

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

FCE Summary Report

Facility : Palisades Nuclear Plant	SRN : B2934
Location : 27780 Blue Star Memorial Hwy.	District : Kalamazoo
	County : VAN BUREN
City : COVERT State: MI Zip Code : 49043	Compliance Status : Compliance
Source Class : MAJOR	Staff : Matthew Deskins
FCE Begin Date : 5/29/2018	FCE Completion Date : 5/29/2019
Comments :	

List of Partial Compliance Evaluations :

Activity Date	Activity Type	Compliance Status	Comments
05/29/2019	Scheduled Inspection	Compliance	Scheduled inspection due to security reasons.
03/25/2019	ROP Annual Cert	Compliance	Facility submitted report with an original signature and date. The report states that during the entire reporting period, all monitoring and associated recordkeeping requirements in the ROP were met and no deviations occurred.
03/25/2019	ROP SEMI 2 CERT	Compliance	Facility submitted report with an original signature and date. The report states that during the entire reporting period, all monitoring and associated recordkeeping requirements in the ROP were met and no deviations occurred.
03/25/2019	MAERS	Compliance	Facility submitted the MAERS certification form with an original signature and date.
09/26/2018	ROP Semi 1 Cert	Compliance	Facility reports no deviations during the reporting period.

Name: Matthew Deskins Date: 6-4-19 Supervisor: RIC 6/10/19

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Scheduled Inspection

B293449036

FACILITY: Palisades Nuclear Plant		SRN / ID: B2934
LOCATION: 27780 Blue Star Memorial Hwy., COVERT		DISTRICT: Kalamazoo
CITY: COVERT		COUNTY: VAN BUREN
CONTACT: Lynn Dewald , Environmental Specialist		ACTIVITY DATE: 05/29/2019
STAFF: Matthew Deskins	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Scheduled inspection due to security reasons.		
RESOLVED COMPLAINTS:		

On May 29th, 2019 AQD Staff (Matt Deskins and Cody Yazzie) went to conduct an announced inspection of the Palisades Nuclear Plant (PNP), owned and operated by Entergy, and is located in Covert, Van Buren County. Due to security reasons, staff had to schedule the inspection. According to file information, PNP is a major source and they have a Renewable Operating Permit (ROP) (MI-ROP-B2934-2019) that was recently renewed and issued in February of this year. The ROP contains various equipment such as diesel fired emergency generators and fire pumps, boilers for space heating, gas fired air compressors, and cold cleaners. Some of the emergency generators are subject to the NSPS IIII for Stationary Compression Ignition Internal Combustion and/or the NESHAP ZZZZ for Stationary Reciprocating Internal Combustion Engines. The AQD is currently not delegated to enforce the NESHAP ZZZZ regulations at area source of HAPS for which PNP is. The two 23.2 mm/btu boilers at PNP are also subject to the NESHAP JJJJJ for Area Source Industrial, Commercial, and Institutional Boilers and Process Heaters; however, the AQD is not delegated to enforce this regulation at area sources either. The purpose of staff's inspection was to determine compliance with the ROP and any state and/or federal regulations that the AQD is delegated to enforce. Staff departed the district office at approximately 8:50 a.m.

Staff arrived at PNP at approximately 9:45 a.m., proceeded to park, and then proceeded to the main entrance area where staff had been instructed to go when scheduling the inspection. Once in the main entrance, staff waited until either Steve Andrews (Secondary Specialist) or Lynn Dewald (Environmental Specialist) came to greet them at 10:00 a.m. (Scheduled time). A few minutes after staff arrived Lynn came out to greet staff and staff introduced themselves. While we were waiting for a male guard to come in to do the pat downs on staff, staff explained how we typically conduct our inspections to Lynn. Staff then asked some general questions about the facility and the following is what staff was told. According to Lynn, PNP has a single nuclear reactor that operates 24/7. The reactor grosses approximately 855,000 kw and has a net output of approximately 815,000 kw. PNP employs approximately 600 people and it is still slated to be closed in 2022. Lynn said that Entergy has offered employees the opportunity to relocate to other facilities they have in the southern U.S. A little time later a male guard arrived to give staff a pat down and a metal detector search. By the time staff made it through all the security measures in place at PNP it was approximately 10:50 a.m. Staff then proceeded with Lynn to a building that houses the administrative offices where staff ended up meeting Steve Andrews and Bill Turco. Bill is the Chemistry Supervisor for PNP. Bill asked staff what the inspection would entail and staff went on to explain how we typically conduct our air permit/ROP inspections which will include going over the various records required to be kept under the various EUs/FGs of the ROP along with viewing the equipment during a plant tour. Bill said he understood and said to get with him should we need anything from him and then excused himself. Staff then went on to conduct the inspection with both Lynn and Steve. Since it currently wasn't raining and rain was in the forecast, it was decided that we would take the plant tour first and then come back to the office to review records. The following is what staff observed/noted during the tour and it will be followed by the conditions of the ROP and PNP's compliance status with them.

NOTE: Staff tried to view the manufacturer's plates on all the equipment contained in the ROP but was unable to view some of them due to where they were located. However, it appears that these had been viewed during previous inspections.

Our first stop was at the boiler known as EUOFFICEBLR. It is rated at 2.5 MMBtu/hr and is fired on fuel oil. It was not operating during the inspection but it is used to for supplemental heating for the administrative office area. According to Steve, most of the heat used at the plant is from the auxiliary steam generated from the nuclear reaction process. T-926 is the tank that provides the fuel for this unit.

Our next stop was at the boiler known as EUPLANTHEATBLR. It is rated at 23.2 MMBtu/hr and is fired on fuel oil. It was not operating during the inspection and according to Steve, it only operates for maintenance checks and if there is a plant power outage, but that rarely happens. T-926 is the tank that provides the fuel for this unit also.

Our next stop was at the boiler known as EUEVAPBOILER. It is rated at 23.2 MMBtu/hr and is fired on fuel oil. It is located in an adjacent room to the plant heat boiler. It was not operating during the inspection and is also rarely used outside of doing maintenance checks. Lynn then mentioned to staff that they are looking into replacing the stack and installing a more efficient burner on it this boiler and asked if anything needed to be submitted. Staff then looked over the permit exemptions and told them that the stack could be replaced under the AQD Rule 285(2)(a) permit exemption as long as it's going to be the same dimensions. Staff then mentioned that the burner could be replaced under the AQD Rule 285(2)(b)(i)(G) permit exemption.

