

Special Conditions

Permit Numbers 9015 and PSDTX325M2

Emission Standards, Fuel Specifications, and Operating Requirements

1. This permit covers only those sources of emissions listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates," (MAERT) and those sources are limited to the emission limits and other conditions specified in that attached table. The annual rates are based on a rolling 12-month period.

If one emission rate limitation should be more stringent than another emission rate limitation, the more stringent limitation shall govern and be the standard by which compliance will be demonstrated. **(2/98)**

2. Compliance with the emission limitations for emission points in Special Condition No. 1 shall be determined by the test methods and procedures as set out in Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Appendix A, Method 5, Determination of Particulate Matter (PM) Emissions from Stationary Sources; Method 6, Determination of Sulfur Dioxide (SO₂) Emissions from Stationary Sources; Method 7, Determination of Nitrogen Oxides (NO_x) Emissions from Stationary Sources; Method 9, Visual Determination of the Opacity of Emissions from Stationary Sources; and Method 10, Determination of Carbon Monoxide (CO) Emissions from Stationary Sources and procedures as set forth in 40 CFR ' 60.48Da and 40 CFR ' 60.50Da. **(2/09)**
3. A copy of this permit shall be kept at the plant site and made available at the request of personnel from the Texas Commission on Environmental Quality (TCEQ) or any air pollution control agency with jurisdiction. In addition, the holder of this permit shall physically identify and permanently mark in a conspicuous location all equipment that has the potential of emitting air contaminants as follows:
 - A. The facility identification numbers as submitted to the Emissions Inventory Section of the TCEQ.
 - B. The emission point numbers (EPNs) as listed on the maximum allowable emission rates table. **(2/98)**
4. This facility shall comply with all requirements of the U.S. Environmental Protection Agency (EPA) regulations in 40 CFR Part 60, Subparts A, Da, and Y on Standards of Performance for New Stationary Sources promulgated for Electric Utility Steam Generating Units and Coal Preparation Plants. **(2/98)**
5. Fuel fired in the Steam Generator designated as EPN 1 is limited to sub-bituminous coal and confiscated narcotics only. The firing of confiscated narcotics in EPN 1 is limited to 200 pounds per hour (lbs/hr) or 9.6 tons per year (tpy). However, during

the times of initial startup and flame stabilization No. 2 fuel oil may be used. The No. 2 fuel oil contaminated soil and kitty litter generated within the Oklaunion Power Plant may also be used as fuel at the maximum firing rate of 200 lbs/hr limited to 150 tpy as well as approximately 5,000 gallons of No. 2 fuel oil and water mixture quarterly which will be dumped on top of the coal pile at the reclaimer. The oil and water mixture activity will continue until the monitoring wells meet remediation standards. **(2/12)**

6. Emission concentrations of NO_x, CO, SO₂, and opacity from the stack gases of the Steam Generator designated as EPN 1 are based upon the design capacity maximum heat input of 6,800 million British thermal units (MMBtu) per hour and shall not exceed the following limits:

Pollutant	Emission Rate
NO _x	0.50 lb/MMBtu (30-day rolling average)
CO	0.07 lb/MMBtu (30-day rolling average)
SO ₂	0.50 lb/MMBtu (3-hour rolling average)

Opacity of emissions from EPN 1 shall not exceed 20 percent with one six-minute average opacity per hour not to exceed 27 percent during the times of soot blowing. Limitations are in accordance with the exception of 40 CFR § 60.42Da (b) and in accordance with the limitations and conditions specified in Title 30 Texas Administrative Code (30 TAC) ' 111.111(a)(1)(E). **(2/09)**

Initial Determination of Compliance

7. Compliance testing for NO_x, SO₂, CO, PM, and opacity was completed on March 24-27, 1987. **(2/98)**

Continuous Determination of Compliance

8. The permittee shall install and operate continuous opacity, SO₂, NO_x, and oxygen (O₂) or carbon dioxide (CO₂) monitors in EPN 1 in accordance with 40 CFR § 60.49Da. The O₂ or CO₂ instruments shall continuously record flue gas O₂ or CO₂ concentrations, in parts per million by volume, as best available control technology for furnace lowest excess air operation. The permittee shall report the opacity, SO₂, and NO_x monitoring data in the manner prescribed in 40 CFR § 60.51Da. However, the SO₂ monitoring data shall consist of three-hour rolling averages considering each

hour and the two preceding hours rather than 30-day rolling averages. The permittee shall report O₂ or CO₂ monitoring which coincides with periods of excess NO_x emissions during periods when the continuous NO_x monitor is not in operation. In addition, the permittee shall install and operate a monitor accurate to ±10 percent to continuously measure and record CO concentrations in EPN 1. All continuous monitoring readings in excess of the CO emission limitations in Special Condition No. 1 shall be reported in accordance with 40 CFR § 60.7(c) and (d).

