be assessed is the lesser of the stationary source'

33.1. potential to emit of 564 tpy; or

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

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

b. material balance calculations;

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

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

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

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

34.1. No later than March 31 of each year, the Permittee may submit an estimate of the stationary source's assessable emissions, as determined in Condition 33.2. Submit actual emissions estimates in accordance with the submission instructions on the Department's Standard Permit Conditions web page at http://dec.alaska.gov/air/air-permit/standard-conditions/standard-condition-i-submission-instructions/.

34.2. The Permittee shall include with the assessable emissions report all the assumptions and calculations used to estimate the assessable emissions in sufficient detail so the Department can verify the estimates.

34.3. If the stationary source has not commenced construction or operation on or before March 31st, the Permittee may submit to the Department's Anchorage office a waiver letter certified under 18 AAC 50.205 that states the stationary source's actual annual emissions for the previous calendar year are zero tpy and provides estimates for when construction or operation will commence.

34.4. If no estimate or waiver is submitted on or before March 31 of each year, emission fees for the next fiscal year will be based on the potential to emit in Condition 33.1.

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

35. 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)]

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

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

36.1. 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 36.1.a or to address the results of Department inspections that found potential problems; and

(ii) to prevent future dust problems.

36.2. The Permittee shall report according to Condition 38.

37. 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)]

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

[18 AAC 50.040(j)(4), 50.110, 50.326(j)(3) & 50.346(a)]
[40 CFR 71.6(a)(3)]

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

a. As soon as practicable after becoming aware of a complaint that is attributable to emissions from the stationary source, the Permittee shall investigate the complaint to identify emissions that the Permittee believes have caused or are causing a violation of Condition 38.

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

(i) after an investigation because of a complaint or other reason, the Permittee believes that emissions from the stationary source have caused or are causing a violation of Condition 38; or

(ii) the Department notifies the Permittee that it has found a violation of Condition 38.

38.2. **Recordkeeping**. 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 38; and

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

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

a. With each operating report under Condition 56, the Permittee shall include a brief summary report which must include the following for the period covered by the report:

(i) the number of complaints received;

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

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

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

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

c. If emissions present a potential threat to human health or safety, the Permittee shall report any such emissions according to Condition 55.

39. 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[9] listed in Condition 17 or 21 (refrigerants),

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

39.2. report in accordance with Condition 55; 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

40. Open Burning. If open burning is conducted at this stationary source, comply with the requirements of 18 AAC 50.065.

40.1. Keep written records to demonstrate compliance with the limitations in this condition and the requirements of 18 AAC 50.065. Submit copies of the records to the Department upon request.

40.2. Include this condition in the annual certification required under Condition 57.

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

[9] 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

41. 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)]

42. Operating Conditions. Unless otherwise specified by an applicable requirement or test method, conduct source testing

[18 AAC 50.220(b)]

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

42.2. 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.

43. Reference Test Methods. Use the following test methods when conducting source testing for compliance with this permit:

43.1. 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]

43.2. 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]

43.3. 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]

43.4. 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)]

43.5. 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]

43.6. 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]

43.7. 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]

44. 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)]

45. Test Exemption. Compliance with Conditions 47, 48 and 49 is not required for Method 9 Plan (Condition 2.2) observations.

[18 AAC 50.345(a)]

46. 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)]

47. Test Plans. Except as provided in Condition 45, 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 41 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)]

48. Test Notification. Except as provided in Condition 45, 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)]

49. **Test Reports.** Except as provided in Condition 45, within 60 days after completing a source test, the Permittee shall submit one certified copy of the results in the format set out in the *Source Test Report Outline*, adopted by reference in 18 AAC 50.030. The Permittee shall certify the results in the manner set out in Condition 52. If requested in writing by the Department, the Permittee must provide preliminary results in a shorter period of time specified by the Department.

