West Virginia Department of Environmental Protection

Earl Ray Tomblin
Governor

Division of Air Quality

Randy C. Huffman
Cabinet Secretary

Permit to Modify

R13-0622A

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§22-5-1 et seq.) and 45 C.S.R. 13 – Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation. The permittee identified at the above-referenced facility is authorized to construct the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Issued to:

Ox Paperboard LLC
Halltown Paperboard Mill
037-00007

_____

William F. Durham
Director

Issued: DRAFT

This permit will supercede and replace Permit R13-0622.

Facility Location:	163 Eyster Road Halltown, Jefferson County, West Virginia
Mailing Address:	P.O. Box 70 Halltown, WV 25423
Facility Description:	Paperboard Mill
NAICS Codes:	322160
UTM Coordinates:	258.70 km Easting • 4,355.29 km Northing • Zone 18
Permit Type:	Modification
Description of Change:	This action is to limit the annual heat input to the permitted boiler to about 40% by limiting annual fuel usage to 15,000 tons of coal per year, and install a sorbent injection system with fabric filter baghouse to control HCl and mercury emissions from the facility below major source threshold levels, which means the boiler is no longer subject to Boiler MACT (Subpart DDDDD to Part 63) but is subject as an existing coal-fired boiler under the Boiler GACT (Subpart JJJJJ to Part 63).

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §§22-5-14.

The source is subject to 45CSR30. Changes authorized by this permit must also be incorporated into the facility's Title V operating permit. Commencement of the operations authorized by this permit shall be determined by the appropriate timing limitations associated with Title V permit revisions per 45CSR30.

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1.0. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
001	BLR-2	Coal-fired Boiler Mfg. Keeler/Dorr Oliver Model: MKB	1986	112 MMBtu/hr	C-3 & C-4
Control Devices					
C-3	BLR-2	Dry Sorbent Injection System Mfg. Amec Foster Wheeler	2015	44,400 acfm	N/A
C-4	BLR-2	Fabric Filter Baghouse Mfg. Amec Foster Wheeler Model: 144 Jet III	2015	44,400 acfm	N/A

2.0. General Conditions

2.1. Definitions

2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.

2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.

2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.2. Acronyms

CAAA	Clean Air Act Amendments
CBI	Confidential Business Information
CEM	Continuous Emission Monitor
CES	Certified Emission Statement
C.F.R. *or* CFR	Code of Federal Regulations
CO	Carbon Monoxide
C.S.R. *or* CSR	Codes of State Rules
DAQ	Division of Air Quality
DEP	Department of Environmental Protection
dscm	Dry Standard Cubic Meter
FOIA	Freedom of Information Act
HAP	Hazardous Air Pollutant
HON	Hazardous Organic NESHAP
HP	Horsepower
lbs/hr	Pounds per Hour
LDAR	Leak Detection and Repair
M	Thousand
MACT	Maximum Achievable Control Technology
MDHI	Maximum Design Heat Input
MM	Million
MMBtu/hr *or* mmbtu/hr	Million British Thermal Units per Hour
MMCF/hr *or* mmcf/hr	Million Cubic Feet per Hour
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAPS	National Emissions Standards for Hazardous Air Pollutants
NO_X	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
$PM_{2.5}$	Particulate Matter less than 2.5 µm in diameter
PM_{10}	Particulate Matter less than 10µm in diameter
Ppb	Pounds per Batch
Pph	Pounds per Hour
Ppm	Parts per Million
Ppm_V or ppmv	Parts per Million by Volume
PSD	Prevention of Significant Deterioration
Psi	Pounds per Square Inch
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
TAP	Toxic Air Pollutant
TPY	Tons per Year
TRS	Total Reduced Sulfur
TSP	Total Suspended Particulate
USEPA	United States Environmental Protection Agency
UTM	Universal Transverse Mercator
VEE	Visual Emissions Evaluation
VOC	Volatile Organic Compounds
VOL	Volatile Organic Liquids

