

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

March 16, 2017

PERMIT TO INSTALL
75-14C

ISSUED TO
Michigan State University

LOCATED AT
354 Service Road - T.B. Simon Power Plant
East Lansing, Michigan

IN THE COUNTY OF
Ingham

STATE REGISTRATION NUMBER
K3249

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: November 4, 2016	
DATE PERMIT TO INSTALL APPROVED: March 16, 2017	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

PERMIT TO INSTALL

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Common Abbreviations / Acronyms

Common Acronyms		Pollutant / Measurement Abbreviations	
AQD	Air Quality Division	BTU	British Thermal Unit
BACT	Best Available Control Technology	°C	Degrees Celsius
CAA	Clean Air Act	CO	Carbon Monoxide
CEM	Continuous Emission Monitoring	dscf	Dry standard cubic foot
CFR	Code of Federal Regulations	dscm	Dry standard cubic meter
CO ₂ e	Carbon Dioxide Equivalent	°F	Degrees Fahrenheit
COM	Continuous Opacity Monitoring	gr	Grains
EPA	Environmental Protection Agency	Hg	Mercury
EU	Emission Unit	hr	Hour
FG	Flexible Group	H ₂ S	Hydrogen Sulfide
GACS	Gallon of Applied Coating Solids	hp	Horsepower
GC	General Condition	lb	Pound
GHGs	Greenhouse Gases	kW	Kilowatt
HAP	Hazardous Air Pollutant	m	Meter
HVLP	High Volume Low Pressure *	mg	Milligram
ID	Identification	mm	Millimeter
LAER	Lowest Achievable Emission Rate	MM	Million
MACT	Maximum Achievable Control Technology	MW	Megawatts
MAERS	Michigan Air Emissions Reporting System	ng	Nanogram
MAP	Malfunction Abatement Plan	NO _x	Oxides of Nitrogen
MDEQ	Michigan Department of Environmental Quality (Department)	PM	Particulate Matter
MSDS	Material Safety Data Sheet	PM10	PM with aerodynamic diameter ≤10 microns
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM2.5	PM with aerodynamic diameter ≤ 2.5 microns
NSPS	New Source Performance Standards	pph	Pounds per hour
NSR	New Source Review	ppm	Parts per million
PS	Performance Specification	ppmv	Parts per million by volume
PSD	Prevention of Significant Deterioration	ppmw	Parts per million by weight
PTE	Permanent Total Enclosure	psia	Pounds per square inch absolute
PTI	Permit to Install	psig	Pounds per square inch gauge
RACT	Reasonably Available Control Technology	scf	Standard cubic feet
ROP	Renewable Operating Permit	sec	Seconds
SC	Special Condition	SO ₂	Sulfur Dioxide
SCR	Selective Catalytic Reduction	THC	Total Hydrocarbons
SRN	State Registration Number	tpy	Tons per year
TAC	Toxic Air Contaminant	µg	Microgram
TEQ	Toxicity Equivalence Quotient	VOC	Volatile Organic Compound
VE	Visible Emissions	yr	Year

* For High Volume Low Pressure (HVLP) applicators, the pressure measured at the HVLP gun air cap shall not exceed ten (10) pounds per square inch gauge (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)	Installation Date / Modification Date	Flexible Group ID
EU-UNIT1	Dry bottom wall-fired, natural gas boiler capable of generating 250,000 lb./hr. of steam. This boiler is used to generate heating steam for the university and for the firing of a steam turbine to produce electricity for the university. This boiler is equipped with overfire air.	01/01/1965, 11/01/1978, 10/20/2011	FG-UNIT1/2, FG-BLRMACT- EXISTINGGAS1,
EU-UNIT2	Dry bottom wall-fired, natural gas fired boiler capable of generating 250,000 lb./hr. of steam. This boiler is used to generate heating steam for the university and for the firing of a turbine to produce electricity for the university. This boiler is equipped with overfire air.	01/01/1965, 11/01/1978, 10/20/2011	FG-UNIT1/2, FG-BLRMACT- EXISTINGGAS1,
EU-UNIT3	Dry bottom wall-fired natural gas fired boiler capable of generating 350,000 lb./hr. of steam. The boiler can be used to generate heating steam for the university and for the firing of a steam turbine to produce electricity for the university. This boiler is equipped with overfire air.	03/15/1973, 01/01/1975, 10/20/2011, 10/31/2014	FG-BLRMACT- EXISTINGGAS1
EU-UNIT4	Circulating fluidized bed natural gas boiler capable of generating 350,000 lb./hr. of steam. The boiler is used to generate heating steam for the university and for the firing of a steam turbine to produce electricity for the university.	12/12/1990, 10/20/2011, 1/10/2017	FG-BLRMACT- EXISTINGGAS1
EU-UNIT5	Heat recovery steam generator (HRSG) with natural gas-fired duct burner; 80 MMBTU/hr heat input (LHV).	06/04/2004	FG-UNITS5/6
EU-UNIT6	139 MMBtu/Hr natural gas fired turbine with dry low-NOx burner (considered a lean premix gas-fired turbine) and HRSG (EU-UNIT5) capable of generating 115,000 lbs. of steam/hour and 12.0 mW. The heat rate based on lower heating value of the fuel for EU-UNIT6 is 10.6 kJ/Wh.	06/04/2004	FG-UNITS5/6
EU-EMGENGINE	Emergency black start 1528 hp, 1020 kW compression ignition reciprocating engine for EU-UNIT6.	06/04/2004	NA
EU-SPENTSANDEXH4	Unit 4 spent sand handling mechanical exhauster used to pneumatically transfer spent sand from hoppers to the spent sand silo. The vacuum system pump pulls the spent sand from the hoppers and into the spent sand silo via a cyclone separator. Two separate discharge vent fans are associated.	12/12/1990, 1/10/2017	FG-4MATVENTS

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Installation Date / Modification Date	Flexible Group ID
EU-SPENTSANDSILO4	Unit 4 spent sand silo vent. This air displacement vent is equipped with a bag filter. This vent discharges air from the spent sand silo during periods when spent sand is being loaded into the silo.	12/12/1990, 1/10/2017	FG-4MATVENTS
EU-SANDSILO4	Sand silo vent. This air displacement vent is equipped with a bag filter. This vent discharges air from the sand silo during periods when the silo is being filled.	12/12/1990	FG-4MATVENTS
EU-DEGTSIMONP1	Parts washer	09/01/1990	FG-2COLDCLEANER
EU-DEGTSIMONP2	Parts washer	09/01/1990	FG-2COLDCLEANER
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:
EU-UNIT3

DESCRIPTION:

Dry bottom wall-fired natural gas fired boiler capable of generating 350,000 lb./hr. of steam. The boiler can be used to generate heating steam and electricity for the university. This boiler is equipped with overfire air. (PTI 75-14B)

Flexible Group ID: FG-BLRMACT-EXISTINGGAS1

POLLUTION CONTROL EQUIPMENT: Low-NOx burners.