Our next stop was at EUGEN1 which is their Emergency Generator #1. It is a compression ignited engine and fires on diesel fuel. It is rated at 21.8 MMBtu/hr. It was not operating during staff's inspection. Tank 10A (Alpha) provides the fuel for this unit. Adjacent to the emergency generator is EUGENK-1A. It is a 10-hp emergency air compressor and is used to assist in start-up of the emergency generator if necessary. They run it one time per year for a maintenance check using 2 cups of fuel.

Our next stop was at EUGEN2 which is their Emergency Generator #2. It is located in an adjacent room to EUGEN1. It is also a compression ignited engine and fires on diesel fuel. It is rated at 21.8 MMBtu/hr. It was not operating during staff's inspection and Tank 10 A (Alpha) also provides the fuel for this unit. Adjacent to this emergency generator is EUGENK-1B. It is a 10-hp emergency air compressor and is used to assist in start-up of the emergency generator if necessary. They also run this unit one time per year for a maintenance check using 2 cups of fuel.

Our next stop was at EUGENK-10 which is an emergency fire pump. It is rated at 175-hp and fires on diesel fuel. Adjacent to this is EUGENK-5 which is the same size and type of emergency fire pump as EUGENK-10. Neither of these were in operation of course.

Our next stop was at EUGEN3 which is their Emergency Generator #3. It is a compression ignited engine and fires on diesel fuel. It was manufactured by CAT and is rated at 17.5 MMBtu/hr. It appears to be a 3516 and is a portable unit housed in its own container. Tank 10A also provides the fuel to this unit and it was not operating during staff's inspection.

Our next stop was at EUGENK-17. It was manufactured by CAT and is an emergency diesel fired engine for their auxiliary feedwater system. It was installed in 2018 and is rated at 800 hp. It is housed in its own enclosure and was not operating during staff's inspection.

Our next stop was at EUSECURITYGEN. It is a compression ignited engine fired on diesel fuel used for security operations. It is rated at 5.9 MMBtu/hr and it was not operating during staff's inspection. Staff did not go inside the building where this is housed due to security clearances needed and this unit has been viewed previously by AQD staff.

Our last stop was at the only cold cleaner at the facility that is housed in the maintenance garage. It had its lid closed and instructions posted.

We then proceeded back to Lynn's office to view records. The following are the emission units contained in the ROP along with their special conditions. Following the special conditions will be staff's comments regarding them.

C. EMISSION UNIT CONDITIONS

Part C outlines terms and conditions that are specific to individual emission units listed in the Emission Unit Summary Table. The permittee is subject to the special conditions for each emission unit in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA (not applicable) has been

used in the table. If there are no conditions specific to individual emission units, this section will be left blank.

EMISSION UNIT SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUEVAPBOILER	Evaporation heating boiler - 23.2 MMBtu/hr, fuel oil fired.	01-01-1970	FGBOILERS
EUPLANTHEATBLR	Plant heating boiler - 23.2 MMBtu/hr, fuel oil fired.	01-01-1970	FGBOILERS
EUOFFICEBLR	Office heating boiler - 2.5 MMBtu/hr, fuel oil fired.	09-20-2018	NA
EUGEN1	Emergency generator #1 - 21.8 MMBtu/hr, compression ignition, diesel fired.	01-01-1970	FGGENS1&2 FGEMERG-EXRICE
EUGEN2	Emergency generator #2 - 21.8 MMBtu/hr, compression ignition, diesel fired.	01-01-1970	FGGENS1&2 FGEMERG-EXRICE
EUGEN3	Emergency generator #3 - 17.5 MMBtu/hr, 2.0 MW, compression ignition, diesel fired emergency generator set.	07-01-2006	NA
EUSECURITYGEN	Emergency generator for security operations - 5.9 MMBtu/hr, compression ignition diesel fired.	07-01-2011	NA
EUGENK-17	800 bhp emergency diesel engine, model year 2016, for auxiliary feedwater system.	10-26-2018	NA
EUGENK-5	Emergency fire pump - 175 bhp, compression ignition, diesel fired.	12-31-1971	FGEMERG-EXRICE
EUEGENK-10	Emergency fire pump - 175 bhp, compression ignition, diesel fired.	11-01-1974	FGEMERG-EXRICE
EUGENK-1A	Emergency air compressor - 10 bhp, spark ignition, gas fired.	12-31-1971	FGEMERG-EXRICE
EUGENK-1B	Emergency air compressor - 10 bhp, spark ignition, gas fired.	12-31-1971	FGEMERG-EXRICE
EUCOLDCLEANER	Various cold cleaners operating under Rule 281(h) or Rule 285(r)(iv).	01-01-1970	FGCOLDCLEANERS

EUOFFICEBLR EMISSION UNIT CONDITIONS

DESCRIPTION

Office heating boiler - 2.5 MMBtu/hr, fuel oil fired.

II. MATERIAL LIMIT(S)

1. The permittee shall not burn fuel oil in EUOFFICEBLR which contains more than 0.40% sulfur by weight. (R 336.1201)

AQD Comment: Appears to be in Compliance. All tanks are tested after a fuel delivery and the sulfur content ranged from 0.0006% to 0.0008% (See attached fuel analysis).

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permittee shall maintain a complete record of fuel oil specifications and/or a fuel oil analysis for each delivery, or storage tank, of fuel oil. These records may include purchase records for ASTM specification fuel oil, specifications or analyses provided by the vendor at the time of delivery, analytical results from laboratory testing, or any other records adequate to demonstrate compliance with the percent sulfur limit in fuel oil. The analysis method used to test the percent sulfur shall be an EPA, or equivalent, approved method. (R 336.1213(3))

AQD Comment: Appears to be in Compliance. The facility is doing this (See attached fuel analysis).

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))

AQD Comment: Appears to be in Compliance with #1 through #3 above. The facility has been submitting their reports on time.

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the applicable requirements of 40 CFR Part 63 Subpart JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. (40 CFR Part 63, Subpart JJJJJJ)

AQD Comment: Staff did not make a compliance determination regarding this regulation since the AQD is not currently delegated to enforce it at area source of HAPs and no conditions pertaining to it were included in the ROP.

