

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION**

November 17, 2017

**PERMIT TO INSTALL  
66-17**

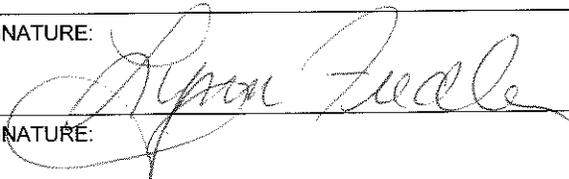
**ISSUED TO**  
Filer City Station Limited Partnership

**LOCATED AT**  
700 Mee Street  
Filer City, Michigan

**IN THE COUNTY OF**  
Manistee

**STATE REGISTRATION NUMBER**  
N1685

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environmental Quality. This permit is hereby issued in accordance with and subject to Section 5505(1) of Article II, Chapter I, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Air Pollution Control Rule 336.1201(1), this permit constitutes the permittee's authority to install the identified emission unit(s) in accordance with all administrative rules of the Department and the attached conditions. Operation of the emission unit(s) identified in this Permit to Install is allowed pursuant to Rule 336.1201(6).

DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203: <b>July 17, 2017</b>	
DATE PERMIT TO INSTALL APPROVED: <b>November 17, 2017</b>	SIGNATURE: 
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

## PERMIT TO INSTALL

### Table of Contents

<b>Section</b>	<b>Page</b>
Alphabetical Listing of Common Abbreviations / Acronyms .....	2
General Conditions .....	3
Special Conditions .....	5
Emission Unit Summary Table.....	5
Special Conditions for EUCCT .....	6
Special Conditions for EUAUXBOILER .....	13
Special Conditions for EUCOOLTWR.....	19
Appendix A.....	21

**Common Abbreviations / Acronyms**

Common Acronyms		Pollutant / Measurement Abbreviations	
AQD	Air Quality Division	acfm	Actual cubic feet per minute
BACT	Best Available Control Technology	BTU	British Thermal Unit
CAA	Clean Air Act	°C	Degrees Celsius
CAM	Compliance Assurance Monitoring	CO	Carbon Monoxide
CEM	Continuous Emission Monitoring	CO <sub>2e</sub>	Carbon Dioxide Equivalent
CFR	Code of Federal Regulations	dscf	Dry standard cubic foot
COM	Continuous Opacity Monitoring	dscm	Dry standard cubic meter
Department/ department	Michigan Department of Environmental Quality	°F	Degrees Fahrenheit
EU	Emission Unit	gr	Grains
FG	Flexible Group	HAP	Hazardous Air Pollutant
GACS	Gallons of Applied Coating Solids	Hg	Mercury
GC	General Condition	hr	Hour
GHGs	Greenhouse Gases	HP	Horsepower
HVLP	High Volume Low Pressure*	H <sub>2</sub> S	Hydrogen Sulfide
ID	Identification	kW	Kilowatt
IRSL	Initial Risk Screening Level	lb	Pound
ITSL	Initial Threshold Screening Level	m	Meter
LAER	Lowest Achievable Emission Rate	mg	Milligram
MACT	Maximum Achievable Control Technology	mm	Millimeter
MAERS	Michigan Air Emissions Reporting System	MM	Million
MAP	Malfunction Abatement Plan	MW	Megawatts
MDEQ	Michigan Department of Environmental Quality	NMOC	Non-methane Organic Compounds
MSDS	Material Safety Data Sheet	NO <sub>x</sub>	Oxides of Nitrogen
NA	Not Applicable	ng	Nanogram
NAAQS	National Ambient Air Quality Standards	PM	Particulate Matter
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM <sub>10</sub>	Particulate Matter equal to or less than 10 microns in diameter
NSPS	New Source Performance Standards	PM <sub>2.5</sub>	Particulate Matter equal to or less than 2.5 microns in diameter
NSR	New Source Review	pph	Pounds per hour
PS	Performance Specification	ppm	Parts per million
PSD	Prevention of Significant Deterioration	ppmv	Parts per million by volume
PTE	Permanent Total Enclosure	ppmw	Parts per million by weight
PTI	Permit to Install	psia	Pounds per square inch absolute
RACT	Reasonable Available Control Technology	psig	Pounds per square inch gauge
ROP	Renewable Operating Permit	scf	Standard cubic feet
SC	Special Condition	sec	Seconds
SCR	Selective Catalytic Reduction	SO <sub>2</sub>	Sulfur Dioxide
SNCR	Selective Non-Catalytic Reduction	TAC	Toxic Air Contaminant
SRN	State Registration Number	Temp	Temperature
TEQ	Toxicity Equivalence Quotient	THC	Total Hydrocarbons
USEPA/EPA	United States Environmental Protection Agency	tpy	Tons per year
VE	Visible Emissions	µg	Microgram
		µm	Micrometer or Micron
		VOC	Volatile Organic Compounds
		yr	Year

\*For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 psig.

### GENERAL CONDITIONS

1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. **(R 336.1201(1))**
2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environmental Quality, P.O. Box 30260, Lansing, Michigan 48909-7760, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. **(R 336.1201(4))**
3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to R 336.1210, operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. **(R 336.1201(6)(b))**
4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. **(R 336.1201(8), Section 5510 of Act 451, PA 1994)**
5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to R 336.1219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of R 336.1219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality. **(R 336.1219)**
6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. **(R 336.1901)**
7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). **(R 336.1912)**
8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.
9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of R 336.1301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with R 336.1303. **(R 336.1301)**
  - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
  - b) A visible emission limit specified by an applicable federal new source performance standard.
  - c) A visible emission limit specified as a condition of this Permit to Install.
  