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

50. **Particulate Matter Calculations.** In source testing for compliance with the particulate matter standards in Conditions 5 and 14.2, 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

51. 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 CFR 60.7(f), Subpart A, 40 CFR 71.6(a)(3)(ii)(B)]

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

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

a. calibration and maintenance records, original strip chart or computer-based recordings for continuous monitoring instrumentation;

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

c. the date(s) analyses were performed;

d. the company or entity that performed the analyses;

e. the analytical techniques or methods used;

f. the results of such analyses; and,

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

Reporting Requirements

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

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

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

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

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

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

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

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

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

[18 AAC 50.345(a) & (i), 50.200, & 50.326(a) & (j)]

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

55.1. **Excess Emissions Reporting**. Except as provided in Condition 38, the Permittee shall report all emissions or operations that exceed emissions standards or limits of this permit, as follows:

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

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

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

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

c. If a continuous or recurring excess emissions is not corrected within 48 hours of discovery, report within 72 hours of discovery unless the Department provides written permission to report under Condition 55.1.d.

d. Report all other excess emissions not described in Conditions 55.1.a, 55.1.b, and 55.1.c within 30 days after the end of the month during which the excess emissions occurred or as part of the next routine operating report in Condition 56 for excess emissions that occurred during the period covered by the report, whichever is sooner.

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

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

a. Report according to the required deadline for failure to monitor, as specified in other applicable conditions of this permit (Conditions 4.3.b and 8.3.b).

b. Report all other permit deviations within 30 days after the end of the month during which the deviation occurred or as part of the next routine operating report in Condition 56 for permit deviations that occurred during the period covered by the report, whichever is sooner.

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

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

56. Operating Reports. During the life of this permit[10], the Permittee shall submit to the Department an operating report in accordance with Conditions 52 and 53 by August 1 for the period January 1 to June 30 of the current year and by February 1 for the period July 1 to December 31 of the previous year.

56.1. The operating report must include all information required to be in operating reports by other conditions of this permit, for the period covered by the report.

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

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

b. the equipment involved;

c. the permit condition affected;

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

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

[10] *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.

56.3. when excess emissions or permit deviation reports have already been submitted under Condition 55 during the period covered by the operating report, the Permittee shall either

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

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

56.4. The operating report must include, for the period covered by the report, a listing of emissions monitored under Condition 2.2.e which trigger additional testing or monitoring, whether or not the emissions monitored exceed an emission standard. The Permittee shall include in the report:

a. the date of the emissions;

b. the equipment involved;

c. the permit condition affected; and

d. the monitoring result which triggered the additional monitoring.

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

[18 AAC 50.346(b)(6) & 50.326(j)(3)]
[40 CFR 71.6(a)(3)(iii)(A)]

57. Annual Compliance Certification. Each year by March 31, compile and submit to the Department an annual compliance certification report according to Condition 53.

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

a. identify each term or condition set forth in Section 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;

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

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

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

58. Emission Inventory Reporting. The Permittee shall submit to the Department reports of actual emissions for the previous calendar year, by emissions unit, of CO, NH_3, NOx, PM_{10}, $PM_{2.5}$, SO_2, VOCs and lead (Pb) and lead compounds, as follows:

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

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

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

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

a. For stationary sources located in Attainment and Unclassifiable Areas:

(i) 0.5 tpy of actual Pb, or

(ii) 1,000 tpy of CO; or

(iii) 100 tpy of SO_2, NH_3, PM_{10}, $PM_{2.5}$, NOx or VOCs.

b. For stationary sources located in Nonattainment Areas:

(i) 0.5 tpy of actual Pb; or

(ii) 1,000 tpy of CO or, when located in a CO nonattainment area, 100 tpy of CO; or

(iii) 100 tpy of SO_2, NH_3, PM_{10}, $PM_{2.5}$, NOx, or VOC; or as specified in Conditions 58.2.b(iv) through 58.2.b(viii);

(iv) 70 tpy of SO_2, NH_3, $PM_{2.5}$, NOx, or VOC in $PM_{2.5}$ serious nonattainment; or

(v) 70 tpy of PM_{10} in PM_{10} serious nonattainment areas; or

(vi) 50 tpy of NOx or VOC in O_3 serious nonattainment areas; or

(vii) 25 tpy of NOx or VOC in O_3 severe nonattainment areas; or

(viii) 10 tpy of NOx or VOC O_3 extreme nonattainment areas.

58.3. For reporting under Condition 58.2, the Permittee shall report the annual emissions and the required data elements under Condition 58.4 every third year for the previous calendar year as scheduled by the EPA[11].

58.4. For each emissions unit and the stationary source, include in the report the required data elements[12] contained within the form included in the Emission Inventory Instructions available at the Department's Air Online Services (AOS) system on the Point Source Emission Inventory webpage at http://dec.alaska.gov/Applications/Air/airtoolsweb/PointSourceEmissionInventory .