2.3. Authority

This permit is issued in accordance with West Virginia Air Pollution Control Act W.Va. Code §§ 22-5-1. et seq. and the following Legislative Rules promulgated thereunder:

2.3.1. 45CSR13 – *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation*;

2.4. Term and Renewal

2.4.1. This permit supersedes and replaces previously issued Permit R13-0662. This Permit shall remain valid, continuous and in effect unless it is revised, suspended, revoked or otherwise changed under an applicable provision of 45CSR13 or any other applicable legislative rule;

2.5. Duty to Comply

2.5.1. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Application R13-0622, R13-0622A, and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to;
[45CSR§§13-5.11 and 10.3.]

2.5.2. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA;

2.5.3. Violations of any of the conditions contained in this permit, or incorporated herein by reference, may subject the permittee to civil and/or criminal penalties for each violation and further action or remedies as provided by West Virginia Code 22-5-6 and 22-5-7;

2.5.4. Approval of this permit does not relieve the permittee herein of the responsibility to apply for and obtain all other permits, licenses, and/or approvals from other agencies; i.e., local, state, and federal, which may have jurisdiction over the construction and/or operation of the source(s) and/or facility herein permitted.

2.6. Duty to Provide Information

The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for administratively updating, modifying, revoking, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

2.7. Duty to Supplement and Correct Information

Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

2.8. Administrative Update

The permittee may request an administrative update to this permit as defined in and according to the procedures specified in 45CSR13.
[45CSR§13-4.]

2.9. Permit Modification

The permittee may request a minor modification to this permit as defined in and according to the procedures specified in 45CSR13.
[45CSR§13-5.4.]

2.10 Major Permit Modification

The permittee may request a major modification as defined in and according to the procedures specified in 45CSR14 or 45CSR19, as appropriate.
[45CSR§13-5.1]

2.11. Inspection and Entry

The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and

d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

2.12. Emergency

2.12.1. An "emergency" means any situation arising from sudden and reasonable unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by

improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

2.12.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of Section 2.12.3 are met.

2.12.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The permitted facility was at the time being properly operated;

c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

d. The permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

2.12.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

2.12.5 The provisions of this section are in addition to any emergency or upset provision contained in any applicable requirement.

2.13. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it should have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

2.14. Suspension of Activities

In the event the permittee should deem it necessary to suspend, for a period in excess of sixty (60) consecutive calendar days, the operations authorized by this permit, the permittee shall notify the Secretary, in writing, within two (2) calendar weeks of the passing of the sixtieth (60) day of the suspension period.

2.15. Property Rights

This permit does not convey any property rights of any sort or any exclusive privilege.

2.16. Severability

The provisions of this permit are severable and should any provision(s) be declared by a court of competent jurisdiction to be invalid or unenforceable, all other provisions shall remain in full force and effect.

2.17. Transferability

This permit is transferable in accordance with the requirements outlined in Section 10.1 of 45CSR13. **[45CSR§13-10.1.]**

2.18. Notification Requirements

The permittee shall notify the Secretary, in writing, no later than thirty (30) calendar days after the actual startup of the operations authorized under this permit.

2.19. Credible Evidence

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defense otherwise available to the permittee including, but not limited to, any challenge to the credible evidence rule in the context of any future proceeding.

3.0. Facility-Wide Requirements

3.1. Limitations and Standards

3.1.1. **Open burning.** The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.
[45CSR§6-3.1.]

3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management, and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40CFR§61.145(b) and 45CSR§34]

3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1] ***[State Enforceable Only]***

3.1.5. **Permanent shutdown.** A source which has not operated at least 500 hours in one 12-month period within the previous five (5) year time period may be considered permanently shutdown, unless such source can provide to the Secretary, with reasonable specificity, information to the contrary. All permits may be modified or revoked and/or reapplication or application for new permits may be required for any source determined to be permanently shutdown.
[45CSR§13-10.5.]

3.1.6. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2.]