12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in R 336.1370(2). **(R 336.1370)**
  
13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001. **(R 336.2001)**

**SPECIAL CONDITIONS**

**EMISSION UNIT SUMMARY TABLE**

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

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Flexible Group ID
EUCCT	A 1,934.7 MMBTU/hr natural gas fired heavy frame industrial combustion turbine. The turbine operates in combined-cycle with an unfired heat recovery steam generator (HRSG). The combustion turbine is equipped with dry low NO <sub>x</sub> burner (DLNB) design, selective catalytic reduction (SCR), an oxidation catalyst, and a combustion inlet air filter.	NA
EUAUXBOILER	A natural gas-fired auxiliary boiler with a maximum heat input rating of 182 MMBTU/hr, to provide auxiliary steam when the plant is off-line, used to maintain warm drums on the HRSG and maintain the steam turbine generator seals. The auxiliary boiler is equipped with low NO <sub>x</sub> burners (LNB) that incorporate internal (within the burner) flue gas recirculation (FGR).	NA
EUCOOLTWR	A four-cell, evaporative cooling tower in series with mechanical chilling to cool turbine inlet air. Particulate emissions will be controlled with high efficiency drift eliminators.	NA
Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1290.		

**The following conditions apply to:**  
**EUCCT**

**DESCRIPTION:** A 1,934.7 MMBTU/hr natural gas fired heavy frame industrial combustion turbine. The turbine operates in combined-cycle with an unfired heat recovery steam generator (HRSG).

**Flexible Group ID:** NA

**POLLUTION CONTROL EQUIPMENT:** The combustion turbine is equipped with dry low NO<sub>x</sub> (DLN) combustor design, selective catalytic reduction (SCR), an oxidation catalyst, and a combustion inlet air filter.

**I. EMISSION LIMITS**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. NO <sub>x</sub>	3 ppmvd at 15% O <sub>2</sub> <sup>A</sup>	24-hour rolling average as determined each operating hour, except during startup and shutdown	EUCCT	SC VI.2, SC VI.4	R 336.1205(1)(a) & (b), R 336.2810
2. NO <sub>x</sub>	15 ppm at 15% O <sub>2</sub> <sup>B</sup>	30-day rolling average as determined each operating day	EUCCT	SC VI.2, SC VI.4	40 CFR 60.4320(a), Table 1 of 40 CFR Part 60 Subpart KKKK
3. NO <sub>x</sub>	21.4 pph <sup>A</sup>	24-hour rolling average as determined each operating hour, except during startup and shutdown	EUCCT	SC VI.2, SC VI.4	R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810
4. NO <sub>x</sub>	32 pounds per event <sup>C</sup>	Each startup or shutdown event <sup>C</sup>	EUCCT	SC VI.2, SC VI.4, SC VI.11	R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810
5. CO	4 ppmvd at 15% O <sub>2</sub> <sup>A</sup>	24-hour rolling average as determined each operating hour, except during startup and shutdown	EUCCT	SC VI.3, SC VI.5	R 336.1205(1)(a) & (b), R 336.2810
6. CO	17.4 pph <sup>A</sup>	24-hour rolling average as determined each operating hour, except during startup and shutdown	EUCCT	SC VI.3, SC VI.5	R 336.1205(1)(a) & (b), R 336.2804, R 336.2810
7. CO	1,580 pounds per event <sup>C</sup>	Each startup or shutdown event <sup>C</sup>	EUCCT	SC VI.3, SC VI.5, SC VI.11	R 336.1205(1)(a) & (b), R 336.2804, R 336.2810
8. PM	0.0025 lb/MMBtu	Three separate test runs of at least 60 minutes each	EUCCT	SC V.1, SC VI.11	R 336.1205(1)(a) & (b), R 336.2810

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
9. PM10	0.0066 lb/MMBtu	Three separate test runs of at least 60 minutes each	EUCCT	SC V.1, SC VI.11	R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810
10. PM2.5	0.0066 lb/MMBtu	Three separate test runs of at least 60 minutes each	EUCCT	SC V.1, SC VI.11	R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810
11. VOC	3 ppmvd measured as methane at 15% O <sub>2</sub> <sup>A</sup>	Three separate test runs of at least 60 minutes each	EUCCT	SC V.1, SC VI.11	R 336.1205(1)(a) & (b), R 336.1702(a)
12. GHGs as CO <sub>2e</sub>	992,286 tpy	12-month rolling time period as determined at the end of each calendar month.	EUCCT	SC VI.7, SC VI.11	R 336.1205(1)(a) & (b), 40 CFR 52.21(j)
13. CO <sub>2</sub>	1,000 lb/MWh gross energy output	12-operating-month rolling average basis as determined at the end of each operating calendar month. <sup>D</sup>	EUCCT	SC VI.8, SC VI.9, SC VI.11	R 336.1205(1)(a) & (b), 40 CFR 60.5520(a), Table 2 of 40 CFR Part 60 Subpart TTTT

ppmvd at 15% O<sub>2</sub>= parts per million by volume at 15 percent oxygen (O<sub>2</sub>) and on a dry gas basis  
 lb/MWh = pound per megawatt hour  
<sup>A</sup> Does not include startup and shutdown.  
<sup>B</sup> Table 1 of 40 CFR Part 60 Subpart KKKK allows 96 ppm at 15 percent O<sub>2</sub> when the turbines are operating at less than 75 percent of peak load or at temperatures less than 0°F.  
<sup>C</sup> Startup is defined as the period of time from initiation of the combustion process (flame-on) and continues until the unit reaches 50% load. Shutdown is defined as that period of time from the lowering of the turbine output below 50% load, with the intent to shut down, until the point at which the fuel flow to the combustor is terminated.  
<sup>D</sup> Compliance is determined monthly at the end of the initial and each subsequent 12-operating-month period. The first month of the initial compliance period is defined in 40 CFR 60.5525(c)(1)(i).

**II. MATERIAL LIMITS**

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Sulfur content in natural gas	1 gr/100 scf <sup>A</sup>	At all times	EUCCT	SC VI.11	R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d)

<sup>A</sup> The sulfur content limit in 40 CFR 60.4365 is 20 gr/100 scf. SC II.1 subsumes the NSPS requirement.