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

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

[11] The calendar years for which reports are required are based on the triennial reporting schedule in 40 CFR 51.30(b)(1), which requires states to report emissions data to the EPA for inventory years 2011, 2014, 2017, 2020, and every 3rd year thereafter. Therefore, the Department requires Permittees to report emissions data for the same inventory years by April 30 of the following year (e.g., triennial emission inventory report for 2020 is due April 30, 2021, triennial emission inventory report for 2023 is due April 30, 2024, etc.).

[12] The required data elements to be reported to the EPA are outlined in 40 CFR 51.15 and Tables 2a and 2b to Appendix A of 40 CFR 51 Subpart A.

Section 8. Permit Changes and Renewal

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

59.1. 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;

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

59.3. 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

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

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

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

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

61. Off Permit Changes. 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, may be made without a permit revision, provided that the following requirements are met:

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

61.2. Provide contemporaneous written notice to EPA and the Department of each such change, except for changes that qualify as insignificant under 18 AAC 50.326(d) – (i). Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change;

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

61.4. 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)]

62. Operational Flexibility. CAA Section 502(b)(10)[13] changes may be made within the permitted stationary source without 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): Provided, that the Permittee provides EPA and the Department with written notification no less than seven days in advance of the proposed change.

62.1. For each such change, the notification required by Condition 62 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.

62.2. The permit shield described in 40 CFR 71.6(f) shall not apply to any change made pursuant to Condition 62.

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

63. Permit Renewal. To renew this permit, the Permittee shall submit to the Department[14] an application under 18 AAC 50.326 no sooner than June 17, 2024 and no later than June 17, 2025. The renewal application must 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)]

[13] 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.

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

Section 9. Compliance Requirements

General Compliance Requirements

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

64.1. included and specifically identified in the permit; or

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

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

65. The Permittee must comply with each permit term and condition. Noncompliance with a permit term or condition constitutes a violation of AS 46.14, 18 AAC 50, and, except for those terms or conditions designated in the permit as not federally enforceable, the Clean Air Act, and is grounds for

65.1. an enforcement action;

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

65.3. denial of an operating permit renewal application.

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

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

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

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

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

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

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

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

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

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

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

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

[18 AAC 50.040(j) & 50.326(j)]
[40 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.

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

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

70.2. 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)]

71. Table B 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 B becomes applicable during the permit term, 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 B - Permit Shields Granted

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
6 through 8	Numerical CO emission limitations specified in Table 2d of 40 CFR 63 Subpart ZZZZ	Engines are located at an area source of HAPs that meets the criteria listed in 40 CFR 63.6603(b)(2).

[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" (a copy is available at https://www3.epa.gov/ttnemc01/methods/webinar8.pdf).