- A. Allowable emissions of NO_x are enforceable on a 30-day rolling average according to the standards, methods, procedures, and requirements of 40 CFR § 60.48Da. Allowable emissions of SO₂ are enforceable on a three-hour rolling average.
 - B. The permittee shall install and operate the continuous opacity monitor on EPN 1 in accordance with Appendix B, Performance Specification No. 1, Performance Specifications, and Specification Test Procedures for Transmissometer Systems for Continuous Measurement of the Opacity of Stack Emissions.
 - C. The continuous monitoring data may, at the discretion of the permitting authority, be used to determine violations of the conditions in this permit.
9. PM and PM equal to or less than 10 microns in diameter from Unit 1 Boiler will be controlled with an electrostatic precipitator (ESP). The ESP shall be operated and maintained according to the data specified on Table 12 submitted on April 14, 1999 of the permit file and in a manner such that the opacity of the emissions will be minimized. **(6/99)**
10. The permittee shall allow representatives of the state environmental control agency or representatives of the EPA upon the presentation of credentials:
- A. To enter upon the permittee's premises or other premises under the control of the permittee where an air pollutant source is located or in which any records are required to be kept under the terms and conditions of the permit;
 - B. To have access to and be able to copy at reasonable times any records required to be kept under the terms and conditions of this permit or the Act;
 - C. To inspect at reasonable times any monitoring equipment or monitoring method required in this permit;
 - D. To sample at reasonable times any emission of pollutants; and

- E. To perform at reasonable times an operation and maintenance inspection of the permitted source. **(2/98)**

Additional Emission Control Requirements

- 11. The permittee shall reduce uncontrolled SO₂ emissions by a minimum of 70 percent in accordance with 40 CFR § 60.43Da. Compliance shall be determined by 40 CFR § 60.48Da and 40 CFR § 60.50Da. **(2/98)**
- 12. The permittee shall control all fugitive PM emissions and shall employ the following work practice standards as necessary such that the specified opacity limitation is not exceeded.
 - A. The permittee shall apply water and compaction techniques to any active or inactive coal storage pile, as necessary, to control fugitive emissions within the opacity limitations required by Special Condition No. 1.
 - B. Fugitive PM emissions from any active or inactive coal storage pile designated as EPNs FS4 and FS5 shall not exceed any opacity limitation required by Special Condition No. 1.
 - C. When equipment is actively working the limestone and/or coal storage piles, the opacity of emissions shall not exceed 20 percent.
 - D. The opacity of emissions associated with the operation of the telescopic chute shall not exceed 20 percent.
 - E. The permittee shall pave all permanent on-site roads and shall water all temporary on-site roads, as necessary, to control fugitive dust. Fugitive PM emissions from on-site roads shall not exceed an opacity limitation of 20 percent.
 - F. Fugitive emissions at the transfer points and unloading area of EPNs FS6, FS7, and FS8 shall be controlled by means of venting the areas around those points through a bag filter collection system. **(7/05)**
 - G. The permittee shall utilize a wet dust extractor as needed except during periods of its maintenance to control the transfer point at the boiler bins. **(7/05)**
 - H. The transfer point from Conveyor 5A to Conveyor 6A shall be controlled by water spray with a biodegradable dust control additive. **(2/09)**