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

EUGEN3 EMISSION UNIT CONDITIONS
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DESCRIPTION

Emergency generator #3 - 17.5 MMBtu/hr, 2.0 MW, compression ignition, diesel fired emergency generator set.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	428 lb/1000 gal of fuel used ²	Instantaneous	EUGEN3	SC V.1	R 336.1205(1) (a) and (3)

AQD Comment: Appears to be in Compliance. The AQD has not requested any stack testing to date to demonstrate compliance with the above limit.

II. MATERIAL LIMIT(S)

1. The permittee shall only burn diesel fuel in EUGEN3.² (R 336.1205(1)(a) and (3), R 336.1224, R 336.1225, R 336.1401, R 336.1702(a), 40 CFR Part 52.21(c) and (d))

AQD Comment: Appears to be in Compliance. The facility only burns diesel fuel in the emergency generator.

2. If any electricity produced by EUGEN3 is sold to a utility power distribution system, the sulfur content of the diesel fuel used in FGENGINES shall not exceed 0.05 percent by weight on an annual average. The annual average shall be calculated as specified in 40 CFR 72.7(d)(3).² (40 CFR Part 72.7)

AQD Comment: N/A to date. Staff was told by the facility that they have never sold power produced by the emergency generator to a power distribution system.

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EUGEN3 for more than 1,100 hours per year on a 12-month rolling time period basis as determined at the end of each calendar month.² (R 336.1205(1)(a) and (3), R 336.1224, R 336.1225, R 336.1702(a), 40 CFR Part 52.21(c) and (d))

AQD Comment: Appears to be in Compliance. 12-month rolling records ending April of 2019 indicated that the emergency generator has run for 6.6 hours.

2. The permittee shall operate EUGEN3 in accordance with manufacturer's recommendations for safe and proper operation to minimize emissions during periods of startup, shutdown and malfunction.² (R 336.1912)

AQD Comment: Appears to be in Compliance. Staff assumes that the facility is operating the emergency generator properly.

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The total capacity from EUGEN3 shall not exceed 5 MW.² (40 CFR Part 72.7)

AQD Comment: Appears to be in Compliance. The emergency generator is rated at 2.0 MW.

2. The nameplate capacity of the generator of EUGEN3 shall not exceed 1,825 kW, and the nameplate capacity of the engine of EUGEN3 shall not exceed 2,628 hp, as certified by the equipment manufacturer.² (R 336.1205(1)(a) and (3), R 336.1224, R 336.1225, R 336.1702(a), 40 CFR Part 52.21(c) and (d))

AQD Comment: Appears to be in Compliance. The nameplate on the generator is 1,825 kW and 2,876

hp.

3. The permittee shall equip and maintain EUGEN3 with a non-resettable hours meter to track the operating hours.² (R 336.1205(1)(a) and (3), R 336.1224, R 336.1225, R 336.1702(a), 40 CFR Part 52.21 (c) and (d))

AQD Comment: Appears to be in Compliance. The unit is equipped with this.

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. Verification of the NOx emission limit, as specified in SC I.1, from EUGEN3, by testing at owner's expense, in accordance with Department requirements may be required. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of the emission factor includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test.² (R 336.1205(1) (a) and (3), R 336.2001, R 336.2003, R 336.2004)

AQD Comment: Appears to be in Compliance. The AQD has not requested any stack testing to date to demonstrate compliance with the NOx limit.

2. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. (R 336.1213(3))

AQD Comment: N/A to date.

See Appendix 5

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.² (R 336.1205(1)(a) and (3), R 336.1224, R 336.1225, R 336.1702(a), 40 CFR Part 52.21(c) and (d))

AQD Comment: Appears to be in Compliance with the above.

2. If any electricity produced by EUGEN3 is sold to a utility power distribution system, the permittee shall keep records of the sulfur content calculated in percent by weight, on an annual average as required by Condition III.2. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² (40 CFR Part 72.7)

AQD Comment: N/A to date. Staff was told by the facility that they have never sold power produced by the emergency generator to a power distribution system.

3. The permittee shall monitor, record, and keep, in a satisfactory manner, the total hours of operation for EUGEN3, on a monthly and 12-month rolling time period basis, in a manner acceptable to the District Supervisor, Air Quality Division. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² (R 336.1205(1)(a) and (3), R 336.1224, R 336.1225, R 336.1702(a), 40 CFR Part 52.21(c) and (d))

AQD Comment: Appears to be in Compliance with the above.

4. The permittee shall keep, in a satisfactory manner, records of the date, duration, and description of any malfunction, any maintenance performed and any testing results for EUGEN3. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² (R 336.1912)

AQD Comment: Appears to be in Compliance with the above.

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. (R 336.1213(3)(c), R 336.2001(5))

AQD Comment: Appears to be in Compliance with #1 through #3 above. The facility has been submitting their reports on time. #4 is N/A to date.

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

1. The exhaust gases from EUGEN3 shall be discharged unobstructed vertically upwards to the ambient air.² (R 336.1225, 40 CFR Part 52.21(c) and (d))

AQD Comment: Appears to be in Compliance with the above requirement.

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart ZZZZ for Stationary Reciprocating Internal Combustion Engines.² (40 CFR Part 63, Subparts A and ZZZZ)

AQD Comment: The AQD is not delegated to enforce the above regulation at area sources of HAPs; however, staff did review the records they've been keeping and they appear to be complying with the regulation.

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

EUSECURITYGEN EMISSION UNIT CONDITIONS

DESCRIPTION

Emergency generator for security operations – 5.9 MMBtu/hr, compression ignition diesel fired.

I. EMISSION LIMIT(S)

1. The permittee shall comply with the emission standards in CFR 40 CFR 94.8(a)(2), for all pollutants, for the same model year and maximum engine power as EUSECURITYGEN by purchasing an engine certified to the applicable emission standards. (40 CFR 60.4205(b), 40 CFR 60.4202(e)(1), 40 CFR 60.4211(a) and (c))

AQD Comment: Appears to be in Compliance. The emergency generator is a certified engine (See Attached Engine Certification).

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Fuel oil sulfur content	15 ppm	Instantaneous, at all times	EUSECURITYGEN	SC VI.2	40 CFR 60.4207(b)

AQD Comment: Appears to be in Compliance. Lab analysis done on the fuel after delivery showed that sulfur content ranged from 0.0006% (6 ppm) to 0.0008% (8 ppm).

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall maintain and operate EU-SECURTIYGEN in compliance with the appropriate emission standards for the life of the engine. (40 CFR Part 60.4206)

AQD Comment: Appears to be in Compliance with the above.