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. NOx	0.20 lbs./MMBtu heat input-	3-hr rolling average	EU-2-UNIT3	SC VI.1	40 CFR 60.44(a)(1)
* Test Protocol will specify the averaging period					

II. MATERIAL LIMITS

1. The permittee shall only combust pipeline quality natural gas fuel in EU-UNIT3.¹ **(R 336.1225)**

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall calibrate, maintain, and operate, in a satisfactory manner, devices to monitor and record the NOx and CO₂ or O₂ emissions from EU-UNIT3, on a continuous basis and according to the procedures outlined in Appendix 3.² **(40 CFR 60.45, 40 CFR Part 75)**
2. The maximum design heat input capacity for EU-UNIT3, shall not exceed 460 MMBtu per hour, based on the higher heating value (HHV) of the fuel. **(R336.1201(3))**

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 continuously monitor and record, in a satisfactory manner, the NOx and CO₂ or O₂ emissions and flow from EU-UNIT3. The permittee shall operate the Continuous Emission Monitoring System (CEMS) (or Predictive Emissions Monitoring Systems (PEMS)) to meet the timelines, requirements and reporting detailed in Appendix 3 and shall use the CEMS (or PEMS) data for determining compliance with SC I.1. **(40 CFR 60.45, 40 CFR Part 75)**

2. Records of all measurements including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring systems' performance evaluations; all continuous monitoring system or monitoring device calibration checks; and records of adjustments and maintenance performed on these systems or devices. **(R 336.1201(3), R 336.1911, 40 CFR Part 60 Subpart D)**
3. The permittee shall monitor and maintain the following:
 - a. Amount of natural gas fired in EU-2-EUNIT3 **on a monthly basis.**
 - b. Calendar month.

The permittee shall keep the above records on file at the facility, in a satisfactory manner, and available to the Department upon request. **(R 336.1205, R 336.1224, R 336.1702, R 336.1901)**

VII. REPORTING

1. The permittee shall submit two copies of an excess emission report (EER) and summary report for each CEMS (or PEMS) in an acceptable format to the AQD, quarterly and in accordance with 40 CFR 60.7(c) & (d). All reports shall be postmarked by the 30th day following each calendar quarter. **(40 CFR 60.7)**

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:

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVUNIT3/4	156	275	R 336.1225

IX. OTHER REQUIREMENTS

1. The permittee shall meet the monitoring, recordkeeping, and reporting requirements of the NOx SIP Call during the ozone season (May 1 through September 30). **(40 CFR Part 96, Subpart H)**
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 DDDDD, for National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters by the initial compliance date. **(40 CFR 63.7495, 40 CFR Part 63, Subparts A and DDDDD)**
3. The permittee shall comply with all applicable requirements of 40 CFR Part 60, Subpart D. **(40 CFR 60.40).**
4. The permittee shall comply with all applicable requirements of 40 CFR Part 75. **(40 CFR Part 75).**
5. The permittee shall provide written notification to the Air Quality Division not more than 30 days after the completion of the project and commencement of trial operation. **(R 336.1201(7)(a))**

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).

The following conditions apply to:
EU-UNIT4

DESCRIPTION:

Circulating fluidized bed natural gas boiler capable of generating 350,000 lb./hr. of steam. The boiler is used to generate steam for the university and for the firing of a steam turbine to produce electricity for the university. (PTI 75-14C)

Flexible Group ID: FG-BLRMACT-EXISTINGGAS1

POLLUTION CONTROL EQUIPMENT:

- Baghouse collector for particulate control
- Selective non-catalytic reduction (SNCR) system for nitrogen oxide control (may be used)l.

EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. NOx	0.076 lbs./MMBtu heat input	24-hr rolling average	EU-UNIT4	VI.6	40 CFR 52.21(j), R 336.2810
2. NOx	32.2 pph	24-hr rolling average	EU-UNIT4	VI.6	40 CFR 52.21(j), R 336.2810

*Compliance with this requirement, 40 CFR 52.21(j)/R 336.2810, shall be considered compliance with the standards specified in NSPS, 40 CFR Part 60, Subpart Db (60.44b for NOx), which has been subsumed under this streamlined requirement.

**Test protocol shall determine averaging time.

II. MATERIAL LIMITS

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

1. The permittee shall only combust pipeline quality natural gas fuel in EU-UNIT4. **(R 336.1213(2))**

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate EU-UNIT4 unless a Malfunction Abatement Plan for EU-UNIT4 and its associated control equipment has been implemented and 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 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 336.1911)**

2. The permittee shall calibrate, maintain, and operate continuous emission monitoring systems (CEMS) (or Predictive Emissions Monitoring Systems (PEMS)) to monitor and record the NO_x, CO₂ or O₂ emissions for EU-UNIT4, on a continuous basis and according to the procedures outlined:
(R 336.1201(3), R 336.2152(2), 40 CFR 60.13(d), 40 CFR Part 75)
 - a. The CEMS (or PEMS) shall complete a minimum of 1 cycle of operation for each successive 15-minute period.
 - b. The permittee shall check the zero and span calibration drifts for all CEM (or PEM) systems, at least once daily, and make the appropriate adjustments in accordance with the manufacturer's written procedure.²

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3), R 336.1213(3)(b)(ii))**

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall continuously monitor and record, in a satisfactory manner, the NO_x, CO₂ or O₂ emissions from EU-UNIT4. The permittee shall operate each Continuous Emission Monitoring System (or Predictive Emissions Monitoring Systems)/Continuous Emission Rate Monitoring System (CEMS (or PEMS)/CERMS) to meet the timelines, requirements and reporting detailed in Appendix 3-2 and shall use the CEMS (or PEMS)/CERMS data for determining compliance with SC I.4-I.9 and I.12-13. Where the following data is required:² **(R 336.2810, R 336.1213(3), 40 CFR 52.21(j), 40 CFR Part 75)**
 - a. The 24-hour rolling average NO_x emission rates in terms of pounds per million BTU heat input and pounds per hour.
2. The permittee shall keep the following information on a monthly basis for EU-UNIT4:
 - a. A record of the hours of operation.