3.1.7. The potential to emit of hazardous air pollutants (HAPs) from the facility shall not exceed 25 tons per year with no single HAP be greater than 10 tons. Compliance with this limit is satisfied by complying with Condition 4.1.1. of this permit.

3.2. Monitoring Requirements

[Reserved]

3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63 in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.

b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.

c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

d. The permittee shall submit a report of the results of the stack test within sixty (60) days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1.; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

1. The permit or rule evaluated, with the citation number and language;
2. The result of the test for each permit or rule condition; and,
3. A statement of compliance or noncompliance with each permit or rule condition.

[WV Code § 22-5-4(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

3.4.1. **Retention of records.** The permittee shall maintain records of all information (including monitoring data, support information, reports, and notifications) required by this permit recorded in a form suitable and readily available for expeditious inspection and review. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation. The files shall be maintained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be maintained on site. The remaining three (3) years of data may be maintained off site, but must remain accessible within a reasonable time. Where appropriate, the permittee may maintain records electronically (on a computer, on computer floppy disks, CDs, DVDs, or magnetic tape disks), on microfilm, or on microfiche.

3.4.2. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[45CSR§4. *State Enforceable Only.*]

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

3.5.2. **Confidential information.** A permittee may request confidential treatment for the submission of reporting required by this permit pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.

3.5.3. **Correspondence.** All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:
Director
WVDEP
Division of Air Quality
601 57th Street
Charleston, WV 25304-2345

If to the US EPA:
Associate Director
Office of Air Enforcement and Compliance Assistance (3AP20)
U.S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

3.5.4. Operating Fee

3.5.4.1. In accordance with 45CSR30 – Operating Permit Program, the permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.

3.5.5. **Emission inventory.** At such time(s) as the Secretary may designate, the permittee herein shall prepare and submit an emission inventory for the previous year, addressing the emissions from the facility and/or process(es) authorized herein, in accordance with the emission inventory submittal requirements of the Division of Air Quality. After the initial submittal, the Secretary may, based upon the type and quantity of the pollutants emitted, establish a frequency other than on an annual basis.

4.0. Source-Specific Requirements

4.1. Limitations and Standards

4.1.1. The following conditions and requirements are specific to the boiler:

a. The permittee shall limit the annual capacity of the boiler to no more than 40 percent by limiting the annual fuel usage of the boiler to 15,000 tons on 12-month rolling total.

b. Particulate Matter (PM) emissions from Emission Point BLR-2 shall not exceed 6.82 pounds per hour based on a six hour average.
[45 CSR §2-4.1.d., and §2-9.1.]

c. Visible emissions from Emission Point BLR-2shall not exceed 10 percent opacity based on a six minute block average. Continuous compliance with this limit is satisfied by operating and maintained the fabric filer control device (C-4) such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during each 6-month period..
[45 CSR §2-3.1, and §2-9.1.]

d. Sulfur dioxide emission from Emission Point BLR-2 shall not exceed 277.78 pound per hour and 484.50 tons per year.
[45 CSR §10-3.1.e.]

e. Hydrochloric acid emissions from Emission Point BLR-2 shall not exceed 1.26 pounds per hour nor 2.20 tons per year.

f. Carbon monoxide emissions from Emission Point BLR-2 shall not exceed a concentration level of 420 ppm on a dry basis corrected to 3 percent oxygen. During performance testing that demonstrated compliance with this CO limit, the permittee shall developed minimum oxygen content in accordance with row 3 of Table 6 to Subpart JJJJJ of Part 63 – Establishing Operating Limits. Compliance with this limit is satisfied by maintaining the 30-day rolling average oxygen content at or above the minimum oxygen level established during the most recent CO performance test.
[40 CFR §63.11201(a) and row 6 of Table 1 to Subpart JJJJJJ of Part 63 – Emission Limits]

g. Mercury emissions from Emission Point BLR-2 shall not exceed 2.2E-5 pounds per MMBtu of heat input on a 30 day rolling average basis.
[40 CFR §63.11201(a) and row 6 of Table 1 to Subpart JJJJJJ of Part 63 – Emission Limits]

h. For the purpose of complying with the SO_2 allowable in 45 CSR §10-3.1.d., and the emission limit in item d of this condition, the boiler shall not consume more than 4.3 tons of coal per hour nor more than 15,000 tons per year. The permittee is limited to burning coal with a sulfur content no greater than 1.7 % by weight.
[45 CSR §10-10.2.]