- Source Name: full company name, parent company or division or subsidiary information, if necessary.
- Address: street (not mailing or home office) address of facility where visible emissions observation is being made.
- Phone (Key Contact): number for appropriate contact.
- Stationary Source ID Number: number from NEDS, agency file, etc.
- Process Equipment, Operating Mode: brief description of process equipment (include type of facility) and operating rate, % capacity, and/or mode (e.g. charging, tapping, shutdown).
- Control Equipment, Operating Mode: specify type of control device(s) and % utilization, control efficiency.
- Describe Emission Point: for identification purposes, stack or emission point appearance, location, and geometry; and whether emissions are confined (have a specifically designed outlet) or unconfined (fugitive).
- Height Above Ground Level: stack or emission point height relative to ground level; can use engineering drawings, Abney level, or clinometer.
- Height Relative to Observer: indicate height of emission point relative to the observation point.
- Distance from Observer: distance to emission point; can use rangefinder or map.
- Direction from Observer: direction plume is traveling from observer.
- Describe Emissions and Color: include physical characteristics, plume behavior (e.g., looping, lacy, condensing, fumigating, secondary particle formation, distance plume visible, etc.), and color of emissions (gray, brown, white, red, black, etc.). Note color changes in comments section.
- Visible Water Vapor Present?: check "yes" if visible water vapor is present.
- If Present, note in the Comments column whether the plume is "attached" if water droplet plume forms prior to exiting stack, or "detached" if water droplet plume forms after exiting stack.
- Point in Plume at Which Opacity was Determined: describe physical location in plume where readings were made (e.g., 1 ft above stack exit or 10 ft. after dissipation of water plume).
- Describe Plume Background: object plume is read against, include texture and atmospheric conditions (e.g., hazy).
- Background Color: sky blue, gray-white, new leaf green, etc.
- Sky Conditions: indicate color of clouds and cloud cover by percentage or by description (clear, scattered, broken, overcast).
- Wind Speed: record wind speed; can use Beaufort wind scale or hand-held anemometer to estimate.
- Wind Direction From: direction from which wind is blowing; can use compass to estimate to eight points.
- Ambient Temperature: in degrees Fahrenheit or Celsius.
- Wet Bulb Temperature: can be measured using a sling psychrometer
- RH Percent: relative humidity measured using a sling psychrometer; use local US Weather Bureau measurements only if nearby.
- Source Layout Sketch: include wind direction, sun position, associated stacks, roads, and other landmarks to fully identify location of emission point and observer position.
- Draw North Arrow: to determine, point line of sight in direction of emission point, place compass beside circle, and draw in arrow parallel to compass needle.
- Sun's Location: point line of sight in direction of emission point, move pen upright along sun location line, mark location of sun when pen's shadow crosses the observer's position.
- Observation Date: date observations conducted.
- Start Time, End Time: beginning and end times of observation period (e.g., 1635 or 4:35 p.m.).
- Data Set: percent opacity to nearest 5%; enter from left to right starting in left column. Use a second (third, etc.) form, if readings continue beyond 30 minutes. Use dash (-) for readings not made; explain in adjacent comments section.
- Comments: note changing observation conditions, plume characteristics, and/or reasons for missed readings.
- Range of Opacity: note highest and lowest opacity number.
- Observer's Name: print in full.
- Observer's Signature, Date: sign and date after performing VE observation.
- 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
Emission Unit Location	
City / State / Zip	
Phone # (Key Contact)	Stationary Source ID Number
Process Equipment	Operating Mode
Control Equipment	Operating Mode
Describe Emission Point/Location	
Height above ground level / Height relative to observer / Clinometer Reading	
Distance From Observer Start / End	Direction From Observer Start / End
Describe Emissions & Color Start	End
Visible Water Vapor Present? If yes, determine approximate distance from the No / Yes	stack exit to w here the plume w as read
Point in Plume at Which Opacity Was Determined	
Describe Plume Background	Background Color
Start	Start
End	End
Sky Conditions: Start	End
Wind Speed Start / End	Wind Direction From Start / End
Ambient Temperature	Wet Bulb Temp / RH percent

SOURCE LAYOUT SKETCH: 1 Stack or Point Being Read 2 Wind Direction From
3 Observer Location 4 Sun Location 5 North Arrow 6 Other Stacks

Observation Date	Start Time	End Time

Min \ Sec	0	15	30	45	Comments
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
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 Observer's Name
Print Name:	
Signature:	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		
	Start	End		Sum	Average	Comments

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 10. 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[15]

Glennallen Diesel Plant — **Stationary Source (Facility) Name**

AQ0287TVP05 — **Air Quality Permit Number.**

Copper Valley Electric Association, Inc.
Company Name

When did you discover the Excess Emissions/Permit Deviation?

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

When did the event/deviation occur?

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

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

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

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

Reason for notification (Please check only 1 box and go to the corresponding section.):

☐ Excess Emissions - Complete Section 1 and Certify

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

☐ Deviation from Permit Conditions - Complete Section 2 and Certify

Note: Use only Section 2 for permit deviations that do not involve excess emissions.

☐ Deviation from COBC[16], CO[17], or Settlement Agreement - Complete Section 2 and Certify

[15] Revised as of November 7, 2020.

[16] Compliance Order By Consent

[17] Compliance Order

Section 1. Excess Emissions

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

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

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

(c) **Description**

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

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

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

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

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

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

(f) **Corrective Actions:**

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

(g) **Unavoidable Emissions:**

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

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

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

Section 2. Permit Deviations

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

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

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

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

EU ID	EU Name	Permit Condition /Potential Deviation

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

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

(d) **Corrective Actions:**

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

Certification:

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

Printed Name:_____Title_____Date _____

Signature:_____ Phone number_____

NOTE: *This document must be certified in accordance with 18 AAC 50.345(j). Read and sign the certification in the bottom of the form above. (See Condition 52.)*

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

If submitted online, report must be submitted by an authorized E-signer for the stationary source (according to Condition 52).

[18 AAC 50.346(b)(3)]

[18 AAC 50.346(b)(3)]