2. The permittee shall do all of the following except as permitted under 40 CFR 60.4211(g):
 - a. Operate and maintain EU-SECURITYGEN 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 EU-SECURITYGEN. (40 CFR Part 60.4211(a))

AQD Comment: Appears to be in compliance with the above.

3. The permittee shall install and configure EU-SECURITYGEN according to the manufacturer's specifications. (40 CFR Part 60.4211(c))

AQD Comment: Appears to be in Compliance. Staff will assume that the unit was installed properly.

4. In order for EU-SECURITYGEN to be considered an emergency engine under 40 CFR Part 60 Subpart IIII, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described below, is prohibited. If you do not operate the engine accordingly, EU-SECURITYGEN will not be considered an emergency engine under Subpart IIII and must meet all requirements for non-emergency engines (40 CFR Part 60.4211(f)):
 - a. There is no time limit on the use of EU-SECURITYGEN in emergency situations.
 - b. EU-SECURITYGEN may be operated for any combination of the purposes specified in 40 CFR 60.4211(f)(2) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed in 3.c below counts as part of the 100 hours per calendar year.
 - c. EU-SECURITYGEN may be operated for up to 50 hours per calendar year in non-emergency situations. These hours are counted as part of the 100 hours per calendar year for maintenance, testing and emergency demand response provided in 3.b above. Except as provided for in 40 CFR 60.4211(f)(3)(i), the 50 hours for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. (40 CFR Part 60.4211(f))

AQD Comment: Appears to be in Compliance with the above. The unit has been run 14.8 hours year to date.

5. If EU-SECURITYGEN is not installed, configured, operated and maintained according to the manufacturer's emission-related instructions, or the emission-related settings are changed in a way that is not permitted by the manufacturer, compliance shall be demonstrated by the applicable requirements in 40 CFR 60.4211(g). (40 CFR Part 60.4211(g))

AQD Comment: Appears to be in Compliance with the above. Staff will assume that it was installed properly and the facility maintains all records of maintenance done on the units.

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate EU-SECURITYGEN unless a non-resettable hour meter has been installed. (40 CFR Part 60.4209(a))

AQD Comment: Appears to be in Compliance.

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permittee shall keep a record of the following information on EU-SECURITYGEN:
 - a. Size of the unit in horsepower and KW, model year, cylinder displacement in liters;
 - b. The manufacturer's certification that EU-SECURITYGEN meets the applicable emission standards;
 - c. The manufacturer's information on the emissions-related instructions for installation, configuration, operation and maintenance. (R 336.1213(3))

AQD Comment: Appears to be in Compliance with the above.

2. The permittee shall keep a complete record of fuel oil specifications and/or a fuel oil analysis for each delivery, or storage tank, of fuel oil. These records may include purchase records for ASTM specification fuel oil, specifications or analyses provided by the vendor at the time of delivery, analytical results from laboratory testing, or any other records adequate to demonstrate compliance with the percent sulfur limit in fuel oil. The analysis method used to test the percent sulfur shall be an EPA, or equivalent, approved method. (R 336.1213(3))

AQD Comment: Appears to be in Compliance. The facility is doing this (See attached fuel analysis).

3. The permittee shall keep a record of the following on the use of EU-SECURITYGEN:
 - a. The date and time of each start up,
 - b. The reason for each operation,
 - c. The hours of operation, and
 - d. The running total of the hours of operation for the calendar year adequate to demonstrate compliance with 40 CFR 60.4211(f). (R 336.1213(3), (40 CFR Part 60.4214(b))

AQD Comment: Appears to be in Compliance with the above. The facility tracks all this information.

4. The permittee shall keep a record of maintenance performed on EU-SECURITYGEN. (R 336.1213(3))

AQD Comment: Appears to be in Compliance with the above. The facility tracks all this information through work orders.

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))

3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
4. If the permittee operates EU-SECURITYGEN under the purposes specified in § 60.4211(f)(2)(ii) and (iii) or § 60.4211(f)(3)(i) the annual report specified in § 60.4214(d) shall be submitted. (40CFR Part 60.4214(d))

AQD Comment: Appears to be in Compliance with #1 through #3 above. The facility has been submitting their reports on time. #4 is N/A to date.

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the federal New Source Performance Standards, as specified in 40 CFR Part 60, Subpart A and Subpart IIII for Stationary Compression Ignition Internal Combustion Engines. (40 CFR Part 60, Subparts A and IIII)

AQD Comment: Appears to be in Compliance with Subparts A and IIII.

2. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart ZZZZ for Stationary Reciprocating Internal Combustion Engines.² (40 CFR Part 63, Subparts A and ZZZZ)

AQD Comment: The AQD is not delegated to enforce the above regulation at area sources of HAPs, but staff did review the records they've been keeping and they appear to be complying with the regulation.

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

EUGENK-17 EMISSION UNIT CONDITIONS

DESCRIPTION

800 bhp emergency diesel engine, model year 2016, for auxiliary feedwater system.

I. EMISSION LIMIT(S)

1. The permittee shall comply with the emission standards in 40 CFR 60.4202, for all pollutants, for the same model year and maximum engine power as EUGENK-17 by purchasing an engine certified to the applicable emission standards.² (40 CFR Part 60.4200(b), 40 CFR Part 60.4202(e), 40 CFR Part 60.4211 (a) and (c))

AQD Comment: Appears to be in Compliance. The emergency generator is a certified engine (See Attached Engine Certification).

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Fuel oil sulfur content	15 ppm ²	Instantaneous, at all times	EUGENK-17	SC VI.1	40 CFR 60.4207(b)

AQD Comment: Appears to be in Compliance. Lab analysis done on the fuel after delivery showed that sulfur content ranged from 0.0006% (6 ppm) to 0.0008% (8 ppm). Testing under SC VI.1 has not been conducted since the engine is certified and the facility appears to be maintaining it properly.

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall not operate each engine in EUGENK-17 for more than 500 hours per year on a 12-month rolling time period basis as determined at the end of each calendar month. The 500 hours includes the hours for the purpose of necessary maintenance checks and readiness testing as described in SC III.5.² (R 336.1205(1)(a) and (b), R 336.1225, R 336.1702(a), 40 CFR Part 52.21 (c) and (d))**

AQD Comment: Appears to be in Compliance. The generator has only been run 10.9 hours since it was installed in October 2018.