2. The permittee shall only burn natural gas in EUCCT. (R 336.1205(1)(a) & (b), R 336.1225, R 336.1702(a), R 336.2810, 40 CFR 52.21(j), 40 CFR 60.4330)

### **III. PROCESS/OPERATIONAL RESTRICTIONS**

1. Within 180 days of trial operation, the permittee shall submit, implement, and maintain a MAP as described in Rule 911(2) for EUCCT. The MAP shall, at a minimum, specify the following:
  - a. A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
  - b. An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
  - c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.
  - d. Identification of the source, and operating variables and ranges for varying loads, shall be monitored and recorded. The normal operating range of these variables and a description of the method of monitoring shall be maintained.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 90 days after such an event occurs. The permittee shall also amend the MAP within 90 days, if new equipment is installed or upon request from the AQD District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1205(1)(a) & (b), R 336.1224, R 336.1702(a), R 336.1910, R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21(j))**

2. The permittee shall not operate EUCCT unless an acceptable plan that describes how emissions will be minimized during startup and shutdown has been submitted to the AQD District Supervisor. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. **(R 336.1911, R 336.1912, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.4333(a))**
3. The total number of startup and shutdown events for EUCCT shall not exceed 1,000 events per 12-month rolling time period as determined at the end of each calendar month. Each startup or shutdown is considered an event. **(R 336.2803, R 336.2804, R 336.2810)**
4. The permittee shall operate and maintain EUCCT, including associated equipment and monitors, in a manner consistent with safety and good air pollution control practice. **(40 CFR 60.4333(a), 40 CFR 60.5525(b))**
5. The permittee shall prepare a monitoring plan to quantify the hourly CO<sub>2</sub> mass emission rate (tons/hr), in accordance with the applicable provisions in 40 CFR 75.53(g) and (h). The electronic portion of the monitoring plan must be submitted using the ECMPs Client Tool and must be in place prior to reporting emissions data and/or the results of monitoring system certification tests under this subpart. The monitoring plan must be updated as necessary. Monitoring plan submittals must be made by the Responsible Official or Authorized Representative (see 40 CFR 60.5555(c)). **(40 CFR 60.5535(a), 40 CFR 60.5535(d)(1))**

### **IV. DESIGN/EQUIPMENT PARAMETERS**

1. The maximum design heat input capacity for EUCCT shall not exceed, on a fuel heat input basis, 1,934.7 MMBTU per hour. **(R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**
2. The permittee shall not operate EUCCT unless the DLN combustor, SCR, oxidation catalyst, and combustion inlet air filter are installed, maintained, and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device in accordance with an approved MAP for EUCCT as required in SC III.1. **(R 336.1205(1)(a) & (b), R 336.1225, R 336.1910, R 336.2803, R 336.2804, R 336.2810)**

3. The permittee shall install, calibrate, maintain and operate in a satisfactory manner devices or equipment to monitor and record the NO<sub>x</sub> emissions and O<sub>2</sub> or CO<sub>2</sub> content of the exhaust gas from EUCCT on a continuous basis. The permittee shall install and operate a CEMS or equivalent Predictive Emission Monitoring System (PEMS) to meet the timelines, requirements and reporting detailed in Appendix A. If the permittee chooses to use a PEMS in lieu of a CEMS to monitor NO<sub>x</sub> emissions, the permittee shall submit a petition to the Environmental Protection Agency (EPA) Clean Air Markets Division for approval and certification of an alternative monitoring system or component according to the procedure in Subpart E of 40 CFR Part 75. **(R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810, 40 CFR 60.4340(b), 40 CFR 60.4345, 40 CFR Part 75 Subpart E, 40 CFR Part 75.66(d))**
4. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the CO emissions and O<sub>2</sub> or CO<sub>2</sub> content of the exhaust gas from EUCCT on a continuous basis. The permittee shall install and operate a CEMS or equivalent PEMS to meet the timelines, requirements and reporting detailed in Appendix A. If the permittee chooses to use a PEMS in lieu of a CEMS to monitor CO emissions, the permittee shall submit a petition to the Environmental Protection Agency (EPA) Clean Air Markets Division for approval and certification of an alternative monitoring system or component according to the procedure in Subpart E of 40 CFR Part 75. **(R 336.1205(1)(a) & (b), R 336.2804, R 336.2810, 40 CFR Part 75 Subpart E, 40 CFR Part 75.66(d))**
5. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the natural gas flow rate for EUCCT on a continuous basis. The device shall be operated in accordance with 40 CFR 60.4345(c). **(R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.4345)**
6. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a sufficient number of watt meters to continuously measure and record the hourly gross electric output from EUCCT. The permittee shall also install, calibrate, maintain, and operate meters to determine and record the hourly total useful thermal output. **(R 336.1205(1)(a) & (b), R 336.2810, 40 CFR 52.21(j), 40 CFR 60.5535(d)(1))**

#### **V. TESTING/SAMPLING**

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Within 180 days after commencement of initial startup of EUCCT, the permittee shall verify PM, PM<sub>10</sub>, PM<sub>2.5</sub>, and VOC emission rates from EUCCT at maximum routine operating conditions, by testing at owner's expense, in accordance with Department requirements. The permittee must complete the required testing once every five years of operation, thereafter. Testing shall be performed using an approved EPA Method listed in:

<b>Pollutant</b>	<b>Test Method Reference</b>
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM <sub>10</sub> /PM <sub>2.5</sub>	40 CFR Part 51, Appendix M
VOCs	40 CFR Part 60, Appendix A, or Method 320 of Appendix A of 40 CFR Part 63

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205(1)(a) & (b), R 336.1702(a), R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, R 336.2810)**

#### **VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

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. **(R 336.1205(1)(a) & (b), R 336.2810, 40 CFR 52.21(j))**

