

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

April 29, 2016

**PERMIT TO INSTALL
227-15**

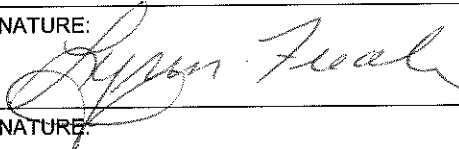
ISSUED TO
DTE Electric Company, Trenton Channel Power Plant

LOCATED AT
4695 Jefferson Avenue West
Trenton, Michigan

IN THE COUNTY OF
Wayne

STATE REGISTRATION NUMBER
B2811

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: December 14, 2015	
DATE PERMIT TO INSTALL APPROVED: April 29, 2016	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	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 ₂ e	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 ₂ 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 _x	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	PM10	Particulate Matter equal to or less than 10 microns in diameter
NSPS	New Source Performance Standards	PM2.5	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 ₂	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)	Installation Date / Modification Date	Flexible Group ID
EU-TCHAUX1-S1	Natural gas-fired auxiliary boilers equipped with continuous oxygen trim systems subject to 40 CFR Part 63 Subpart DDDDD as new affected sources with heat inputs between 10 and 100 MMBtu/hr ("Units designed to burn gas 1 fuels" subcategory). Each of the five boilers is equipped with low NOx burners and flue gas recirculation.	TBD	FG-AUXBOILERS-S1
EU-TCHAUX2-S1	Natural gas-fired auxiliary boilers equipped with continuous oxygen trim systems subject to 40 CFR Part 63 Subpart DDDDD as new affected sources with heat inputs between 10 and 100 MMBtu/hr ("Units designed to burn gas 1 fuels" subcategory). Each of the five boilers is equipped with low NOx burners and flue gas recirculation.	TBD	FG-AUXBOILERS-S1
EU-TCHAUX3-S1	Natural gas-fired auxiliary boilers equipped with continuous oxygen trim systems subject to 40 CFR Part 63 Subpart DDDDD as new affected sources with heat inputs between 10 and 100 MMBtu/hr ("Units designed to burn gas 1 fuels" subcategory). Each of the five boilers is equipped with low NOx burners and flue gas recirculation.	TBD	FG-AUXBOILERS-S1
EU-TCHAUX4-S1	Natural gas-fired auxiliary boilers equipped with continuous oxygen trim systems subject to 40 CFR Part 63 Subpart DDDDD as new affected sources with heat inputs between 10 and 100 MMBtu/hr ("Units designed to burn gas 1 fuels" subcategory). Each of the five boilers is equipped with low NOx burners and flue gas recirculation.	TBD	FG-AUXBOILERS-S1
EU-TCHAUX5-S1	Natural gas-fired auxiliary boilers equipped with continuous oxygen trim systems subject to 40 CFR Part 63 Subpart DDDDD as new affected sources with heat inputs between 10 and 100 MMBtu/hr ("Units designed to burn gas 1 fuels" subcategory). Each of the five boilers is equipped with low NOx burners and flue gas recirculation.	TBD	FG-AUXBOILERS-S1
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.			

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-AUXBOILERS-S1	Five (5) Natural gas-fired auxiliary boilers equipped with continuous oxygen trim systems subject to 40 CFR Part 63 Subpart DDDDD as new affected sources with heat inputs between 10 and 100 MMBtu/hr ("Units designed to burn gas 1 fuels" subcategory). Each of the five boilers is equipped with low NOx burners and flue gas recirculation.	EU-TCHAUX1-S1 EU-TCHAUX2-S1 EU-TCHAUX3-S1 EU-TCHAUX4-S1 EU-TCHAUX5-S1

The following conditions apply to: FG-AUXBOILERS-S1

DESCRIPTION: Five (5) Natural gas-fired auxiliary boilers equipped with continuous oxygen trim systems subject to 40 CFR Part 63 Subpart DDDDD as new affected sources with heat inputs between 10 and 100 MMBtu/hr (“Units designed to burn gas 1 fuels” subcategory). Each of the five boilers is equipped with low NOx burners and flue gas recirculation.

Emission Units: EU-TCHAUX1-S1, EU-TCHAUX2-S1, EU-TCHAUX3-S1, EU-TCHAUX4-S1, and, EU-TCHAUX5-S1

POLLUTION CONTROL EQUIPMENT: Each boiler is equipped with low NOx burners, an oxygen trim system, and flue gas recirculation

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. NOx	6.99 lb/hr	Test Protocol*	Each boiler in FG-AUXBOILERS-S1	SC V.2	40 CFR 52.21(c) & (d), R 336.1205(1)(a)
*Test protocol will specify the averaging period					