- 2. The permittee shall maintain and operate EUGENK-17 in compliance with the appropriate emission standards for the life of the engine.² (40 CFR Part 60.4206)**

AQD Comment: Appears to be in Compliance.

- 3. The permittee shall do all of the following except as permitted under 40 CFR 60.4211(g):**
 - a. Operate and maintain EUGENK-17 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 EUGENK-17.² (40 CFR Part 60.4211(a))**

AQD Comment: Appears to be in Compliance with the above.

- 4. The permittee shall install and configure EUGENK-17 according to the manufacturer's specifications.² (40 CFR Part 60.4211(c))**

AQD Comment: Appears to be in Compliance. Staff will have to assume that it was installed properly.

- 5. In order for EUGENK-17 to be considered an emergency engine under 40 CFR Part 60 Subpart IIII, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described below, is prohibited. If you do not operate the engine accordingly, EUGENK-17 will not be considered an emergency engine under Subpart IIII and must meet all requirements for non-emergency engines.² (40 CFR Part 60.4211(f)):**
 - a. There is no time limit on the use of EUGENK-17 in emergency situations.**
 - b. EUGENK-17 may be operated for any combination of the purposes specified in 40 CFR 60.4211(f) (2) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed in 4.c below counts as part of the 100 hours per calendar year.**
 - c. EUGENK-17 may be operated for up to 50 hours per calendar year in non-emergency situations. These hours are counted as part of the 100 hours per calendar year for maintenance, testing and emergency demand response provided in 4.b above. Except as provided for in 40 CFR 60.4211(f) (3)(i), the 50 hours for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.² (40 CFR Part 60.4211(f))**

AQD Comment: Appears to be in Compliance. The generator has only been run 10.9 hours since it was installed in October 2018.

- 6. If EUGENK-17 is not installed, configured, operated and maintained according to the manufacturer's emission-related instructions, or the emission-related settings are changed in a way that is not permitted by the manufacturer, compliance shall be demonstrated by the applicable requirements in 40 CFR 60.4211(g).² (40 CFR Part 60.4211(g))**

AQD Comment: Appears to be in Compliance with the above. Staff will assume that it was installed properly and the facility maintains all records of maintenance done on the units. The facility hasn't changed any emission related settings.

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate EUGENK-17 unless a non-resettable hour meter has been installed.² (40 CFR Part 60.4209(a))

AQD Comment: Appears to be in Compliance.

2. The nameplate capacity of each engine in EUGENK-17 shall not exceed 800 BHP, as certified by the equipment manufacturer.² (R 336.1205(1)(a) and (3), 40 CFR Part 60.4202, 40 CFR Part 89.112(a))

AQD Comment: Appears to be in Compliance. The nameplate capacity stated 800 hp.

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permittee shall conduct an initial performance test for each engine in EUGENK-17 within one year after startup of the engine to demonstrate compliance with the emission limits in 40 CFR 60.4205 unless the engine has been certified by the manufacturer and the permittee maintains the engine as required by 40 CFR Part 60 Subpart IIII. If a performance test is required, the performance tests shall be conducted according to 40 CFR 60.4212. No less than 30 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. Subsequent performance testing shall be conducted every 8,760 hours of engine operation or 3 years, whichever comes first.² (40 CFR Part 60.4211, 40 CFR Part 60.4212, 40 CFR Part 60, Subpart IIII)

AQD Comment: N/A to date. The engine is certified and the facility appears to be maintaining it properly.

2. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. (R 336.1213(3))

AQD Comment: N/A to date.

See Appendix 5

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permittee shall keep a complete record of fuel oil specifications and/or a fuel oil analysis for each delivery, or storage tank, of fuel oil. These records may include purchase records for ASTM specification fuel oil, specifications or analyses provided by the vendor at the time of delivery, analytical results from laboratory testing, or any other records adequate to demonstrate compliance with the percent sulfur limit in fuel oil. The analysis method used to test the percent sulfur shall be an EPA, or equivalent, approved method.² (R 336.1205(1)(a) and (b), 40 CFR Part 80.510(b))

AQD Comment: The facility is sampling and analyzing every fuel delivery (See attached fuel analysis).

2. The permittee shall keep a record of the following on the use of EUGENK-17:
 - a. The date and time of each start up,
 - b. The reason for each operation,
 - c. The hours of operation, and
 - d. The running total of the hours of operation for the calendar year adequate to demonstrate compliance with 40 CFR 60.4211(f).² (40 CFR Part 60.4214)

AQD Comment: Appears to be in Compliance with the above. The facility tracks all this information.

3. The permittee shall keep a record of maintenance performed on EUGENK-17.² (40 CFR Part 60.4214 (a)(2))

AQD Comment: Appears to be in Compliance with the above. The engine is brand new and hasn't needed any maintenance done on it yet.

4. The permittee shall keep, in a satisfactory manner, records of testing required in SC V.1 or manufacturer certification documentation indicating that each engine in EUGENK-17 meets the applicable requirements contained in the federal Standards of Performance for New Stationary Sources 40 CFR Part 60 Subpart IIII. If an engine in FG-EG1 becomes uncertified, then the permittee must also keep records of a maintenance plan and maintenance activities for that engine. The permittee shall keep all records on file and make them available to the Department upon request.² (40 CFR Part 60.4211(g))

AQD Comment: Appears to be in Compliance. The facility has the documentation that it's a certified engine (See Attached Certification).

5. The permittee shall keep records of the operation of EUGENK-17 in emergency and non-emergency service that are recorded through the non-resettable hour meter, on a calendar year basis. The owner must record the time of operation of the engine and the reason the engine was in operation during each operational period. The record shall include calculations of the total number of hours used for each type of operation in the previous calendar year.² (40 CFR Part 60.4211, 40 CFR Part 60.4214(b))

AQD Comment: Appears to be in Compliance with the above.

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c) (ii))
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
4. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EUGENK-17.² (R 336.1201(7)(a))
5. If the EUGENK-17 is an emergency stationary internal combustion engine with a model year 2011 or newer, the permittee is not required to submit an initial notification.² (40 CFR Part 60.4214(b))
6. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. (R 336.1213(3)(c), R 336.2001(5))

AQD Comment: Appears to be in Compliance with #1 through #5 above and #6 is N/A to date.