- I. The following transfer points shall be partially enclosed: Conveyor 2 to Silo 1A; Conveyor 2 to Conveyor 2A; Conveyor 2A to Silo 1B; Conveyor 5B to Conveyor 5A; Conveyor 4 to Conveyor 5A. **(7/05)**
 - J. The permittee shall utilize bag filter collection systems on the storage silos of EPNs FS10A and FS10B. **(7/05)**
 - K. The permittee shall utilize water sprays and a partial enclosure at the coal car dumper. **(2/09)**
 - L. A biodegradable dust control additive shall be sprayed onto the material at the transfer points from the vibratory feeders to Conveyor 1A, the transfer point from Conveyor 1A to Conveyor 1, and as the material travels on Conveyor 1.
 - i. Except for maintenance access points in the cover, Conveyor 1 shall be enclosed and sufficient chemical shall be applied to ensure emissions are controlled through carryover chemical at the Conveyor 1 to Conveyor 2 and Conveyor 1 to Conveyor 3 transfers. **(2/09)**
 - M. The following conveyor transfer points shall be fully enclosed: Conveyor 6A to surge bin; surge bin to Conveyor T3A; Conveyor T3A to Conveyor 7A; and silos to Conveyor 5B. **(2/09)**
13. The permittee shall control all fugitive PM emissions during construction and shall employ the following work practice standards such that an opacity limitation of 20 percent is not exceeded:
- A. Temporary roads and other disturbed areas on the plant site shall be watered as necessary to control fugitive dust.
 - B. All on-site construction roads shall either be watered or coated with emulsions or a sealer with a non-dusting wear surface as necessary to control fugitive dust.
 - C. The borrow pit and stockpiles resulting from earthwork shall be graded and/or seeded. **(2/98)**
14. Within 45 days of the approval of this permit revision, the holder of this permit shall conduct a performance test for the ESP. The performance test will involve three test periods of no less than two hours in duration. The data collected shall include the following: (1) auto voltage controller (AVC)/transformer rectifier buss section primary and secondary voltages, current, and buss section power; (2) stack exit opacity readings for the same test periods; and (3) individual AVC tuning parameters correlating to the same test periods. **(6/99)**

Recordkeeping

15. Records of the continuous monitoring data pursuant to Special Condition No. 8 shall be kept and made available for inspection for a minimum of five years after each readout. **(2/12)**
16. Baseline ESP performance data shall be maintained on site and made available upon request by the Executive Director of the TCEQ or any local air pollution control program having jurisdiction. **(6/99)**
17. The permittee shall retain records of all information indicating operating parameters as specified in the special conditions of this permit including records of kitty litter, contaminated soil, and No. 2 fuel oil/water mixture fired in the steam generator for a minimum of five years from the date of recording. **(2/12)**

Reporting

18. All continuous monitoring readings in excess of the emission limitations in Special Condition No. 1 shall be reported in accordance with 40 CFR § 60.51Da. **(2/98)**
19. Within 60 days of the revision of this permit, the holder of this permit shall submit baseline ESP performance data specified in Special Condition No. 14 of this permit to the TCEQ Abilene Regional Office. **(6/99)**

Maintenance, Startup, and Shutdown (MSS) (2/12)

20. This permit authorizes the emissions from the planned MSS activities listed in Attachment A, Attachment B, or the MAERT attached to this permit. Attachment A identifies the inherently low emitting (ILE) planned maintenance activities that this permit authorizes to be performed. Attachment B identifies the planned maintenance activities that are non-ILE planned maintenance activities that this permit authorizes to be performed.
21. When a planned maintenance activity identified in Attachment B is associated with a volatile organic compound (VOC) liquid storage facility and may result in VOC emissions from that facility, the permit holder shall not open that facility to the atmosphere in connection with the planned maintenance activity until the VOC liquids are removed from that facility to the maximum extent practicable.
22. No vacuum pump on a vacuum truck that is used to move solids (such as ash) during planned maintenance activities shall be operated unless the vacuum system exhaust is controlled by a filtering system.

23. The emissions limits that are identified in Special Condition No. 6 do not apply during planned MSS activities.
24. The holder of this permit shall minimize emissions during planned MSS activities by operating the facility and associated air pollution control equipment in accordance with good air pollution control practices, safe operating practices, and protection of the facility and associated air pollution control equipment.
25. Emissions during planned startup and shutdown activities will be minimized by limiting the duration of operation in planned startup and shutdown modes as follows:
 - A. A planned startup of one of the boilers begins when fans are placed in service for the initiating of combustion and is complete when the boiler has achieved the lowest sustainable load for at least 60 consecutive minutes while coal is being fired. Normal startup shall not exceed 2880 minutes. An extended startup is allowed for greater than 2880 minutes after a major outage, but the cumulative annual minutes of extended startups shall not exceed 18,000 minutes.
 - B. A planned shutdown of one of the boilers begins when the boiler has dropped below the lowest sustainable load for at least 30 consecutive minutes and is complete 24 hours after combustion has ceased. Each shutdown shall not exceed 2880 minutes.
26. Compliance with the emissions limits for planned MSS activities identified in the MAERT attached to this permit may be demonstrated as follows.
 - A. For each pollutant emitted during ILE planned maintenance activities, the permit holder shall annually confirm the continued validity of the estimated potential to emit represented in the permit application for all ILE planned maintenance activities. The total emissions from all ILE planned maintenance activities (See Attachment A) shall be considered to be no more than the estimated potential to emit for those activities that are represented in the permit application.
 - B. For each pollutant emitted during non-ILE planned maintenance activities (See Attachment B) whose emissions are measured using a continuous emission monitoring system (CEMS), as per Special Condition No. 27A, the permit holder shall do the following for each calendar month.
 - i. Compare the pollutant's short-term (hourly) emissions during planned maintenance activities as measured by the CEMS to the applicable short-term planned MSS emissions limit in the MAERT.