II. MATERIAL LIMITS

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Natural gas	2,573.8 MMSCF	12-month rolling time period, as determined at the end of each calendar month	FG-AUXBOILERS-S1	SC VI.3	R 336.1205(3)
2. Natural gas	97,941 SCF/hr*	Per clock hour	Each boiler in FG-AUXBOILERS-S1	SC VI.3	R 336.1205(1)(a), 40 CFR 60 Subpart Dc
*Based upon a natural gas higher heating (HHV) value of 1,020 Btu/scf					

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall combust only pipeline quality natural gas in FG-AUXBOILERS-S1. **(R 336.2803, R 336.2804, 40 CFR 63.7499(I))**
2. The maximum design heat input capacity for each Boiler in FG-AUXBOILERS-S1, shall not exceed 99.9 MMBtu per hour, based on the higher heating value (HHV) of the fuel. **(R 336.1205(3), R 336.2803, R 336.2804)**
3. The maximum heat input to FG-AUXBOILERS-S1 combined may not exceed 299.7 MMBtu per hour. **(R 336.1205(3), R 336.2803, R 336.2804)**

4. The permittee must meet the tune-up work practice standards for each applicable boiler at the source. The permittee must conduct 5-year performance tune-ups according to § 63.7540(a)(10) and (12). The first 5-year tune-up must be no later than 61 months after the initial startup of the new affected source. Each subsequent 5-year tune-up specified in § 63.7540(a)(12) must be conducted no more than 61 months after the previous tune-up. **(40 CFR 63.7500(a)(1), 40 CFR 63.7510(g), 40CFR 63.7515(d), 63.7540(a)(10) & (12), 40 CFR Part 63, Subpart DDDDD Table 3, No. 1)**
5. The permittee must follow the procedures described in SC IX.3.a-f for all initial and subsequent tune ups. **(40 CFR 63.7540(a)(10), 40 CFR Part 63, Subpart DDDDD Table 3)**
6. The oxygen level must be set no lower than the oxygen concentration measured during the most recent tune-up, as reported in the boiler tune-up report required per SC VII.3. **(40 CFR 63.7540(a)(12))**
7. If the unit is not operating on the required date for a tune-up, the permittee must conduct the tune-up within 30 calendar days of startup. **(40 CFR 63.7540(a)(13))**
8. The permittee may obtain approval from the Administrator to use an alternative to the work practice standards noted in SC III.4. **(40 CFR 63.7500(b))**
9. Volatile organic compound (VOC) emissions from FG-AUXBOILERS-S1 shall be controlled to a level representing the best available control technology using good combustion practices. **(R 336.1702)**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate FG-AUXBOILERS-S1 unless the low NOx burners and flue gas recirculation are installed and operating properly. **(R 336.1205(1)(a), R 336.1910, R 336.2803, R 336.2804)**

V. TESTING/SAMPLING

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

1. The permittee shall test each boiler in FG-AUXBOILERS-S1 to assure that the maximum heat release capacity of the boiler does not exceed 99.9 MMBtu per hour at the maximum steam production rate of each boiler. This testing shall be performed no later than 180 days after initial operation of each boiler, and shall follow all appropriate American Society of Mechanical Engineers (ASME) Performance Test Codes, or an alternate method approved by the AQD. The permittee shall provide written notification of when the

maximum heat release capacity testing is scheduled. Such notification shall be provided no less than seven days from the test date. **(R 336.1205(3), 40 CFR 60 Subpart Dc)**

2. Within three (3) years of permit issuance, the permittee shall verify NOx emission rates from each boiler in FG-AUXBOILERS-S1 by testing at owner's expense, in accordance with Department requirements. No less than 45 days prior to testing each boiler, 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. Verification of emission rates includes the submittal of 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(3), R 336.2803, R 336.2804, R 336.2001)**

VI. MONITORING/RECORDKEEPING

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

1. The permittee must keep a copy of each notification and report 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))**

2. As specified in § 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. 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. The permittee can keep the records offsite for the remaining 3 years. **(40 CFR 63.7560(a),(b), & (c))**
3. The permittee shall record total natural gas usage to each individual boiler in FG-AUXBOILERS-S1 on a clock hour, monthly, and a rolling 12-month time period basis, as determined at the end of each calendar month. **(R 336.1205(1)(a), 40 CFR 60 Subpart Dc)**
4. The permittee shall maintain records of the heating value of the natural gas, based upon information provided by the natural gas supplier. This information shall be collected on a monthly basis. **(R 336.1205(1)(a))**
5. The permittee shall maintain records of the initial capacity test required under special condition V.1 for each boiler in FG-AUXBOILERS-S1. **(R 336.1205(1)(a), 40 CFR 60 Subpart Dc)**