The permittee shall keep the records in a format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.2810, 40 CFR 52.21(j))**

3. The permittee shall calibrate, maintain, and operate a continuous emission monitoring system (CEMS) or Predictive Emissions Monitoring Systems (PEMS) to monitor and record the NO_x, CO₂ or O₂ emissions from EU-UNIT4, on a continuous basis and according to the procedures outlined below and in Appendix 3-2:² **(R 336.1201(3))**
 - a. The CEMS (or PEMS) shall complete a minimum of 1 cycle of operation for each successive 15-minute period.² **(R 336.2152(2))**
 - b. The permittee shall check the zero and span calibration drifts for all CEM (or PEM) systems, at least once daily, and make the appropriate adjustments in accordance with the manufacturer's written procedure.² **(40 CFR 60.13(d), 40 CFR 75)**
4. The permittee shall keep records of all measurements including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring systems performance evaluations; all continuous monitoring system or monitoring device calibration checks; and records of adjustments and maintenance performed on these systems or devices.² **(R 336.1201(3))**

5. The Permittee shall monitor and maintain daily records on the following:
 - a. Amount of natural gas fired in EU-UNIT4.
 - b. Calendar date.

The permittee shall keep the above records on file at the facility, in a satisfactory manner, and available to the Department upon request.² **(R 336.1224, R 336.1702)**

6. The permittee shall keep records of the occurrence and duration of any startup, shutdown, or malfunction in the operation; any malfunction of the air pollution control equipment, or any periods during which a continuous monitoring system or monitoring device is inoperative.² **(40 CFR 60.7)**

See Appendix 3-2

I. REPORTING

1. Quarterly reporting of the "Excess Emission and Monitoring Systems Performance Report" and the "Summary Report" as specified in 40 CFR 60.7 (c) and (d) for NO_x, (excess emissions shall be based on the limits identified in Section I). Due April 30 for reporting period January 1 to March 31, July 30 for reporting period April 1 to June 30, October 30 for reporting period July 1 to September 30, and January 30 for reporting period October 1 to December 31.² **(R 336.2170, 40 CFR 60.7)**
2. Quarterly reporting of the "Data Assessment Report" (ie. Linearity or CGA) as set forth in Appendix F of 40 CFR 60 for the CEMS (or PEMS). Due April 30 for reporting period January 1 to March 31, July 30 for reporting period April 1 to June 30, October 30 for reporting period July 1 to September 30, and January 30 for reporting period October 1 to December 31.² **(40 CFR 60.7)**
3. The permittee shall notify the AQD of any physical or operational change which may increase the emission rate of any pollutant to which a standard applies, unless that change is specifically exempted. This notice shall be postmarked 60 days, or as soon as practical, before the change is commenced and shall include information on describing the precise nature of the change, present and proposed emission control systems, productive capacity before and after the change, and the expected completion date of the change. **(40 CFR 60.7)**
4. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD. The AQD must approve the final plan prior to testing. The permittee shall notify the District Supervisor or the Technical Programs Unit no less than 7 days prior to the anticipated test date. 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. **(R 336.1331, R 336.2001, R 336.2003, R 336.2004, R 336.2810, 40 CFR 52.21(j))**
5. Each calendar quarter, the permittee shall perform the Quality Assurance Procedures of the CEMS/PEMS set forth in 40 CFR Part 75, Subpart C. Within 30 days following the end of each calendar quarter, the permittee shall submit the results to the AQD.² **(40 CFR 75.21)**

See Appendix 8-2

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. SVUNIT3/4	156 ¹	275 ¹	R 336.1225

IX. OTHER REQUIREMENT(S)

1. The permittee shall meet the monitoring, recordkeeping, and reporting requirements of the NOx SIP Call during the ozone season (May 1 through September 30). **(40 CFR Part 96, Subpart H)**
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 DDDDD, for National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters by the extend compliance date of January 31, 2017. **(40 CFR 63.7495, 40 CFR Part 63, Subparts A and DDDDD)**
3. The permittee shall comply with all applicable requirements of 40 CFR, Part 60 Subpart Db. **(40 CFR 60.40b).**
4. The permittee shall comply with all applicable requirements of 40 CFR, Part 75. **(40 CFR Part 75).**

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).

The following conditions apply to: FG-UNIT5

DESCRIPTION

Heat recovery steam generator (HRSG) with natural gas fired duct burner capable of 80 MMBTU/hr. heat input for EU-UNIT6. (PTI 13-04)

Flexible Group ID: FG-UNITS5/6

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

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

II. MATERIAL LIMIT(S)

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

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

The permittee shall record and maintain records of the amount of fuel combusted in EU-UNIT5 during each calendar month. 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 60.48c (g)(2))

VII. REPORTING

See Appendix 8-2

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
NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable requirements of the New Source Performance Standards for Small Industrial –Commercial-Institutional Steam Generating Units as specified in 40 CFR Part 60, Subpart Dc. **(40 CFR Part 60, Subpart Dc)**

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).

The following conditions apply to: EU-UNIT6

DESCRIPTION

139 MMBtu/Hr natural gas fired turbine with dry low-NOx burner (considered a lean premix gas-fired turbine) and HRSG (EU-UNIT5) capable of generating 115,000 lbs. of steam/hour and 12.0 MW. The heat rate based on lower heating value of the fuel for EU-UNIT6 is 10.6 kJ/Wh. (PTI 13-04)

Flexible Group ID: FG-UNITS5/6

POLLUTION CONTROL EQUIPMENT

Low NOx Burner

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	204 ppm @ 15% O2 dry	Test Protocol	EU-UNIT6	40 CFR 60.335	40 CFR 60.332(a)

II. MATERIAL LIMIT(S)

1. The permittee shall only fire natural gas containing 20.0 grains or less of total sulfur per 100 standard cubic feet.² **(40 CFR 60.331)**

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain EU-UNIT6 with a dry low-NOx combustor.² **(R 336.1225, R 336.1702(a), R 336.1910)**
2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the NOx emissions for EU-UNIT6 on a continuous basis.² **(R 336.1205 (1)(a) and (3))**
3. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the CO emissions for EU-UNIT6 on a continuous basis² **(R 336.1205 (1)(a) and (3))**