- C. For each pollutant emitted during non-ILE planned maintenance activities (See Attachment B) whose emissions occur through a stack, but are not measured using CEMS as per Special Condition No. 27A, the permit holder shall do the following for each calendar month.
 - i. Determine the total emissions of the pollutant through the stack that result from such non-ILE planned maintenance activities in accordance with Special Condition No. 27B.
 - D. For each pollutant emitted during non-ILE planned maintenance activities (See Attachment B) whose emissions do not occur through a stack, the permit holder shall do the following for each calendar month.
 - i. Determine the total emissions of the pollutant from such non-ILE planned maintenance activities in accordance with Special Condition No. 27B.
 - ii. Once monthly emissions have been determined in accordance with Special Condition No. 26D(i) for 12 months after the MSS permit amendment has been issued, the permit holder shall compare the sum of the rolling 12-month emissions for the pollutant for all non-ILE planned maintenance activities to the annual EPN MSS-FUG emissions limit for the pollutant in the MAERT.
27. The permit holder shall determine the emissions during planned MSS activities for use in Special Condition No. 26 as follows.
- A. For each pollutant whose emissions during normal facility operations are measured with a CEMS that has been certified to measure the pollutant's emissions over the entire range of a planned MSS activity, the permit holder shall measure the emissions of the pollutant during the planned MSS activity using the CEMS.
 - B. For each pollutant not described in Special Condition No. 27A, the permit holder shall calculate the pollutant's emissions during all occurrences of each type of planned MSS activity for each calendar month using the frequency of the planned MSS activity identified in work orders or equivalent records and the emissions of the pollutant during the planned MSS activity as represented in the planned MSS permit application. In lieu of using the emissions of the pollutant during the planned MSS activity as represented in the planned MSS permit application to calculate such emissions, the permit holder may determine the emissions of the pollutant during the planned MSS activity using an appropriate method, including but not limited to, any of the methods described in paragraphs i through iv below, provided that the permit holder maintains appropriate records supporting such determination:

- i. Use of emission factor(s), facility-specific parameter(s), and/or engineering knowledge of the facility's operations.
 - ii. Use of emissions data measured (by a CEMS or during emissions testing) during the same type of planned MSS activity occurring at or on a similar facility, and correlation of that data with the facility's relevant operating parameters, including, but not limited to, electric load, temperature, fuel input, and fuel sulfur content.
 - iii. Use of emissions testing data collected during a planned MSS activity occurring at or on the facility, and correlation of that data with the facility's relevant operating parameters, including, but not limited to, electric load, temperature, fuel input, and fuel sulfur content.
 - iv. Use of parametric monitoring system data applicable to the facility.
28. With the exception of the emission limits in the MAERT attached to this permit, the permit conditions relating to planned MSS activities do not become effective until 180 days after issuance of the permit amendment that added such conditions.
29. Opacity greater than 20 percent from the boiler is authorized when the permit holder complies with the planned MSS duration limitations in Special Condition No. 25 and the applicable work practices identified below.
- A. Emissions during planned startup and shutdown activities shall be minimized by employing the following work practices: During planned startup and shutdown activities, the permit holder shall comply with the parts of the boiler and ESP manufacturers' operating procedures or the procedures in the permittee's written Standard Operating Procedures manual that impact opacity, and shall operate the boiler and ESP in a manner consistent with those procedures to minimize opacity by placing the ESP into service during planned startups once the outlet gas temperature to the ESP is greater than 300°F, or removing the ESP from service as late as possible during planned shutdowns. The boiler and ESP manufacturers' operating procedures or written Standard Operating Procedure manual shall be located on-site and available to the TCEQ regional investigator.
 - B. Periods of opacity greater than 20 percent from planned online and offline maintenance activities identified in Attachment A or B are authorized for no more than 600 minutes in a calendar year.
 - C. The permit holder shall keep records to identify periods of planned MSS, the opacity measured by the continuous opacity monitoring system for the duration of the planned startup and shutdown and the maintenance activities identified in Attachment A or B and the work practices in Special Condition No. 29A that are

followed during the planned MSS activities for the purpose of demonstrating compliance with this permit special condition.