VII. REPORTING

1. The permittee shall submit an Initial Notification not later than 15 days after the actual date of startup of each affected source, as specified in § 63.9(b)(4) and (5). **(40 CFR 63.7545(c))**
2. The permittee must submit the Notification of Compliance Status and it shall contain the information specified in paragraphs (e)(1) and (8) of this section and must be submitted within 60 days of the compliance date specified at 40 CFR 63.7495(b). **(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 this subpart, description of the fuel(s) burned, including whether the fuel(s) were a secondary material determined by the permittee or the EPA through a petition process to be a non-waste under 40 CFR 241.3, whether the fuel(s) were a secondary material processed from discarded non-hazardous secondary materials within the meaning of 40 CFR 241.3, and justification for the selection of fuel(s) burned during the compliance demonstration. **(40 CFR 63.7545(e)(1))**
 - b. In addition to the information required in 40 CFR 63.9(h)(2), the 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 completed the required initial tune-up for all of the boilers and process heaters covered by 40 CFR part 63 subpart DDDDD at this site according to the procedures in §63.7540(a)(10)(i) through (vi)." **(40 CFR 63.7545(e)(8)(i))**
3. The permittee shall submit boiler tune-up compliance reports. The first compliance report shall cover the period beginning on the compliance date that is specified for each boiler (i.e. each boiler's initial startup date) and ending on December 31 of the year that is no more than four years after the startup of any boilers that were started during the reporting period. Subsequent compliance reports must be postmarked or submitted by March 15th of the year following the tune-up and must cover the applicable period starting from January 1 of the year following the previous tune-up to December 31 (of the latest tune-up year). The permittee must submit all reports required by Table 9 of this subpart electronically to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) The permittee must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, the permittee may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (<http://www.epa.gov/ttn/chief/cedri/index.html>), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the permittee must submit the report to the Administrator at the appropriate address listed in 40 CFR 63.13. The permittee must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. **(40 CFR 63.7550(b), 40 CFR 63.10(a)(5), 40 CFR 63.7550(h)(3))**

4. The permittee must include the following information in the compliance report specified in SC VII.3. **(40 CFR 63.7550(c)):**
 - a. Company and Facility name and address. **(40 CFR 63.7550(c)(5)(i))**
 - b. Process unit information for each boiler, including boiler identification, emissions limitations, and operating parameter limitations. **(40 CFR 63.7550(c)(5)(ii))**
 - c. Date of report and beginning and ending dates of the reporting period. **(40 CFR 63.7550(c)(5)(iii))**
 - d. Include the date of the most recent tune-up for each unit. Include the date of the most recent burner inspection if it was not done annually, biennially, or on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown. **(40 CFR 63.7550(c)(5)(xiv))**
 - e. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. **(40 CFR 63.7550(c)(5)(xvii))**
5. The permittee shall submit notification of date of construction and actual startup of FG-AUXBOILERS-S1 **(40 CFR 60.48c(a), 40 CFR 60.7)**. This notification shall include:
 - a. The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility. **(40 CFR 60.48c(a)(1))**
 - b. If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under §60.42c, or §60.43c. **(40 CFR 60.48c(a)(2))**
 - c. The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired. **(40 CFR 60.48c(a)(3))**
6. The permittee shall provide written notification to the Air Quality Division no later than 15 days after each of the existing coal-fired "high side" boilers (Boilers 16, 17, 18, and 19) have been permanently shut down and taken out of service. **(R 336.1205, R 336.2802)**

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.SV-TCHAUXBOILERS	77	205	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENTS

1. The permittee must comply with the applicable provisions of 40 CFR 63 Subpart DDDDD upon the startup of each boiler as defined in § 63.7575. **(40 CFR 63.7495(a))**
2. The permittee must be in compliance with applicable work practice standards in 40 CFR Part 63 Subpart DDDDD. **(40 CFR 63.7505(a))**
3. The permittee must demonstrate continuous compliance with the tune-up requirement by completing the following: **(40 CFR 63.7540(a))**
 - a. Inspect the burner, and clean or replace any components of the burner as necessary (the permittee may perform the burner inspection any time prior to the tune up or 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))**
 - b. 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))**
 - c. 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))**
 - d. 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))**
 - e. 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))**
 - f. Maintain on-site and submit, if requested by the Administrator, the most recent periodic report containing the information as listed below. **(40 CFR 63.7540(a)(10)(vi))**
 - i. 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 or process heater. **(40 CFR 63.7540(a)(10)(vi)(A))**
 - ii. A description of any corrective actions taken as a part of the tune-up. **(40 CFR 63.7540(a)(10)(vi)(B))**
 - iii. 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))**
4. If the boiler has a continuous oxygen trim system that maintains an optimum air to fuel ratio, the permittee may delay the burner inspection specified in SC IX.3.a 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))**
5. The permittee shall permanently shut down the existing coal-fired "high side" boilers (Boilers 16, 17, 18, and 19) no later than April 15, 2016. **(R 336.1205(1)(a), R 336.2802, 40 CFR 52.21(b)(3))**
6. The permittee shall comply with all applicable provisions of the federal New Source Performance Standards as set forth in 40 CFR 60, Subparts A and Dc. **(40 CFR 60, Subparts A and Dc)**