2. The permittee shall continuously monitor and record, in a satisfactory manner, the NO<sub>x</sub> emissions and the O<sub>2</sub> or CO<sub>2</sub> content from EUCCT. The permittee shall operate each CEMS or equivalent PEMS to meet the timelines, requirements and reporting detailed in Appendix A and shall use the CEMS or equivalent PEMS data for determining compliance with SC I.1, SC I.2, SC I.3, and SC I.4. **(R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810, 40 CFR 60.4345)**
3. The permittee shall continuously monitor and record, in a satisfactory manner, the CO emissions and the O<sub>2</sub> or CO<sub>2</sub> content from EUCCT. The permittee shall operate each CEMS or equivalent PEMS to meet the timelines, requirements and reporting detailed in Appendix A and shall use the CEMS or equivalent PEMS data for determining compliance with SC I.5, SC I.6, and SC I.7. **(R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810)**
4. The permittee shall keep, in a satisfactory manner, hourly and 24-hour rolling average NO<sub>x</sub> concentration and mass emission records, and 30-day rolling average NO<sub>x</sub> concentration records for EUCCT, as required by SC I.1, SC I.2, SC I.3, and SC I.4. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810, 40 CFR 60.4345)**
5. The permittee shall keep, in a satisfactory manner, hourly and 24-hour rolling average CO concentration and mass emission records for EUCCT, as required by SC I.5, SC I.6, and SC I.7. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1)(a) & (b), R 336.2804, R 336.2810)**
6. The permittee shall monitor and record, in a satisfactory manner, the natural gas usage for EUCCT on a monthly basis. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**
7. The permittee shall calculate and keep, in a satisfactory manner, records of monthly and 12-month rolling total CO<sub>2e</sub> mass emissions for EUCCT. The permittee shall keep all records on file and make them available to the Department upon request. The calculations shall be performed using applicable global warming potential and emission factors obtained from 40 CFR 98 Subparts A and C, respectively, or an alternate method approved by the District Supervisor. **(R 336.1205(1)(a) & (b), 40 CFR 52.21(j))**
8. The permittee shall determine the hourly CO<sub>2</sub> mass emissions and hourly gross energy output for EUCCT according to 40 CFR 60.5535(b) or (c) and 40 CFR 60.5540(a). The permittee shall keep records of the determined values for hourly CO<sub>2</sub> mass emissions and hourly gross energy output for EUCCT. **(40 CFR 60.5535(c), 40 CFR 60.5540(a), 40 CFR 60.5560)**
9. The permittee shall calculate and keep, in a satisfactory manner, records of the monthly and initial and each subsequent 12-operating-month calculation required by SC I.13 according to the procedures described in 40 CFR 60.5540: **(R 336.1205(1)(a) & (b), 40 CFR 52.21(j), 40 CFR 60.5540(a) & (b), 40 CFR 60.5560)**
  - a. Total data is determined by summing valid operating hours for either CO<sub>2</sub> mass emissions or gross energy output.
  - b. To determine compliance with SC I.13, the total CO<sub>2</sub> mass emissions for EUCCT shall be divided by the total gross energy output value.
  - c. The final calculated value shall be rounded to two significant figures if the calculated value is less than 1,000 and to three significant figures if the calculated value is greater than 1,000.
10. The permittee shall keep, in a satisfactory manner, a record of the monthly and 12-month rolling total number of startup and shutdown events for EUCCT. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.2803, R 336.2804, R 336.2810)**

11. The permittee shall maintain records of all information necessary for all notifications and reports as specified in these special conditions as well as that information necessary to demonstrate compliance with the emission limits of this permit for EUCCT. This information shall include, but shall not be limited to the following:
  - a. Compliance tests and any testing required under the special conditions of this permit;
  - b. Monitoring data;
  - c. Total sulfur content and potential sulfur emissions, as applicable, of the natural gas as required by 40 CFR 60.4365(a) or (b);
  - d. Verification of heat input capacity;
  - e. Identification, type, and amount of fuel combusted on a calendar month basis;
  - f. Gross energy output on a calendar month basis;
  - g. All records required by 40 CFR 60.7;
  - h. Records of the duration of all dates and times of startup and shutdown events;
  - i. All calculations necessary to show compliance with the limits contained in this permit;
  - j. All records related to, or as required by, the MAP and the startup and shutdown plan.

All of the above information shall be stored in a format acceptable to the AQD District Supervisor and shall be consistent with the requirements of 40 CFR 60.7(f). **(R 336.1205(1)(a) & (b), R 336.1224, R 336.1225, R 336.1331(1)(c), R 336.1702(a), R 336.1912, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.7(f), 40 CFR 60.4345, 40 CFR 60.4365, 40 CFR 60.5525(b), 40 CFR 60.5560)**