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall monitor the fuel sulfur content via a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less.² (40 CFR 60.334(h)(3)(i))
2. The permittee shall keep, in a satisfactory manner, monthly NOx records for EU-UNIT6. 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), 40 CFR 60.332 (a)(2))
3. The permittee shall keep, in a satisfactory manner, monthly CO records for EU-UNIT6. 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))

VII. REPORTING

1. Each calendar quarter, the permittee shall perform the Quality Assurance Procedures of the CEMS set forth in Appendix F of 40 CFR Part 60. Within 30 days following the end of each calendar quarter, the permittee shall submit the results to the AQD. This documentation can be submitted as a combined package for FG-UNITS-5/6.² (40 CFR Part 60, Appendix F)
2. 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:² (R 336.2170, 40 CFR 60.7)
 - a. A report of each exceedance above the limits specified in the conditions of FG-UNIT5/6. 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 (or PEMS)/CERMS downtime and corrective action.
 - c. A report of the total operating time of FG-UNIT5/6 during the reporting period.
 - d. A report of any periods that the CEMS (or PEMS)/CERMS exceeds the instrument range.
 - e. If no exceedances or CEMS (or PEMS)/CERMS downtime occurred during the reporting period, the permittee shall report that fact.

This documentation can be submitted as a combined package for FG-UNITS-5/6

See Appendix 8-2

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
NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants from Stationary Combustion Turbines as specified in 40 CFR Part 63, Subparts A and YYYY, as they apply to EU-UNIT6.² **(40 CFR Part 63, Subparts A & YYYY, 40 CFR 63.6095(d))**
2. The permittee shall comply with all applicable provisions of the New Source Performance Standards for Stationary Gas Turbines as specified in 40 CFR Part 60, Subpart GG, as applicable to EU-UNIT6.² **(40 CFR Part 60, Subpart GG)**

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).

The following conditions apply to: EU-EMGENGINE

DESCRIPTION

Kohler compression ignition 1528 horsepower, 1020kW, black start existing reciprocating internal combustion engine, for EU-UNIT6.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

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

II. MATERIAL LIMIT(S)

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

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee may operate EU-EMGENGINE unlimited hours for emergency use. The permittee may also operate EU-EMGENGINE for no more than 100 hours per calendar year for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. The permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. 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 internal combustion engines beyond 100 hours per calendar year. EU-EMGENGINE may operate up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per calendar year provided for maintenance and testing. The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply non-emergency power as part of a financial arrangement with another entity. **(40 CFR 63.6640(f))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

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, in a satisfactory manner, a written log of the monthly hours of operation and type of operation for EU-EMENGINE. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² **(R336.1205 (1)(a) and (3))**

See Appendix 2-4

VII. REPORTING

See Appendix 8-2

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
NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the applicable requirements of 40 CFR Part 63 (“National Emission Standard for Hazardous Air Pollutants for Source Categories”), Subparts A (“General Provisions”) and ZZZZ (“National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines”). **(40 CFR Part 63, Subparts A and ZZZZ)**

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).

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
FG-UNIT1/2	Two dry bottom wall-fired natural gas fired boilers capable of generating 250,000 lb./hr. of steam. The boilers are used to generate heating steam for the university and for the firing of a steam turbine to produce electricity for the university. The boilers are equipped with overfire air and are also equipped with SNCR which may be used primarily during the ozone season to reduce NOx levels.	EU-UNIT1 EU-UNIT2
FG-UNITS5/6	Natural gas fired 139 MMBtu/hr. heat input turbine with dry low-NOx burner and heat recovery steam generator (HRSG) and a natural gas fired duct burner capable of 80 MMBTU/hr heat input.	EU-UNIT5 EU-UNIT6
FG-2COLDCLEANER	All cold cleaners at the powerhouse.	EU-DEGTSIMONP1 EU-DEGTSIMONP2
FG-4MATVENTS	Material handling equipment associated with Unit 4 boiler	EU-SPENTSANDEXH4 EU-SPENTSANDSILO4 EU-SANDSILO4
FG-BLRMACT-EXISTINGGAS1	Gas 1 Fuel Subcategory requirements for existing Boilers at major sources of Hazardous Air Pollutants per 40 CFR Part 63, Subpart DDDDD. EU-UNIT1, EU-UNIT2, and EU-UNIT3 must comply with this subpart no later than January 31, 2016, and EU-UNIT4 must comply with this subpart no later than January 31, 2017.	EU-UNIT1 EU-UNIT2 EU-UNIT3 EU-UNIT4

The following conditions apply to: FG-UNIT1/2

DESCRIPTION

Two dry bottom wall-fired natural gas fired boilers each capable of generating 250,000 lb./hr. of steam. The boilers are used to generate steam for the university and for the firing of a steam turbine to produce electricity (CHP). The boilers are equipped with overfire air. (PTI 75-14A)

Emission Units: EU-UNIT1, EU-UNIT2

POLLUTION CONTROL EQUIPMENT

Low-NO_x burners

I. EMISSION LIMIT(S)

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

II. MATERIAL LIMIT(S)

1. The permittee shall only combust pipeline quality natural gas fuel in EU-UNIT1 and EU-UNIT2. **(R 336.1213(2))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate either EU-UNIT1 or EU-UNIT2 unless a Malfunction Abatement Plan for EU-UNIT1 and EU-UNIT2, and their associated control equipment, has been implemented and is maintained for both units. 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.² **(R 336.1911)**.

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall monitor and maintain monthly records on the following:
 - a. Amount of natural gas fired in EU-UNIT1 and EU-UNIT2.
 - b.. Calendar month.

The permittee shall keep the above records on file at the facility, in a satisfactory manner, and available to the Department upon request.² (R 336.1205, R 336.1224, R 336.1702, R 336.1901)

VII. REPORTING

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. SVUNIT1/2	132 ²	275 ²	R 336.1201(3), R 336.1225

IX. OTHER REQUIREMENT(S)

1. The permittee shall meet the monitoring, recordkeeping, and reporting requirements of the NOx SIP Call during the ozone season (May 1 through September 30). (40 CFR Part 96, Subpart H)
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 DDDDD, for National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters by the initial compliance date. (40 CFR 63.7495, 40 CFR Part 63, Subparts A and DDDDD)

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).