i. The permittee shall install and operate an activated carbon injection system to control mercury emissions. Prior to establishing minimum activated carbon injection operating limit, the minimum injection rate of activated carbon shall not be less than 5 lb of activated carbon per 112 MMBtu of heat input (which equates to 0.045 lb of activated carbon per MMBtu) on a 30 day rolling average basis. The minimum activated carbon injection rate means the load faction multiplied by the lowest hourly average activated carbon injection rate measured according to Table 6 to this subpart during the most recent performance stack test

demonstrating compliance with the applicable emission limit. Following the date on which the initial compliance demonstration is completed or is required to be completed under Condition 4.3.2., whichever date comes first, the permittee must continuously monitor the operating parameters. Operation below the established minimum operating limits specified in this requirement constitutes a deviation from operating limits established under Subpart JJJJJJJ, except during performance tests conducted to determine compliance with the emission and operating limits or to establish new operating limits. Operating limits are confirmed or reestablished during performance tests.
[40 CFR §63.11211(b)(3), §63.112222(a)(1)]

j. The permittee shall install and operate a dry sorbent injection system on or before January 31, 2016 to meet the hourly and annual HCl emission limits in item e of this condition. Prior to establishing a 30-day rolling minimum dry sorbent injection rate in accordance with Condition 4.3.1., the hourly hydrated lime injection rate shall be 60 pounds per hour. Following the date on which the initial compliance demonstration is completed or is required to be completed under Condition 4.3.2., whichever date comes first, the permittee must continuously monitor the operating parameters. Operation below the established minimum operating limits specified in this requirement constitutes an exceedance of the limits in item e of this condition, except during performance tests conducted to determine compliance with the emission and operating limits or to establish new operating limits. Operating limits are confirmed or reestablished during performance tests.
[40 CFR §63.11211(b)(3), §63.112222(a)(1)]

k. The permittee must conduct an initial boiler tune-up in accordance with 40 CFR §63.11223(b) prior to conducting the initial compliance test as required in Condition 4.3.1.
[40 CFR §63.11214]

l. The permittee shall develop and submit to the Director a site specific monitoring plan for the Continuous Parameter Monitoring System (CPMS) for the oxygen analyzer, activated carbon injection and dry sorbent injection systems. This plan shall include a means to measure the amount of heat input or load produced by the unit. Such plan shall be submitted 60 days prior to conducting the required testing in Condition 4.3.1 according to the following requirements.

i. Installation of the continuous measuring system (CMS) sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);

ii. Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and

iii. Performance evaluation procedures and acceptance criteria (e.g., calibrations).

iv. Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR §63.8(c)(1)(ii),

v. Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR §63.8(d); and

vi. Ongoing recordkeeping and reporting procedures in accordance with the general requirements of 40 CFR §63.10(c) (as applicable in Table 8 to Subpart JJJJJJJ), (e)(1), and (e)(2)(i).
[40 CFR §§63.11205(c) & (c)(1) through (c)(3), and 45 CSR §123-5.11.]

m. The permittee must conduct a performance evaluation of each CMS in accordance with the site-specific monitoring plan as required in item l of this condition.
[40 CFR §§63.11205(c)(2) and 45 CSR §13-5.11.]