## **VII. REPORTING**

1. Within 30 days after completion of the installation and construction 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 and construction is considered to occur not later than commencement of trial operation of EUCCT. **(R 336.1201(7)(a))**
2. The permittee shall provide written notification of the date construction commences and the actual date of initial startup of EUCCT, in accordance with 40 CFR 60.7. The permittee shall submit the notification(s) to the AQD District Supervisor within the time frames specified in 40 CFR 60.7 and 40 CFR 60.19, where applicable. **(40 CFR 60.7(a), 40 CFR 60.5550(a))**
3. The permittee shall submit reports of excess emissions and monitor downtime, in accordance with 40 CFR 60.7(c) and with 40 CFR 60.4375 and 40 CFR 4380. The reports shall be postmarked by the 30<sup>th</sup> day following the end of each 6-month period. **(40 CFR 60.7(c), 40 CFR 60.4375(a), 40 CFR 60.4380, 40 CFR 60.4395)**
4. The permittee shall prepare and submit the notifications specified in 40 CFR 60.19, as applicable, and 40 CFR 75.61, as applicable, for EUCCT. **(40 CFR 60.5550(a) & (b))**
5. The permittee shall submit electronic quarterly reports as follows: **(40 CFR 60.5555(a) & (b))**
  - a. After EUCCT has accumulated the first 12-operating months, the permittee shall submit a report for the calendar quarter that includes the twelfth operating month no later than 30 days after the end of that quarter.
  - b. Thereafter, the permittee shall submit a report for each subsequent calendar quarter, no later than 30 days after the end of the quarter.
  - c. Each quarterly report shall include the information specified in 40 CFR 60.5555(a)(2).
  - d. The final quarterly report of each calendar year shall include the information specified in 40 CFR 60.5555(a)(3).
  - e. All electronic reports shall be submitted using the Emissions Collection and Monitoring Plan System (ECMPS) Client Tool provided by the Clean Air Markets Division in the Office of Atmospheric Programs of EPA.
6. The permittee shall meet all applicable reporting requirements and submit reports as required under 40 CFR Part 75 Subpart G in accordance with 40 CFR 75.64(a), which is also listed in 40 CFR 60.5555(c)(3)(i). **(40 CFR 60.5555(c)(1) & (3)(i))**

**VIII. STACK/VENT RESTRICTIONS**

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

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter/Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVCCT	216 (18 feet)	140	R 336.1225, R 336.2803, R 336.2804

**IX. OTHER REQUIREMENTS**

1. The permittee shall comply with all provisions of the federal Standards of Performance for Stationary Combustion Turbines as specified in 40 CFR Part 60 Subparts A and KKKK, as they apply to EUCCT. **(40 CFR Part 60 Subparts A and KKKK)**
2. The permittee shall comply with all provisions of the federal Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units as specified in 40 CFR Part 60 Subparts A and TTTT, as they apply to EUCCT. **(40 CFR Part 60 Subparts A and TTTT)**
3. The permittee shall comply with all provisions of the federal Acid Rain Program as specified in 40 CFR Parts 72 through 78, as they apply to EUCCT. **(40 CFR Parts 72-78)**
4. The permittee shall comply with all provisions of the federal Cross-State Air Pollution Rule (CSAPR) as specified in 40 CFR Part 97, as they apply to EUCCT. **(40 CFR Part 97)**
5. The permittee shall comply with all provisions of the federal Standards of Continuous Emission Monitoring as specified in 40 CFR Part 75, as they apply to EUCCT. **(40 CFR Part 75).**
6. The permittee shall comply with all provisions of 40 CFR Part 63, Subpart YYYY - National Emission Standards for Hazardous Air Pollutants: National Emission Standards for Stationary Combustion Turbines. **(40 CFR Part 63, Subpart YYYY)**

**Footnotes:**

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

**The following conditions apply to:**  
**EUAUXBOILER**

**DESCRIPTION:** A natural gas-fired auxiliary boiler, rated at 182 MMBTU/hr to provide auxiliary steam when the plant is off-line, used to maintain warm drums on the HRSG and maintain the steam turbine generator seals.

**Flexible Group ID:** NA

**POLLUTION CONTROL EQUIPMENT:** The auxiliary boiler is equipped with LNB that incorporate internal (within the burner) FGR.

**I. EMISSION LIMITS**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. NO <sub>x</sub>	0.04 lb/MMBTU <sup>E</sup>	30-day rolling average time period	EUAUXBOILER	SC VI.2, SC VI.3, SC VI.8	R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810, 40 CFR 60.44b(i), 40 CFR 60.44b(l)(1)
2. CO	0.04 lb/MMBTU	Three separate test runs of at least 60 minutes each	EUAUXBOILER	SC V.1, SC VI.8	R 336.1205(1)(a) & (b), R 336.2804, R 336.2810
3. PM	0.005 lb/MMBTU	Three separate test runs of at least 60 minutes each	EUAUXBOILER	SC V.1, SC VI.8	R 336.1205(1)(a) & (b), R 336.2810
4. PM <sub>10</sub>	0.0075 lb/MMBtu	Three separate test runs of at least 60 minutes each	EUAUXBOILER	SC V.1, SC VI.8	R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810
5. PM <sub>2.5</sub>	0.0075 lb/MMBtu	Three separate test runs of at least 60 minutes each	EUAUXBOILER	SC V.1, SC VI.8	R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810
6. VOC	0.004 lb/MMBTU	Three separate test runs of at least 60 minutes each	EUAUXBOILER	SC V.1, SC VI.8	R 336.1205(1)(a) & (b), R 336.1702(a)
7. GHGs as CO <sub>2e</sub>	93,346 tpy	12-month rolling time period as determined at the end of each calendar month.	EUAUXBOILER	SC VI.7, SC VI.8	R 336.1205(1)(a) & (b), 40 CFR 52.21(j)

<sup>E</sup> The emission limit as required in 40 CFR 60.44b(l)(1) is 0.20 lb/MMBTU (expressed as NO<sub>2</sub>) at a high heat release rate. SC I.1 subsumes the NSPS emission limit.

**II. MATERIAL LIMITS**

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Sulfur content in natural gas	1 gr/100 scf	At all times	EUAUXBOILER	SC VI.6, SC VI.8	R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d)

2. The permittee shall burn only natural gas in EUAUXBOILER. **(R 336.1205(1)(a) & (b), R 336.1224, R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j), 40 CFR 60 Subpart Db, 40 CFR 63.7499(l))**

**III. PROCESS/OPERATIONAL RESTRICTIONS**

1. Within 180 days of trial operation, the permittee shall submit, implement, and maintain a MAP as described in Rule 911(2) for EUAUXBOILER. The MAP shall, at a minimum, specify the following:
- a. A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
  - b. An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
  - c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1205(1)(a) & (b), R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810)**