The following conditions apply to: FG-UNITS5/6

DESCRIPTION

139 MMBtu/Hr heat input natural gas fired turbine with dry low-NOx burner, heat recovery steam generator (HRSG) and a natural gas fired duct burner rated at 80 MMBTU/hr. heat input. (PTI 13-04)

Emission Units: EU-UNIT5, EU-UNIT6

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	34.9 tpy ²	12-month rolling time period as determined by the end of each calendar month	FG-UNITS5/6	SC VI.2	R 336.1205 (1)(a) and (3),
2. CO	89.9 tpy ²	12-month rolling time period as determined by the end of each calendar month	FG-UNITS5/6	SC VI.3	R 336.1205 (1)(a) and (3)

II. MATERIAL LIMIT(S)

1. The permittee shall only fire natural gas containing 20.0 grains or less of total sulfur per 100 standard cubic feet.² **(40 CFR 60.331)**

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain FG-UNITS5/6 with a dry low-NOx combustor.² **(R 336.1225, R 336.1702(a), R 336.1910)**
2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the NOx emissions for FG-UNITS5/6 on a continuous basis.² **(R 336.1205 (1)(a) and (3))**
3. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the CO emissions for FG-UNITS5/6 on a continuous basis.² **(R 336.1205 (1)(a) and (3))**

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall keep, in a satisfactory manner, monthly and previous 12 month NOx records for FG-UNITS5/6. 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))
2. The permittee shall keep, in a satisfactory manner, monthly and previous 12 month CO records for FG-UNITS5/6. 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))

VII. REPORTING

1. Each calendar quarter, the permittee shall perform the Quality Assurance Procedures of the CEMS set forth in Appendix F of 40 CFR Part 60. Within 30 days following the end of each calendar quarter, the permittee shall submit the results to the AQD.² (40 CFR Part 60, Appendix F)
2. 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:² (R 336.2170, 40 CFR 60.7,)
 - a. A report of each exceedance above the limits specified in the conditions of FG-UNIT5/6. 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 (or PEMS)/CERMS downtime and corrective action.
 - c. A report of the total operating time of FG-UNIT5/6 during the reporting period.
 - d. A report of any periods that the CEMS (or PEMS)/CERMS exceeds the instrument range.
 - e. If no exceedances or CEMS (or PEMS)/CERMS downtime occurred during the reporting period, the permittee shall report that fact.

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. SV-2-TURB/DB1	72 ²	157.5 ²	R 336.1225, 40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENT(S)

NA

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).

The following conditions apply to: FG-2COLDCLEANER

DESCRIPTION

Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 281(h) or Rule 285(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.

Emission Units: EU-DEGTSIMONP1, EU-DEGTSIMONP2

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

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

II. MATERIAL LIMIT(S)

1. The permittee shall not use cleaning solvents containing more than 5 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 10 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))**

V. TESTING/SAMPLING

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

NA

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%, 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

See Appendix 8-2

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
NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

NA

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).

The following conditions apply to: FG-4MATVENTS

DESCRIPTION

Material handling equipment associated with Unit 4 boiler

Emission Units: EU-SPENTSANDEXH4, EU-SPENTSANDSILO4, EU-SANDSILO4

POLLUTION CONTROL EQUIPMENT

Cyclone on EU-SPENTSANDEXH4
 Bag filter on EU-SPENTSANDSILO4
 Bag filter on EU-SANDSILO4

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Opacity	5% ²	6-minute average	FG-4MATVANTS	SC V.1	R336,1301(1)(c)
2. Particulate Matter	0.02 gr/dscf ²	NA	FG-4MATVANTS	SC VI.1, VI.2	R336.1331(1)(c)

II. MATERIAL LIMIT(S)

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

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

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 measure the opacity using Method 9 (Visual Determination of the Opacity of Emissions from Stationary Sources) upon request of the AQD. (R 336.1213(3))

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall perform, at a minimum, a semiannual maintenance check and repairs on each baghouse filter. A record of repairs and maintenance performed on the baghouse filters shall be maintained. (R 336.1213(3))

2. Visual inspection for abnormal/excessive dust to be performed at least once a week on all exhausts points. A record shall be made of all checks. Abnormal conditions shall trigger initiation of abatement/repair actions. **(R 336.1213(3))**

VII. REPORTING

See Appendix 8-2

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. SVSPENTSANDEXH4A	NA	NA	NA
2. SVSPENTSANDEXH4B	NA	NA	NA
3. SVSPENTSANDSILO4	NA	NA	NA
4. SVSANDSILO	NA	NA	NA

IX. OTHER REQUIREMENT(S)

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).

The following conditions apply to: FG-BLRMACT-EXISTINGGAS1

DESCRIPTION

Gas 1 Fuel Subcategory requirements for existing Boilers at major sources of Hazardous Air Pollutants per 40 CFR Part 63, Subpart DDDDD. EU-UNIT1, EU-UNIT2, and EU-UNIT3 must comply with this subpart no later than January 31, 2016, and EU-UNIT4 must comply with this subpart no later than January 31, 2017.

Emission Units: EU-UNIT1, EU-UNIT2, EU-UNIT3, EU-UNIT4

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

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

II. MATERIAL LIMIT(S)

1. The permittee shall only burn fuels as allowed in the Unit designed to burn gas 1 subcategory definition in 40 CFR 63.7575. **(40 CFR 63.7499(I))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee must meet the requirements in paragraphs (a)(1) and (3) of 40 CFR 63.7500, as listed below, except as provided in paragraphs (b) and (e) of 40 CFR 63.7500, stated in SC III.2 and SC III.3. The permittee must meet these requirements at all times the affected unit is operating, except as provided in paragraph (f) of 40 CFR 63.7500, stated in SC III.4. **(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 to the boiler, for each boiler at the source. **(40 CFR 63.7500(a)(1))**
 - b. At all times, the permittee must operate and maintain any affected source (EU-UNIT1, EU-UNIT2, EU-UNIT3, and EU-UNIT4), 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))**
2. As provided in 40 CFR 63.6(g), EPA may approve use of an alternative to the work practice standards. **(40 CFR 63.7500(b))**
3. Boilers 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 above standards apply at all times the affected unit is operating, except during periods of startup and shutdown during which time the permittee must comply only with Table 3 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7500(f))**