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the federal New Source Performance Standards, as specified in 40 CFR Part 60, Subpart A and Subpart IIII for Stationary Compression Ignition Internal Combustion Engines.² (40 CFR Part 60, Subparts A and IIII)

AQD Comment: Appears to be in Compliance with Subparts A and III.

- 2. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart ZZZZ for Stationary Reciprocating Internal Combustion Engines.² (40 CFR Part 63, Subparts A and ZZZZ)

AQD Comment: The AQD is not delegated to enforce the above regulation at area sources of HAPs, but staff did review the records they've been keeping and they appear to be complying with the regulation.

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FLEXIBLE GROUP SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGBOILERS	An evaporator heating boiler and a plant heating boiler that fire fuel oil and have heat input capacities of 23.2 MMBtu/hr each.	EUEVAPBOILER EUPLANTHEATBLR
FGGENS1&2	Two emergency generators that fire fuel oil and have heat input capacities of 21.8 MMBtu/hr each.	EUGEN1 EUGEN2
FGEMERG-EXRICE	Emergency generators subject to 40 CFR Part 63, Subpart ZZZZ, as existing units.	EUGEN1 EUGEN2 EUGENK-5 EUGENK-10 EUGENK-1A EUGENK-1B
FGCOLDCLEANERS	Any existing cold cleaner (placed into operation prior to July 1, 1979) or new cold cleaner (placed into operation after July 1, 1979) that is exempt from NSR permitting by R 336.1281(h) or R 336.1285 (r)(iv).	EUCOLDCLEANER

**FGBOILERS
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

An evaporator heating boiler and a plant heating boiler that fire fuel oil and have heat capabilities of 23.2 MMBtu/hr.

Emission Units: EUEVAPBOILER, EUPLANTHEATBLR

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Fuel Oil	The maximum sulfur content in fuel oil shall not exceed the equivalent of 1.5%.*	Instantaneous	FGBOILERS	SC VI.2, VI.4	R 336.1401(1), Table 41
* The maximum sulfur content in fuel is defined as the average sulfur content in all fuels burned at any one time in a power plant as calculated on the basis of 18,000 BTUs per pound of liquid fuels.					

AQD Comment: Appears to be in Compliance. Lab analysis done on the fuel after delivery showed that sulfur content ranged from 0.0006% (6 ppm) to 0.0008% (8 ppm) (See attached lab analysis).

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permittee shall record the monthly fuel oil usage rates, in gallons, from FGBOILERS. (R 336.1213(3))

AQD Comment: Appears to be in Compliance. The facility is tracking this and they have used 1,150 gallons of fuel between the two year to date.

2. The permittee shall maintain a complete record of fuel oil specifications and/or a fuel oil analysis for each delivery, or storage tank, of fuel oil. These records may include purchase records for ASTM specification fuel oil, specifications or analyses provided by the vendor at the time of delivery, analytical results from laboratory testing, or any other records adequate to demonstrate compliance with the percent sulfur limit in fuel oil. The analysis method used to test the percent sulfur shall be an EPA, or equivalent, approved method. (R 336.1213(3))

AQD Comment: Appears to be in Compliance. Lab analysis is done on the fuel after every delivery and records are maintained.

3. To ensure proper operation, the permittee shall record the results of a weekly visible emission observation from SVPLNHTBLR and SVEVAPHTBLR. If visible emissions are observed, the permittee shall implement the Preventative Maintenance Plan at the facility. (R 336.1213(3))

AQD Comment: Appears to be in Compliance. The facility does VEs when the boilers are in operation and they have a PMP.

4. The permittee shall sample and record the percent sulfur content, by weight, of fuel oil in the storage tank once every 12 months using an EPA or equivalent approved method. (R 336.1213(3))

AQD Comment: Appears to be in Compliance. Lab analysis is done on the fuel after every delivery and records are maintained.

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for

reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))

- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))

AQD Comment: Appears to be in Compliance with #1 through #3 above. The facility has been submitting their reports on time.

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVEVAPHTBLR	27	100	R 336.1201(1)
2. SVPLNHTBLR	27	100	R 336.1201(1)

AQD Comment: Appears to be in Compliance with the above dimensions.

IX. OTHER REQUIREMENT(S)

- 1. The permittee shall comply with the applicable requirements of 40 CFR Part 63 Subpart JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. (40 CFR Part 63, Subpart JJJJJJ)

AQD Comment: Staff did not make a compliance determination regarding this regulation since the AQD is not currently delegated to enforce it at area source of HAPs and no conditions pertaining to it were included in the ROP.

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).
² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

<p>FGGENS1&2 FLEXIBLE GROUP CONDITIONS</p>

DESCRIPTION

Two emergency generators that fire fuel oil and have heat input capacities of 21.8 MMBtu/hr each.

Emission Units: EUGEN1, EUGEN2

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements

1. Fuel Oil	The maximum sulfur content in fuel oil shall not exceed the equivalent of 1.5%.*	Instantaneous	FGGENS	SC VI.2, VI.3	R 336.1401(1), Table 41
* The maximum sulfur content in fuel is defined as the average sulfur content in all fuels burned at any one time in a power plant and is calculated on the basis of 18,000 BTUs per pound of liquid fuels.					

AQD Comment: Appears to be in Compliance. Lab analysis done on the fuel after delivery showed that sulfur content ranged from 0.0006% (6 ppm) to 0.0008% (8 ppm) (See attached lab analysis).

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permittee shall record the monthly fuel oil usage rates, in gallons, from FGGENS. (R 336.1213(3))

AQD Comment: Appears to be in Compliance. The facility is tracking this and to date Gen 1 has used 5,437 gallons and Gen 2 has used 2,624 gallons year to date.

2. The permittee shall maintain a complete record of fuel oil specifications and/or a fuel oil analysis for each delivery, or storage tank, of fuel oil. These records may include purchase records for ASTM specification fuel oil, specifications or analyses provided by the vendor at the time of delivery, analytical results from laboratory testing, or any other records adequate to demonstrate compliance with the percent sulfur limit in fuel oil. The analysis method used to test the percent sulfur shall be an EPA, or equivalent, approved method. (R 336.1213(3))

AQD Comment: Appears to be in Compliance. Lab analysis is done on the fuel after every delivery and records are maintained (See attached fuel analysis).

3. To ensure proper operation, the permittee shall record the results of a weekly visible emission observation from SVGEN1 and SVGEN2 when operating, and within one hour following start up conditions, if startup has occurred. If visible emissions are observed, the permittee shall implement the Preventative Maintenance Plan at the facility. (R 336.1213(3))

AQD Comment: Appears to be in Compliance. The facility does VEs when the engines are in operation and they have a PMP.