n. The permittee shall minimize the boiler's startup and shutdown periods and conduct startups and shutdowns according to the manufacturer's recommended procedures, if available. If manufacturer's recommended procedures are not available, the permittee shall follow the recommended procedures for a unit of similar design for which manufacturer's recommended procedures are available.
[40 CFR §63.11223(g)]

o. The permittee shall conduct a onetime energy assessment performed by a qualified energy assessor. The energy assessment must include the following with the extent of the evaluation for the items (1) to (4) appropriate for the on-site technical hours listed in 40 CFR §63.11237:

i. A visual inspection of the boiler system;

ii. An evaluation of operating characteristics of the affected boiler systems, specifications of energy use systems, operating and maintenance procedures, and unusual operating constraints;

iii. An inventory of major energy use systems consuming energy from the boiler and which are under control of the permittee;

iv. A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage;

v. A list of the energy conservation measures that are within the permittee's control;

vi. A list of the energy savings potential of the energy conservation measures identified; and

vii. A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.
[40 CFR §§63.11201(b) & 63.11214(c); and row 16 of Table 2 to Subpart JJJJJJ of Part 63—Work Practice Standards]

4.1.2. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR§13-5.11.]

4.2. Monitoring Requirements

4.2.1. The permittee shall conduct fuel analysis of each coal shipment received at the facility to demonstrate that the coal meets the sulfur specification of item h. of Condition 4.1.1. Such records shall be maintained in accordance with Condition 3.4.1.
[45 CSR §10-8.2.c.3.]

4.2.2. The permittee shall conduct fuel (coal) analysis in accordance with the following procedures:

a. At a minimum, the permittee must obtain three composite coal samples according to the procedures in 40 CFR §63.11213(b) or ASTM D2234/D2234M or equivalent method for coal. During performance testing for mercury, each composite sample must consist of a minimum of three samples collected at approximately equal intervals during a test run period.

b. The composited fuel samples must be prepared in accordance with ASTM D2013/D2013M or equivalent method for coal.

c. Determine the heat content of the fuel type in accordance with ASTM D5865 or equivalent method for coal.

d. Determine the moisture content of the fuel type in accordance with ASTM D3173 or ASTM E871 or equivalent method for coal.

e. Measure the mercury concentration in the fuel sample using ASTM D6722 or equivalent method for coal.

f. Convert the concentration of mercury in the fuel in units of pounds per million Btu of each composite sample.
[40 CFR §63.11213 and Table 5 to Subpart JJJJJJ of Part 63-Fuel Analysis Requirements]

4.2.3. If the permittee demonstrates compliance with the mercury emission limit based on fuel analysis, the fuel analysis must be in accordance with Condition 4.2.2. Records of such analysis shall be maintained in accordance with Condition 3.4.1.

The permittee must conduct a fuel analysis according to 40 CFR §63.11213 for each type of fuel burned as specified in paragraphs (c)(1) and (2). If you plan to burn a new type of fuel or fuel mixture, you must conduct a fuel analysis before burning the new type of fuel or mixture in your boiler. The permittee must recalculate the mercury emission rate using Equation 1 of 40 CFR §63.11211. The recalculated mercury emission rate must be less than the applicable emission limit.

a. When demonstrating initial compliance with the mercury emission limit, if the mercury constituents in the fuel or fuel mixture are measured to be equal to or less than half of the mercury emission limit, The permittee do not need to conduct further fuel analysis sampling but must continue to comply with all applicable operating limits and monitoring requirements.

b. When demonstrating initial compliance with the mercury emission limit, if the mercury constituents in the fuel or fuel mixture are greater than half of the mercury emission limit, the permittee must conduct quarterly sampling.
[40 CFR §63.11220(c)]

4.2.4. For the purpose of demonstration compliance with the CO limit in Condition 4.1.1f., the permittee calibrate, operate, and maintain an oxygen analyzer system, as defined in 40 CFR §63.11237, according to the manufacturer's recommendations and 40 CFR §§63.11224(a)(7). Such system must be operational prior to the initial performance testing as required in Condition 4.3.1. Oxygen monitors must be installed to monitor oxygen in the boiler flue gas, boiler firebox, or other appropriate intermediate location.
[40 CFR §§63.11224(a), (a)(7), and (d)]