5. The permittee must complete an initial tune-up by following the procedures described in 40 CFR 63.7540(a)(10)(i) through (vi), stated in SC IX.5, no later than the compliance date specified in 40 CFR 63.7495 unless an extension applies, stated in SC IX.2. The permittee must complete the one-time energy assessment specified in Table 3 of 40 CFR Part 63, Subpart DDDDD no later than the compliance date specified in 40 CFR 63.7495 unless an extension applies, stated in SC IX.2. **(40 CFR 63.6(i)(4)(i)(A), 40 CFR 63.7510(e))**
6. The permittee must conduct an annual performance tune-up according to 40 CFR 63.7540(a)(10), stated in SC IX.5.a; or 5-year performance tune-up according to 40 CFR 63.7540(a)(12), stated in SC IX.14.b. 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 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))**
7. For startup and shutdown, the permittee must meet the work practice standards according to item 5 of Table 3 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7540(d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee must keep records according to paragraphs (a)(1) and (2) of 40 CFR 63.7555, as listed below. **(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))**
2. The permittee must maintain records of the calendar date, time, occurrence and duration of each startup and shutdown. **(40 CFR 63.7555(i))**
3. The permittee must maintain records of the amount(s) of natural gas used during each startup and shutdown. **(40 CFR 63.7555(j))**
4. 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))**
5. 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))**
6. 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. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semi-annual 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 meet the notification requirements in 40 CFR 63.7545 according to the schedule in 40 CFR 63.7545, both stated in SC VII.7 through SC VII.10, and in Subpart A of 40 CFR 63. **(40 CFR 63.7495(d))**
5. The permittee must include with the Notification of Compliance Status a signed certification that the energy assessment was completed according to Table 3 of 40 CFR Part 63, Subpart DDDDD and is an accurate depiction of the facility at the time of the assessment. **(40 CFR 63.7530(e))**
6. The permittee must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in 40 CFR 63.7545(e), stated in SC VII.8. **(40 CFR 63.7530(f))**
7. The permittee must submit to the Administrator all of the notifications in 40 CFR 63.7(b) and (c), 40 CFR 63.8(e), (f)(4) and (6), and 40 CFR 63.9(b) through (h) that apply to the permittee by the dates specified. **(40 CFR 63.7545(a))**
8. Since the permittee is not required to conduct an initial compliance demonstration as specified in 40 CFR 63.7530(a), the Notification of Compliance Status must only contain the information specified in paragraphs (e)(1) and (8). **(40 CFR 63.7545(e))**
 - a. A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with 40 CFR Part 63, Subpart DDDDD, and description of the fuel(s) burned. **(40 CFR 63.7545(e)(1))**
 - b. In addition to the information required in 40 CFR 63.9(h)(2), your notification of compliance status must include the following certification(s) of compliance, as applicable, and signed by a responsible official: **(40 CFR 63.7545(e)(8))**
 - i. "This facility complies with the required initial tune-up according to the procedures in 40 CFR 63.7540(a)(10)(i) through (vi)." **(40 CFR 63.7545(e)(8)(i))**
 - ii. "This facility has had an energy assessment performed according to 40 CFR 63.7530(e)." **(40 CFR 63.7545(e)(8)(ii))**
9. During a period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575, if the permittee intends to use a fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart of 40 CFR Part 63, Part 60, Part 61, or Part 65, or other gas 1 fuel to fire any affected unit, the permittee must submit a notification of alternative fuel use within 48 hours of the declaration of each period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575. The notification must include the information specified in paragraphs (f)(1) through (5) of 40 CFR 63.7545, as listed below. **(40 CFR 63.7545(f))**
 - a. Company name and address. **(40 CFR 63.7545(f)(1))**
 - b. Identification of the affected unit. **(40 CFR 63.7545(f)(2))**
 - c. Reason the permittee is unable to use natural gas or equivalent fuel, including the date when the natural gas curtailment was declared or the natural gas supply interruption began. **(40 CFR 63.7545(f)(3))**
 - d. Type of alternative fuel that the permittee intends to use. **(40 CFR 63.7545(f)(4))**
 - e. Dates when the alternative fuel use is expected to begin and end. **(40 CFR 63.7545(f)(5))**

10. If the permittee has switched fuels or made a physical change to any boiler and the fuel switch or physical change resulted in the applicability of a different subcategory, the permittee must provide notice of the date upon which the permittee switched fuels or made the physical change within 30 days of the switch/change. The notification must identify: **(40 CFR 63.7545(h))**
 - a. The name of the owner or operator of the affected source, EU-UNIT1, EU-UNIT2, EU-UNIT3, and EU-UNIT4, the location of the source, the boiler(s) that have switched fuels, were physically changed, and the date of the notice. **(40 CFR 63.7545(h)(1))**
 - b. The currently applicable subcategory under 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7545(h)(2))**
 - c. The date upon which the fuel switch or physical change occurred. **(40 CFR 63.7545(h)(3))**
11. The permittee must submit each report in Table 9 of 40 CFR Part 63, Subpart DDDDD that applies. **(40 CFR 63.7550(a))**
12. Unless the EPA Administrator has approved a different schedule for submission of reports under 40 CFR 63.10(a), the permittee must submit each report, according to paragraph (h)(3) of 40 CFR 63.7550, stated in SC VII.14, by the date in Table 9 of 40 CFR Part 63, Subpart DDDDD and according to the requirements in paragraphs (b)(1) through (4) of 40 CFR 63.7550, as listed below. For units that are subject only to a requirement to conduct an annual tune-up according to 40 CFR 63.7540(a)(10), stated in SC IX.5.a, or 5-year tune-up according to 40 CFR 63.7540(a)(12), stated in SC IX.5.b, and not subject to emission limits or operating limits, the permittee may submit only an annual or 5-year compliance report, as applicable, as specified in paragraphs (b)(1) through (4) of 40 CFR 63.7550, as listed below, instead of a semi-annual compliance report. **(40 CFR 63.7550(b))**
 - a. The first compliance report must cover the period beginning on the compliance date that is specified for each boiler stated in SC IX.2, and ending on January 31, 2018 (or whichever date is the first date that occurs at least 5 years after January 31, 2017, stated in SC IX.2 if submitting a 5-year compliance report). **(40 CFR 63.6(i)(4)(i)(A), 40 CFR 63.7550(b)(1))**
 - b. The first annual or 5-year compliance report must be postmarked or submitted no later than January 31. **(40 CFR 63.7550(b)(2), 40 CFR 63.10(a)(5))**
 - c. Each subsequent annual and 5-year compliance reports must cover the applicable 1 or 5-year periods from January 1 to December 31. **(40 CFR 63.7550(b)(3))**
 - d. Each subsequent annual and 5-year compliance reports must be postmarked or submitted no later than March 15. **(40 CFR 63.7550(b)(4), 40 CFR 63.10(a)(5))**
13. A compliance report must contain the following information depending on how the permittee chooses to comply with the limits set in this rule. **(40 CFR 63.7550(c))**
 - a. If the facility is subject to a the requirements of a tune up they must submit a compliance report with the information in paragraphs (c)(5)(i) through (iv) and (xiv) of 40 CFR 63.7550. **(40 CFR 63.7550(c)(1))**
 - b. 40 CFR 63.7550(c)(5) is as follows:
 - i. Company and Facility name and address. **(40 CFR 63.7550(c)(5)(i))**
 - ii. Process unit information, emissions limitations, and operating parameter limitations. **(40 CFR 63.7550(c)(5)(ii))**
 - iii. Date of report and beginning and ending dates of the reporting period. **(40 CFR 63.7550(c)(5)(iii))**
 - iv. The total operating time during the reporting period. **(40 CFR 63.7550(c)(5)(iv))**
 - v. Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual tune-up according to 40 CFR 63.7540(a)(10), stated in SC IX.5.a, or 5-year tune-up according to 40 CFR 63.7540(a)(12), stated in SC IX.5.b. Include the date of the most recent burner inspection if it was not done annually or on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown. **(40 CFR 63.7550(c)(5)(xiv))**
14. The permittee must submit all reports required by Table 9 of 40 CFR Part 63, Subpart DDDDD electronically using CEDRI that is accessed through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to 40 CFR Part 63, Subpart DDDDD is not available in CEDRI at the time that the report is due the report the permittee must submit the report to the Administrator at the appropriate address listed in 40 CFR 63.13. At the discretion of the Administrator, the permittee must also submit these reports, to the Administrator in the format specified by the Administrator. **(40 CFR 63.7550(h)(3))**