2. The permittee shall not operate EUAUXBOILER unless an acceptable plan that describes how emissions will be minimized during all startups and shutdowns has been submitted to the AQD District Supervisor. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. **(R 336.1911, R 336.1912, R 336.2810, 40 CFR 52.21(j))**
3. The permittee must meet the following requirements at all times EUAUXBOILER is operating. **(40 CFR 63.7500(a))**
- a. The permittee must meet each work practice standard in Table 3 of 40 CFR Part 63, Subpart DDDDD that applies EUAUXBOILER. As provided in 40 CFR 63.6(g), EPA may approve use of an alternative to the work practice standards. **(40 CFR 63.7500(a)(1), 40 CFR 63.7500(b))**
  - b. At all times, the permittee must operate and maintain EUAUXBOILER, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that 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 63.7500(a)(3))**
  - c. Boilers and process heaters in the units designed to burn *gas 1 fuels subcategory* are not subject to the emission limits in Tables 1 and 2 or 11 through 13 of 40 CFR Part 63, Subpart DDDDD, or the operating limits in Table 4 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7500(e))**

4. The permittee must demonstrate initial compliance with the applicable work practice standards in Table 3 to 40 CFR Part 63, Subpart DDDDD within the applicable annual, biennial, or 5-year schedule as specified in 40 CFR 63.7515(d), following the initial compliance date specified in 40 CFR 63.7495(a). Thereafter, you are required to complete the applicable annual, biennial, or 5-year tune-up as specified in 40 CFR 63.7515(d). **(40 CFR 63.7510(g))**
5. If the permittee is required to meet an applicable tune-up work practice standard, the permittee must:
  - a. Conduct the first annual tune-up no later than 13-months after the initial startup of the new or reconstructed boiler or process heater, the first biennial tune-up no later than 25-months after the initial startup of the new or reconstructed boiler or process heater, or the first 5-year tune-up no later than 61-months after the initial startup of the new or reconstructed boiler or process heater.
  - b. Conduct an annual performance tune-up according to 40 CFR 63.7540(a)(10); biennial performance tune-up according to 40 CFR 63.7540(a)(11); or 5-year performance tune-up according to 40 CFR 63.7540(a)(12). Each annual tune-up specified in 40 CFR 63.7540(a)(10) must be no more than 13-months after the previous tune-up. Each biennial tune-up specified in 40 CFR 63.7540(a)(11) must be conducted no more than 25-months after the previous tune-up. Each 5-year tune-up specified in 40 CFR 63.7540(a)(12) must be conducted no more than 61-months after the previous tune-up. **(40 CFR 63.7515(d))**

#### **IV. DESIGN/EQUIPMENT PARAMETERS**

1. The maximum design heat input capacity for EUAUXBOILER shall not exceed 182 MMBTU per hour on a fuel heat input basis. **(R 336.1205(1)(a) & (b), R 336.1225, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**
2. The permittee shall not operate EUAUXBOILER unless the low NO<sub>x</sub> burners with internal FGR are installed, maintained, and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining the air pollution control equipment in accordance with the MAP required in SC III.1. **(R 336.1205(1)(a) & (b), R 336.1910, R 336.2803, R 336.2804, R 336.2810)**
3. The permittee shall install, calibrate, maintain and operate, in a satisfactory manner, a device to monitor and record the hourly and daily natural gas usage rate for EUAUXBOILER. **(R 336.1205(1)(a) & (b), R 336.1224, R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.49b(d))**
4. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, devices to monitor and record the NO<sub>x</sub> emissions, and O<sub>2</sub> or CO<sub>2</sub> content of the exhaust gas from EUAUXBOILER on a continuous basis. The permittee shall install and operate the CEMS or equivalent PEMS to meet the timelines, requirements and reporting detailed in Appendix A. If the permittee chooses to use a PEMS in lieu of a CEMS to monitor NO<sub>x</sub> emissions, the permittee shall follow the protocol outlined in 40 CFR Part 60.49b(c). **(R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810, 40 CFR 60.48b(b), 40 CFR 60.49b(c))**

#### **V. TESTING/SAMPLING**

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Within 180 days after commencement of initial startup, the permittee shall verify CO, PM, PM10, PM2.5, and VOC emission rates from EUAUXBOILER, at maximum routine operation, by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

<b>Pollutant</b>	<b>Test Method Reference</b>
CO	40 CFR Part 60, Appendix A
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10/PM2.5	40 CFR Part 51, Appendix M
VOCs	40 CFR Part 60, Appendix A, or Method 320 in Appendix A of 40 CFR Part 63

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. The permittee shall complete the required testing once every five years, thereafter, unless an alternate testing schedule is approved by the District Supervisor. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee shall submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205(1)(a) & (b), R 336.1702(a), R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, R 336.2810)**