4. The permittee shall sample and record the percent sulfur content, by weight, of fuel oil in the storage tank once every 12 months using an EPA or equivalent approved method. (R 336.1213(3))

AQD Comment: Appears to be in Compliance. Lab analysis is done on the fuel after every delivery and records are maintained.

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))

3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))

AQD Comment: Appears to be in Compliance with #1 through #3 above. The facility has been submitting their reports on time.

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVGEN1*	22	50	R 336.1201(1)
2. SVGEN2*	22	50	R 336.1201(1)
* Exhaust gases may be discharged horizontally.			

AQD Comment: Appears to be in Compliance with the above dimensions.

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart ZZZZ for Stationary Reciprocating Internal Combustion Engines.² (40 CFR Part 63, Subparts A and ZZZZ)

AQD Comment: The AQD is not delegated to enforce the above regulation at area sources of HAPs, but staff did review the records they've been keeping and they appear to be complying with the regulation.

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FGEMERG-EXRICE FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Emergency generators subject to 40 CFR Part 63, Subpart ZZZZ, as existing units.

Emission Units: EUGEN1, EUGEN2, EUGENK-5, EUGENK-10, EUGENK-1A, EUGENK-1B

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall 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 Part 63.6625(h))

AQD Comment: Appears to be in Compliance. Staff will assume that this is being done.

2. The permittee shall operate and maintain FGEMERG-EXRICE according to the manufacturer's emission-related operation and maintenance instructions or develop and follow a site-specific maintenance plan. The site-specific maintenance plan must provide, to the extent practicable, for

the maintenance and operation of the engine in a manner consistent with good air pollution control practices for minimizing emissions. (40 CFR Part 63.6605(b), 40 CFR Part 63.6625(e), 40 CFR Part 63.6640(a), 40 CFR Part 63, Subpart ZZZZ, Table 6.9)

AQD Comment: Appears to be in Compliance. Staff will assume that the facility is operating and maintaining the engines according to either manufacturer's and/or a site specific maintenance plan. They have work orders for all work that is performed on the engines.

3. In order to be considered emergency generators the permittee must operate FGEMERG-EXRICE according to the requirements below. Any operation other than this is prohibited. If not operated accordingly, then the engine must meet all requirements in 40 CFR Part 63, Subpart ZZZZ for non-emergency engines:
 - a. There is no time limit on the use of the emergency engine in emergency situations.
 - b. The permittee may operate each FGEMERG-EXRICE for any combination of the purposes specified below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 3.c counts as part of the 100 hours per calendar year:
 - i. FGEMERG-EXRICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.
 - ii. FGEMERG-EXRICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see § 63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
 - iii. FGEMERG-EXRICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
 - c. The permittee may operate each unit in FGEMERG-EXRICE up to 50 hours per year in non-emergency situations, but these 50 hours of operation are counted towards the 100 hours per year allowed in 3.b. Except as provided below, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity:
 - i. Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system.
 - ii. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
 - A. The engine is dispatched by the local balancing authority or local transmission and distribution system operator.
 - B. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
 - C. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
 - D. The power is provided only to the facility itself or to support the local transmission and distribution system.
 - E. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator. (40 CFR Part 63.6640(f))

AQD Comment: Appears to be in Compliance with all the requirements above and the facility has not sold any power that the emergency engines generate. Each engine has been run less than 100 hours per year.

4. The permittee shall maintain FGEMERG-EXRICE in a satisfactory manner, which includes the following:
 - a. Change oil and filter every 500 hours of operation or annually, whichever comes first. The permittee has the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) or (j).
 - b. For diesel-fired units, inspect the air filter every 1,000 hours of operation or annually, whichever comes first.
 - c. For gas-fired units, inspect the spark plugs every 1,000 hours of operation or annually, whichever comes first.
- d. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. (40 CFR Part 63.6603(a), 40 Part CFR 63.6625(i) and (j), 40 CFR Part 63, Subpart ZZZZ, Table 2d.4)

AQD Comment: Appears to be in Compliance with the above and the facility tracks this information through work orders on each unit.

5. If the engine is operating during an emergency & it is not possible to shut down the engine in order to perform the work practice requirements in III.4, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. (40 CFR Part 63, Subpart ZZZZ, Table 2d)

AQD Comment: This has been N/A to date.

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall install a non-resettable hour meter on each unit if one is not already installed. (40 CFR Part 63.6625(f))

AQD Comment: Appears to be in Compliance with the above.

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. If the permittee uses an oil analysis program for any engine as allowed in 40 CFR 63.6625(i) and (j) the permittee shall perform the tests specified. (40 CFR Part 63.6625(i) and (j))

AQD Comment: The facility does oil analysis on each engine and they are also on multiple PM schedules

See Appendix 5

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permittee shall maintain a log of all maintenance activities to demonstrate compliance with 40 CFR Part 63, Subpart ZZZZ. (R 336.1213(3)(b), 40 CFR Part 63.6625(i) and (j), 40 CFR Part 63.6655(d) and (e), 40 CFR Part 63.6660)

AQD Comment: Appears to be in Compliance. The facility tracks this information through work orders.

2. The permittee shall maintain a log of the hours of operation of each engine in FGEMERG-EXRICE using the non-resettable hour meter. The log shall document the reason for the operation, including how many hours are spent for emergency operation and what classified the operation as an

emergency and how many hours are for non-emergency operation. If the engines are used for demand response operation the permittee must keep records of the notification of the emergency situation and the time the engine was operated as part of the demand response. The records shall be sufficient to demonstrate compliance with the conditions in III.2 and 3, above. (R 336.1213(3)(b), 40 CFR Part 63.6655(f), 40 CFR Part 63.6660)

AQD Comment: Appears to be in Compliance. The facility tracks the hours each engine is ran and for what purpose each month.

3. The permittee shall record the monthly fuel use for FGEMERG-EXRICE. (R 336.1213(3))

AQD Comment: Appears to be in Compliance. The facility tracks the amount of fuel use in each engine n a monthly basis.