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
NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

1. A boiler is existing if it is not new or reconstructed, as defined below. **(40 CFR 63.7490(d))**
 - a. A boiler is new if the permittee commences construction of the boiler after June 4, 2010, and the permittee meets the applicability criteria at the time the permittee commences construction. **(40 CFR 63.7490(b))**
 - b. A boiler is reconstructed if the permittee meets the reconstruction criteria as defined in 40 CFR 63.2, the permittee commences reconstruction after June 4, 2010, and the permittee meets the applicability criteria at the time the permittee commence reconstruction. **(40 CFR 63.7490(c))**
2. If the permittee has an existing boiler, the permittee must comply with 40 CFR Part 63, Subpart DDDDD no later than January 31, 2016 for EU-UNIT1, EU-UNIT2, and EU-UNIT3 and no later than January 31, 2017 for EU-UNIT4. **(40 CFR 63.6(i)(4)(i)(A), 40 CFR 63.7495(b))**
3. The permittee must be in compliance with the work practice standards of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7505(a))**
4. For affected sources that have not operated since the previous compliance demonstration and more than one year has passed since the previous compliance demonstration, the permittee must complete a subsequent tune-up by following the procedures described in 40 CFR 63.7540(a)(10)(i) through (vi), stated in SC IX.5.a, and the schedule described in 40 CFR 63.7540(a)(13), stated in SC IX.5.c, for units that are not operating at the time of their scheduled tune-up. **(40 CFR 63.7515(g))**
5. The permittee must demonstrate continuous compliance with the work practice standards in Table 3 of 40 CFR Part 63, Subpart DDDDD that applies according to the methods specified in paragraphs (a)(10) through (13) of 40 CFR 63.7540, as listed below. **(40 CFR 63.7540(a))**
 - a. For the affected units, the permittee must conduct an annual tune-up of the boiler to demonstrate continuous compliance as specified in paragraphs (a)(10)(i) through (vi) of 40 CFR 63.7540, as listed below. This frequency does not apply to units with continuous oxygen trim systems that maintain an optimum air to fuel ratio. **(40 CFR 63.7540(a)(10))**
 - i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the permittee may delay the burner inspection until the next scheduled unit shutdown). At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment. **(40 CFR 63.7540(a)(10)(i))**
 - ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available. **(40 CFR 63.7540(a)(10)(ii))**
 - iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the inspection until the next scheduled unit shutdown). **(40 CFR 63.7540(a)(10)(iii))**
 - iv. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the unit is subject. **(40 CFR 63.7540(a)(10)(iv))**

- v. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. **(40 CFR 63.7540(a)(10)(v))**
 - vi. Maintain on-site and submit, if requested by the Administrator, an annual report containing the information in paragraphs (a)(10)(vi)(A) through (C) of 40 CFR 63.7540, as listed below. **(40 CFR 63.7540(a)(10)(vi))**
 - A. The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler. **(40 CFR 63.7540(a)(10)(vi)(A))**
 - B. A description of any corrective actions taken as a part of the tune-up. **(40 CFR 63.7540(a)(10)(vi)(B))**
 - C. The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit. **(40 CFR 63.7540(a)(10)(vi)(C))**
 - b. If a boiler has a continuous oxygen trim system that maintains an optimum air to fuel ratio, the permittee must conduct a tune-up of the boiler every 5 years as specified in paragraphs (a)(10)(i) through (vi) of 40 CFR 63.7540 to demonstrate continuous compliance. The permittee may delay the burner inspection specified in paragraph (a)(10)(i) of 40 CFR 63.7540 until the next scheduled or unscheduled unit shutdown, but the permittee must inspect each burner at least once every 72 months. **(40 CFR 63.7540(a)(12))**
 - c. If a boiler is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. **(40 CFR 63.7540(a)(13))**
6. Table 10 of 40 CFR Part 63, Subpart DDDDD shows which parts of the General Provisions in 40 CFR 63.1 through 63.15 applies to the permittee. **(40 CFR 63.7565)**

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).

Appendix : 2-2

The permittee certified in the ROP application that this stationary source is in compliance with all applicable requirements and the permittee shall continue to comply with all terms and conditions of this ROP. A Schedule of Compliance is not required. (R 336.1213(4)(a), R 336.1119(a)(ii))

Appendix : 3-2

1. The following monitoring procedures, methods, or specifications are the details to the monitoring requirements identified and referenced in **EU-UNIT3, EU-UNIT4, FG-UNITS5/6**

**NO_x, and CO₂ or O₂ Monitoring
Continuous Emission Monitoring System/ Continuous Emission Rate Monitoring System/ Predictive
Emission Monitoring System (CEMS/CERMS/PEMS) Requirements**

- a. The CEMS/CERMS/PEMS shall be installed, calibrated, maintained, and operated in accordance with the procedures set forth in 40 CFR 60.13 and the PS Numbers of Appendix B to 40 CFR Part 60 listed in the table below. As an alternative to PS 6 for CERMS, the flow CEMS (or PEMS) may be installed, calibrated, maintained, and operated in accordance with the procedures set forth in 40 CFR Part 75, Appendices A and B.