## **VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

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. **(R 336.1205(1)(a) & (b), R 336.1224, R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.44b(i), 40 CFR 60.49b(d), (g), & (w))**
2. The permittee shall continuously monitor and record, in a satisfactory manner, the NO<sub>x</sub> emissions and the O<sub>2</sub> or CO<sub>2</sub> content from EUAUXBOILER. The permittee shall operate each CEMS or equivalent PEMS to meet the timelines, requirements and reporting detailed in Appendix A and shall use the CEMS or equivalent PEMS data for determining compliance with SC I.1. If the permittee chooses to use a PEMS in lieu of a CEMS to monitor NO<sub>x</sub> emissions, the permittee shall follow a protocol as described in 40 CFR 60.49b(c). **(R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810, 40 CFR 60.48b(b), 40 CFR 60.49b(c))**
3. The permittee shall keep, in a satisfactory manner, daily and 30-day rolling average NO<sub>x</sub> emission rate records for EUAUXBOILER, as required by SC I.1. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810, 40 CFR 60.44b(i), 40 CFR 60.49b(g))**
4. The permittee shall monitor natural gas consumption on a continuous basis and keep monthly natural gas usage records, in a format acceptable to the AQD District Supervisor, indicating the amount of natural gas used, in cubic feet, on a monthly basis and shall calculate and keep monthly natural gas usage records, in a format acceptable to the AQD District Supervisor, indicating the amount of natural gas used, in cubic feet, on a calendar month basis and a 12-month rolling time period basis. The records must indicate the total amount of natural gas used in EUAUXBOILER. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205(1)(a) & (b), R 336.1224, R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.49b(d))**
5. The permittee shall calculate and keep, in a satisfactory manner, records of the monthly and 12-month rolling annual capacity factor for natural gas for EUAUXBOILER. The permittee shall keep all records on file and make them available to the Department upon request. **(40 CFR 60.49b(d))**
6. The permittee shall keep, in a satisfactory manner, records of the fuel receipts (such as a current, valid purchase contract, tariff sheet, or transportation contract) from the fuel supplier that certify that the natural gas meets the definition of natural gas defined in 40 CFR 60.41b and records indicating the sulfur content of the natural gas for EUAUXBOILER on file at the facility and make them available to the Department upon request. **(R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810, 40 CFR Part 60 Subpart Db, 40 CFR 60.49b(r)(1))**
7. The permittee shall calculate and keep, in a satisfactory manner, records of monthly and 12-month rolling total CO<sub>2e</sub> mass emissions for EUAUXBOILER. The permittee shall keep all records on file and make them available to the Department upon request. The calculations shall be performed using applicable global warming potential and emission factors obtained from 40 CFR 98 Subparts A and C, respectively, or an alternate method approved by the District Supervisor. **(R 336.1205(1)(a) & (b), 40 CFR 52.21(j))**

8. The permittee shall maintain records of all information necessary for all notifications and reports as specified in these special conditions as well as that information necessary to demonstrate compliance with the emission limits of this permit. This information shall include, but shall not be limited to the following:
  - a. Compliance tests and any testing required under the special conditions of this permit;
  - b. Monitoring data;
  - c. Total sulfur content of the natural gas;
  - d. Verification of heat input capacity;
  - e. Identification, type and the amounts of fuel combusted in EUAUXBOILER on an hourly basis, calendar day basis, and calendar month basis;
  - f. All records required by 40 CFR 60.7 and 60.49b;
  - g. All calculations or documents necessary to show compliance with the limits contained in this permit;
  - h. All records related to, or as required by, the MAP and the startup and shutdown plan.

All of the above information shall be stored in a format acceptable to the Air Quality Division and shall be consistent with the requirements of 40 CFR 60.7(f). The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1)(a) & (b), R 336.1224, R 336.1225, R 336.1331(1)(c), R 336.1702(a), R 336.1912, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.7(f), 40 CFR Part 60 Subpart Db)**

9. The permittee shall keep the following records. **(40 CFR 63.7555(a))**
  - a. A copy of each notification and report that the permittee submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that the permittee submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). **(40 CFR 63.7555(a)(1))**
  - b. Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 CFR 63.10(b)(2)(viii). **(40 CFR 63.7555(a)(2))**
  - c. The permittee's records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). **(40 CFR 63.7560(a))**
  - d. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5-years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. **(40 CFR 63.7560(b))**
  - e. The permittee must keep each record on site, or they must be accessible from on-site (for example, through a computer network), for at least 2-years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee can keep the records off site for the remaining 3-years. **(40 CFR 63.7560(c))**

## **VII. REPORTING**

1. The permittee shall provide written notification of construction and operation to comply with the federal Standards of Performance for New Stationary Sources, 40 CFR 60.7. The permittee shall submit the notification(s) to the AQD District Supervisor within the time frames specified in 40 CFR 60.7. **(40 CFR 60.7(a))**
2. The permittee shall provide written notification of the actual date of initial startup to comply with the federal Standards of Performance for New Stationary Sources, 40 CFR 60.49b(a). The notification shall include:
  - a. The design heat input capacity of EUAUXBOILER and identification of the fuels to be combusted in EUAUXBOILER.
  - b. The annual capacity factor at which the owner or operator anticipates operating the facility based on all fuels fired and based on each individual fuel fired.

The permittee shall submit this notification to the AQD District Supervisor within 15 days after initial startup occurs. **(R 336.1201(7)(a), 40 CFR 60.7(a)(3), 40 CFR 60.49b(a))**

3. The permittee shall submit all reports required by the federal Standards of Performance for New Stationary Sources, 40 CFR 60.49b, as applicable. The permittee shall submit these reports to the AQD District Supervisor within the time frames specified in 40 CFR 60.49b and/or 40 CFR 60.7. **(40 CFR 60.7, 40 CFR 60.49b(b), (h) & (i))**

4. The permittee must meet the notification requirements in 40 CFR 63.7545 according to the schedule in 40 CFR 63.7545, stated in Subpart A of 40 CFR Part 63. **(40 CFR 63.7495(d))**
5. As specified in 40 CFR 63.9(b)(4) and (5), if the permittee starts up the new or reconstructed affected source on or after January 31, 2013, the permittee must submit an Initial Notification not later than 15-days after the actual date of startup of the affected source. **(40 CFR 63.7545(c))**
6. The permittee must submit each report in Table 9 of 40 CFR Part 63, Subpart DDDDD that applies. **(40 CFR 63.7550(a))**

### **VIII. STACK/VENT RESTRICTIONS**

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

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter/Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVAUXBOILER	48 (4 feet)	110	R 336.1225, R 336.2803, R 336.2804

### **IX. OTHER REQUIREMENTS**

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and Db, as they apply to EUAUXBOILER. **(40 CFR Part 60 Subparts A & Db)**
2. The permittee shall comply with all provisions of 40 CFR Part 63, Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants: Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. **(40 CFR Part 63, Subparts A and DDDDD)**