- D. For periods of planned MSS other than those that are subject to Paragraph A of this condition, 30 TAC §§ 111.111 and 111.153, and Chapter 101, Subchapter F apply.

Dated February 3, 2012

Attachment A

Permit Nos. 9015 and PSDTX325M2

Inherently Low Emitting (ILE) Planned Maintenance Activities

Planned Maintenance Activity	Emissions				
	VOC	NO _x	CO	PM	SO ₂
Water-based washing	X				
Miscellaneous particulate filter maintenance ¹				X	
Degassing for maintenance of storage vessels storing material with vapor pressure <0.5 psia, or material with vapor pressure >0.5 psia that does not require clearing of the vessels to allow for entry of personnel	X				
Boiler general maintenance ²				X	
Management of sludge from pits, ponds, sumps, and water conveyances ³	X				
Organic chemical usage	X				
Inspection, repair, replacement, adjusting, testing, and calibration of analytical equipment, process instruments including sight glasses, meters, gauges, and CEMS.	X	X	X		X
Deslagging of boiler ⁴	X	X	X	X	
Material handling system maintenance ⁵				X	
Small equipment and fugitive component repair/replacement in VOC service ⁶	X				
Storage tank/vessel maintenance [<0.5 psia vapor pressure (vp) and not requiring clearing for personnel entry]	X				

Notes:

1. Includes, but is not limited to, baghouse filters, ash silo/transfer filters, coal handling filters, process-related building air filters, and combustion turbine air intake filters.
2. Includes pre-heater basket handling and maintenance, refractory change-out, fan maintenance and balancing, damper, air heater, and soot blower maintenance, and any other general boiler maintenance that does not exceed the worst-case emissions representation in the application.
3. Includes, but is not limited to, management by vacuum truck/dewatering of materials in open pits and ponds, and sumps, tanks and other closed or open vessels. Materials managed include water and sludge mixtures containing miscellaneous VOCs such as diesel, lube oil, and other waste oils.
4. Includes, but is not limited to, explosive blasting, clinker shooting, and other boiler deslagging activities; does not include dry abrasive blasting that may occur in boilers.
5. Material handling system equipment includes, but is not limited to, silos, transport systems, coal bunkers, coal crushing equipment, coal handling, nuvafeeders, hoppers, FGD sludge handling system. Materials handled include coal, ash, limestone, gypsum, and sorbents.
6. Includes, but is not limited to, (i) repair/replacement of pumps, compressors, valves, pipes, flanges, transport lines, filters and screens in natural gas, fuel oil, diesel oil, ammonia, lube oil, and gasoline service, and (ii) vehicle and mobile equipment maintenance that may involve small VOC emissions, such as oil changes, transmission service, and hydraulic system service

Dated February 3, 2012

Attachment B

Permit Nos. 9015 and PSDTX325M2
Non-ILE Planned Maintenance Activities

Planned Maintenance Activity	EPN	Emissions				
		VOC	NO _x	CO	PM	SO ₂
Combustion optimization ¹	1	x	x	x	x	x
Vacuum truck solids loading ²	MSS-FUG				x	
Vacuum truck solids unloading	MSS-FUG				x	
Dump truck grit loading	MSS-FUG				x	
Dump truck grit unloading	MSS-FUG				x	
Degassing for maintenance of storage vessels storing gasoline or other material with vapor pressure >0.5 psia that requires clearing of the vessels to allow for entry of personnel (Only once per year allowed for the gasoline tank)	MSS-FUG	x				
PM control device maintenance - unit online	1				x	
Use of fans during maintenance - unit offline	1				x	
Smoke test boiler	1				x	

Notes:

1. Includes, but is not limited to (i) leak and operability checks, (ii) balancing, and (iii) tuning activities that occur during seasonal tuning or after the completion of initial construction, a burner change-out, a major repair, maintenance to a burner, or other similar circumstances.
2. Includes site-wide solids vacuuming operations (e.g. baghouse, ESP, ducts, furnace, loop seals, stripper coolers, and airlocks).

Dated February 3, 2012