4. The permittee shall maintain a complete record of fuel oil specifications and/or a fuel oil analysis for each delivery, or storage tank, of fuel oil. These records may include purchase records for ASTM specification fuel oil, specifications or analyses provided by the vendor at the time of delivery, analytical results from laboratory testing, or any other records adequate to demonstrate compliance with the percent sulfur limit in fuel oil. The analysis method used to test the percent sulfur shall be an EPA, or equivalent, approved method. (R 336.1213(3))

AQD Comment: Appears to be in Compliance. Lab analysis is done on the fuel after every delivery and records are maintained (See attached fuel analysis).

5. To ensure proper operation, the permittee shall record the results of a weekly visible emission observation from SVGEN1 and SVGEN2 when operating, and within one hour following start up conditions, if startup has occurred. If visible emissions are observed, the permittee shall implement the Preventative Maintenance Plan at the facility. (R 336.1213(3))

AQD Comment: Appears to be in Compliance. The facility does VEs when the engines are in operation and they have a PMP.

6. The permittee shall sample and record the percent sulfur content, by weight, of fuel oil in the storage tank once every 12 months using an EPA or equivalent approved method. (R 336.1213(3))

AQD Comment: Appears to be in Compliance. Lab analysis is done on the fuel after every delivery and records are maintained.

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))

2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))

3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))

4. The permittee must report any failure to perform the work practices in condition III.5 above on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable. (40 CFR Part 63, Subpart ZZZZ, Table 2d)

AQD Comment: Appears to be in Compliance with #1 through #3 above. The facility has been submitting their reports on time. #4 is N/A to date.

See Appendix 8

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart ZZZZ for Stationary Reciprocating Internal Combustion Engines. (40 CFR Part 63, Subparts A and ZZZZ).

AQD Comment: The AQD is not delegated to enforce the above regulation at area sources of HAPs, but staff did review the records they've been keeping and they appear to be complying with the regulation.

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FGCOLDCLEANERS FLEXIBLE GROUP CONDITIONS

AQD Comment: The facility appears to be in Compliance with all the requirements below. The facility only has one cold cleaner and it is in the maintenance area. It is a non-heated unit and doesn't contain any of the materials listed below. It wasn't in use during the inspection but it did have it's lid closed and instructions posted on it.

DESCRIPTION

Any existing cold cleaner (placed into operation prior to July 1, 1979) or new cold cleaner (placed into operation after July 1, 1979) that is exempt from NSR permitting by R 336.1281(h) or R 336.1285(r)(iv).

Emission Unit: EUCOLDCLEANER

II. MATERIAL LIMIT(S)

1. The permittee shall not use cleaning solvents containing more than five percent by weight of the following halogenated compounds: methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chloroform, or any combination thereof. (R 336.1213(2))

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Cleaned parts shall be drained for no less than 15 seconds or until dripping ceases. (R 336.1611(2)(b), R 336.1707(3)(b))
2. The permittee shall perform routine maintenance on each cold cleaner as recommended by the manufacturer. (R 336.1213(3))

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The cold cleaner must meet one of the following design requirements:
 - a. The air/vapor interface of the cold cleaner is no more than ten square feet. (R 336.1281(h))
 - b. The cold cleaner is used for cleaning metal parts and the emissions are released to the general in-plant environment. (R 336.1285(r)(iv))
2. The cold cleaner shall be equipped with a device for draining cleaned parts. (R 336.1611(2)(b), R 336.1707(3)(b))
3. All new and existing cold cleaners shall be equipped with a cover and the cover shall be closed whenever parts are not being handled in the cold cleaner. (R 336.1611(2)(a), R 336.1707(3)(a))
4. The cover of a new cold cleaner shall be mechanically assisted if the Reid vapor pressure of the solvent is more than 0.3 psia or if the solvent is agitated or heated. (R 336.1707(3)(a))
5. If the Reid vapor pressure of any solvent used in a new cold cleaner is greater than 0.6 psia; or, if any solvent used in a new cold cleaner is heated above 120 degrees Fahrenheit, then the cold cleaner

must comply with at least one of the following provisions:

- a. The cold cleaner must be designed such that the ratio of the freeboard height to the width of the cleaner is equal to or greater than 0.7. (R 336.1707(2)(a))
- b. The solvent bath must be covered with water if the solvent is insoluble and has a specific gravity of more than 1.0. (R 336.1707(2)(b))
- c. The cold cleaner must be controlled by a carbon adsorption system, condensation system, or other method of equivalent control approved by the AQD. (R 336.1707(2)(c))

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. For each new cold cleaner in which the solvent is heated, the solvent temperature shall be monitored and recorded at least once each calendar week during routine operating conditions. (R 336.1213(3))
2. The permittee shall maintain the following information on file for each cold cleaner (R 336.1213(3)):
 - a. A serial number, model number, or other unique identifier for each cold cleaner.
 - b. The date the unit was installed, manufactured or that it commenced operation.
 - c. The air/vapor interface area for any unit claimed to be exempt under Rule 281(h).
 - d. The applicable Rule 201 exemption.
 - e. The Reid vapor pressure of each solvent used.
 - f. If applicable, the option chosen to comply with Rule 707(2).
3. The permittee shall maintain written operating procedures for each cold cleaner. These written procedures shall be posted in an accessible, conspicuous location near each cold cleaner. (R 336.1611(3), R 336.1707(4))
4. As noted in Rule 611(2)(c) and Rule 707(3)(c), if applicable, an initial demonstration that the waste solvent is a safety hazard shall be made prior to storage in non-closed containers. If the waste solvent is a safety hazard and is stored in non-closed containers, verification that the waste solvent is disposed of so that not more than 20 percent, by weight, is allowed to evaporate into the atmosphere shall be made on a monthly basis. (R 336.1213(3), R 336.1611(2)(c), R 336.1707(3)(c))

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

INSPECTION SUMMARY: The facility appears to be in COMPLIANCE with the special conditions contained in ROP No. MI-ROP-B2934-2019. However, staff did not make any compliance determinations with regards to 40 CFR Part 63 Subpart JJJJJ since the AQD is not delegated to enforce this regulation at area sources of HAPS and no conditions were included in the ROP. Staff did review the records the facility was keeping to demonstrate compliance with 40 CFR Part 63 Subpart ZZZZ and they appeared to

be in Compliance; however, the AQD is not delegated to enforce that regulation at area sources of HAPs either. Staff thank Lynn and Steve for their time and staff departed the facility at approximately 1:50 p.m.

NAME Matt Dahl

DATE 6-4-19

SUPERVISOR R12 6/6/19