#### **Footnotes:**

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

**The following conditions apply to:**  
**EUCOOLTWR**

**DESCRIPTION:** A four-cell, evaporative cooling tower in series with mechanical chilling to cool turbine inlet air.

**Flexible Group ID:** NA

**POLLUTION CONTROL EQUIPMENT:** Particulate emissions will be controlled with high efficiency drift eliminators.

**I. EMISSION LIMITS**

NA

**II. MATERIAL LIMITS**

<b>Material</b>	<b>Limit</b>	<b>Time Period / Operating Scenario</b>	<b>Equipment</b>	<b>Testing / Monitoring Method</b>	<b>Underlying Applicable Requirements</b>
1. Total Dissolved Solids (TDS) in cooling water	7700 ppmw	Based on monthly sampling	EUCOOLTWR	SC VI.2	R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810

**III. PROCESS/OPERATIONAL RESTRICTIONS**

1. Within 180 days after startup of EUCCT, the permittee shall submit to the AQD District Supervisor, an inspection and maintenance program for EUCOOLTWR. The permittee shall comply with the submitted program until the AQD District Supervisor approves the program or approves an amended program. At any time, the permittee may submit a modified program to the AQD District Supervisor for review and approval. **(R 336.2810)**

**IV. DESIGN/EQUIPMENT PARAMETERS**

1. The permittee shall equip and maintain EUCOOLTWR with mist/drift eliminators with a vendor-certified maximum drift rate of 0.0006 percent or less. **(R 336.1205(1)(a) & (b), R 336.1910, R 336.2810)**

**V. TESTING/SAMPLING**

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

NA

**VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall maintain a record of the vendor's certification required in SC IV.1, for the life of EUCOOLTWR. **(R 336.1205, R 336.1910, R 336.2810)**
2. The permittee shall monitor and record the TDS content of the cooling water for EUCOOLTWR on a monthly basis. **(R 336.2810)**
3. The permittee shall maintain a record of any maintenance conducted for EUCOOLTWR. **(R 336.2810)**

**VII. REPORTING**

1. 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 EU COOLTWR. **(R 336.1201(7)(a))**

**VIII. STACK/VENT RESTRICTIONS**

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

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter/Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVCOOLTWR1	168.3 (14 feet)	21	R 336.2803, R 336.2804
2. SVCOOLTWR2	168.3 (14 feet)	21	R 336.2803, R 336.2804
3. SVCOOLTWR3	168.3 (14 feet)	21	R 336.2803, R 336.2804
4. SVCOOLTWR4	168.3 (14 feet)	21	R 336.2803, R 336.2804

**IX. OTHER REQUIREMENTS**

NA

**Footnotes:**

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

**APPENDIX A**  
**Continuous Emission Monitoring System (CEMS) and**  
**Predictive Emission Monitoring System (PEMS) Requirements**

1. Within 30 calendar days after commencement of initial start-up, the permittee shall submit two copies of a Monitoring Plan to the AQD, for review and approval. The Monitoring Plan shall include drawings or specifications showing proposed locations and descriptions of the required CEMS/PEMS.
2. Within 150 calendar days after commencement of initial start-up, the permittee shall submit two copies of a complete test plan for the CEMS/PEMS to the AQD for approval.
3. Within 180 calendar days after commencement of initial start-up, the permittee shall complete the installation and testing of the CEMS/PEMS.
4. Within 60 days of completion of testing, the permittee shall submit to the AQD two copies of the final report demonstrating the CEMS complies with the requirements of the corresponding Performance Specifications (PS) in the following table:

<b>Pollutant</b>	<b>Applicable PS</b>
NO <sub>x</sub>	2
O <sub>2</sub> & CO <sub>2</sub>	3
CO	4
PEMS	16

5. The span value shall be 2.0 times the lowest emission standard or as specified in the federal regulations.
6. The CEMS shall be installed, calibrated, maintained, and operated in accordance with the procedures set forth in 40 CFR 60.13 and the PS, listed in the table above, of Appendix B to 40 CFR Part 60.  
For EUCCT: If a PEMS is installed in lieu of a CEMS, the PEMS shall be installed, maintained, and operated in accordance with PS 16 of Appendix B to 40 CFR Part 60, as proposed or promulgated or, with approval from the AQD District Supervisor and EPA Clean Air Markets Division, the permittee may install a PEMS for NO<sub>x</sub> in accordance with Part 75, Appendix B requirements, as stated in 40 CFR 60.4340(b)(2)(iv).  
For EUAUXBOILER: If a PEMS is installed in lieu of a CEMS, the PEMS shall be installed, maintained, and operated in accordance with 40 CFR 60.49b(c).
7. Each calendar quarter, the permittee shall perform the Quality Assurance Procedures of the CEMS set forth in Appendix F of 40 CFR Part 60. As an alternative, the permittee may perform the Quality Assurance Procedures for CEMS set forth in Appendix B of 40 CFR Part 75 for the EUCCT. Within 30 days following the end of each calendar quarter, the permittee shall submit the results to the AQD in the format of the data assessment report (Figure 1, Appendix F of 40 CFR Part 60).
8. In accordance with 40 CFR 60.7(c) and (d), the permittee shall submit two copies of an excess emission report (EER) and summary report in an acceptable format to the AQD, within 30 days following the end of each calendar quarter. The Summary Report shall follow the format of Figure 1 in 40 CFR 60.7(d). The EER shall include the following information:
  - a. A report of each exceedance above the limits specified in the conditions of this permit. This includes the date, time, magnitude, cause and corrective actions of all occurrences during the reporting period.
  - b. A report of all periods of CEMS/PEMS downtime and corrective action.
  - c. A report of the total operating time of EUCCT, or EUAUXBOILER during the reporting period.
  - d. A report of any periods that the CEMS/PEMS exceeds the instrument range.
  - e. If no exceedances or CEMS/PEMS downtime occurred during the reporting period, the permittee shall report that fact.

The permittee shall keep all monitoring data on file for a period of at least five years and make them available to the AQD upon request.