Pollutant	Applicable PS
NO _x	2
O ₂ & CO ₂	3
CERMS	6
PEMS	16

- b. CEMS (or PEMS) shall complete a minimum of 1 cycle of operation for each successive 15-minute period.
- c. The permittee shall check the zero and span calibration drifts for all CEM systems, at least once daily, and make the appropriate adjustments in accordance with the manufacturer's written procedure.
- d. The span value shall be 2.0 times the lowest emission standard or as specified in the federal regulations.
- e. Each calendar quarter, the permittee shall perform the Quality Assurance Procedures of the CEMS (or PEMS)/CERMS set forth in Appendix F of 40 CFR Part 60. As an alternative to Appendix F of 40 CFR Part 60, the permittee may perform the Quality Assurance Procedures for flow CEMS (or PEMS) as set forth in Appendices B of 40 CFR Part 75. 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).

- f. 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:
 - i. A report of each exceedance above the limits specified in the conditions of EU-UNIT3 and EU-UNIT4. This includes the date, time, magnitude, cause and corrective actions of all occurrences during the reporting period.
 - ii. A report of all periods of CEMS (or PEMS)/CERMS downtime and corrective action
 - iii. A report of the total operating time of EU-UNIT3 and EU-UNIT4 during the reporting period.
 - iv. A report of any periods that the CEMS (or PEMS)/CERMS exceeds the instrument range.
 - v. If no exceedances or CEMS (or PEMS)/CERMS downtime occurred during the reporting period, the permittee shall report that fact.

- g. FG-UNITS5/6 - NO_x and CO Continuous Emission Monitoring System (CEMS) (or Predictive Emissions Monitoring Systems (PEMS)) Requirements
 - i. The span value shall be 2.0 times the lowest emission standard or as specified in the federal regulations.
 - ii. The NO_x and CO CEMS (or PEMS) shall be installed, calibrated, maintained, and operated in accordance with the procedures set forth in 40 CFR 60.13 and PS 2 and PS 4 of Appendix B, 40 CFR Part 60.

(PEMS) downtime occurred during the reporting period, the permittee shall report that fact.

All monitoring data shall be kept on file for a period of at least five years and made available to the AQD upon request.

Appendix : 4-2

1. The permittee shall use this or a similar format for recordkeeping requirements referenced in EU-EMGENGINE.

**EU-EMGENGINE
 EMERGENCY USE RECORDKEEPING**

Permittee (Source Name) _____ ROP Number _____ Unit ID _____ Location _____					
Beginning Date	Ending Date	Elapsed Hours and Purpose			Comment
		Emergency	≤ 100 hours annually combined		
				Maintenance & Testing	Non-Emergency ≤ 50 hours annually
3/14/2009	3/16/2009	42			Loss of electricity due to tornado damage
4/01/2009	4/01/2009		1		Monthly Readiness Check
6/27/2009	6/27/2009		1		Following bearing replacement.
Calendar Year Total		42	2	0	

Appendix : 5-2

Specific testing requirement plans, procedures, and averaging times are detailed in the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, this appendix is not applicable.

Appendix : 6-2

The following table lists any PTIs issued or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-K3249-2009. Those ROP revision applications that are being issued concurrently with this ROP renewal are identified by an asterisk (*). Those revision applications not listed with an asterisk were processed prior to this renewal.

Source-Wide PTI No MI-PTI-K3249-2009a is being reissued as Source-Wide PTI No. MI-PTI-K3249-2016.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
142-10	201100135	Incorporate Permit to Install (PTI) No. 142-10. The permit includes conditions to minimize fugitive emissions generated by materials handling activities, truck traffic, and wind erosion of coal piles.	EU-MHFUGITIVE
25-11	201100135	Incorporate Permit to Install (PTI) No. 25-11. The PTI public comment period was from September 9, 2011 through October 11, 2011. The equipment modified included EU-UNIT3, EU-UNIT4 and FG-UNIT1/2. The project is for the use of biofuel as an alternative fuel in four existing boilers at the T.B. Simon Power Plant. The use of biofuel (agricultural residues, switchgrass, hay, wood waste, and processed biofuels) will replace a portion of the coal usage at the power plant. There are no changes proposed which will increase the capacity of the boilers beyond their present capacities.	EU-UNIT3, EU-UNIT4, FG-UNIT1/2
75-14 75-14A 75-14B	201400190	Incorporate Permit to Install (PTI) No. 75-14. The PTI public comment period was from September 26, 2014, until October 28, 2014. The emission units modified included EU-UNIT3, EU-UNIT4 and FG-UNIT1/2. EU-UNIT3 will no longer burn coal or biofuels, but is dedicated to natural gas fuel only. All applicable requirements related to coal and/or biofuel combustion have been removed from the ROP. 75-14B included a burner change. EU-UNIT4 is allowed to combust upto 30% biofuel and engineered pelleted fuel by weight. Recordkeeping provisions included for Actual to Projected-Actual Applicability Test. FG-UNIT1/2 removed obsolete testing and sampling requirements. Future MACT subpart DDDDD requirements were added as an amendment to the permit, as well as future allowances for the possible addition of dry or liquid sorbent injection. The amendments were issued February 24, 2015.	EU-UNIT3, EU-UNIT4, FG-UNIT1/2, EU-2-DSLIMESILO1, EU-2-DSLIMESILO2, EU-2-DSLIMESILO4

Appendix : 7-2

Specific emission calculations to be used with monitoring, testing or recordkeeping data are detailed in the appropriate Source-Wide, Emission Unit and/or Flexible group Special Conditions. Therefore, this appendix is not applicable

Appendix : 8-2

A. Annual, Semi-annual, and Deviation Certification Reporting

The permittee shall use the MDEQ, AQD, Report Certification form (EQP 5736) and MDEQ, AQD, Deviation Report form (EQP 5737) for the annual, semi-annual and deviation certification reporting referenced in the Reporting Section of the Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Alternative formats must meet the provisions of Rule 213(4)(c) and Rule 213(3)(c)(i), respectively, and be approved by the AQD District Supervisor.

B. Other Reporting

Specific reporting requirement formats and procedures are detailed in Part A or the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, Part B of this appendix is not applicable.