4.2.5. The permittee shall install, calibrate, maintain, and continuously operate a fabric filter bag detection system in accordance with the following and the site-specific monitoring plan as required in Condition 4.1.1.l.:

a. The permittee must install and operate a bag leak detection system each outlet of control device C-4.

b. Each bag leak detection system must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations and in accordance with EPA-454/R-98-015 (incorporated by reference, see 40 CFR §63.14).

c. The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 milligrams per actual cubic meter or less.

d. The bag leak detection system sensor must provide output of relative or absolute particulate matter loadings.

e. The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor. The bag leak detection system must be equipped with an audible or visual alarm system that will activate automatically when an increase in relative particulate matter emissions over a preset level is detected. The alarm must be located where it is easily heard or seen by plant operating personnel.

[40 CFR §63.11224(f) and 45 CSR §2-8.2.a.]

4.2.6. The permittee shall install, calibrate, maintain, and continuously parameter monitoring system (CPMS) in accordance with the following and the site-specific monitoring plan for the oxygen analyzer, the activated carbon and dry sorbent injection systems:

a. The CPMS must complete a minimum of one cycle of operation every 15 minutes. The permittee must have data values from a minimum of four successive cycles of operation representing each of the four 15-minute periods in an hour, or at least two 15-minute data values during an hour when CMS calibration, quality assurance, or maintenance activities are being performed, to have a valid hour of data.

b. The permittee must calculate hourly arithmetic averages from each hour of CPMS data in units of the operating limit and determine the 30-day rolling average of all recorded readings, except as provided in §63.11221(c). Calculate a 30-day rolling average from all of the hourly averages collected for the 30-day operating period using the following equation.

$$30 - day\ average\ = \frac{\sum_{i=1}^{n} Hpvi}{n}$$

Where:

Hpvi = the hourly parameter value for hour i

n = the number of valid hourly parameter values collected over 30 boiler operating days

c. For purposes of collecting data, the permittee must operate the CPMS as specified in §63.11221(b). For purposes of calculating data averages, the permittee must use all the data collected during all periods in assessing compliance, except that the permittee must exclude certain data as specified in §63.11221(c) (monitoring system malfunctions or out -of –control periods or repairs to associated with monitoring system malfunctions). Periods when CPMS data are unavailable may constitute monitoring deviations as specified in §63.11221(d).

d. Records the results of each inspection, calibration, and validation check.

[40 CFR §§63.11224(c) & (d) & 45 CSR §13-5.11]

4.3. Testing Requirements

4.3.1. The permittee shall conduct performance testing on or before July 30, 2016. Such testing shall determine compliance with the CO limit of Condition 4.1.1.f., PM limit of Condition 4.1.1.b., visible emissions limit of Condition 4.1.1.c., the HCl limit of Condition 4.1.1.e. and mercury limit of Condition 4.1.1.g. and establish operating limits for the oxygen content, injection of activated carbon and dry sorbent as required in items i. and j. of Condition 4.1.1. This testing shall be conducted in accordance with 45 CSR 2 Appendix, Row 2 of Table 4 to Subpart JJJJJJ of Part 63, U.S. EPA Method 29 for HCl, and Condition 3.3.1.

The permittee must conduct performance stack tests at the representative operating load conditions while burning the type of fuel or mixture of fuels that have the highest emissions potential for mercury and HCl emissions, and the permittee must demonstrate initial compliance and establish operating limits based on these performance stack tests. For subcategories with more than one emission limit, these requirements could result in the need to conduct more than one performance stack test. Following each performance stack test and until the next performance stack test, the permittee must comply with the operating limit for operating load conditions specified in (Table 3 to Subpart JJJJJJ of Part 63).

The permittee must conduct a minimum of three separate test runs for each performance stack test required in this section, as specified in 40 CFR §63.7(e)(3) and in accordance with the provisions in Table 4 to Subpart JJJJJJ.

To determine compliance with the emission limits, the permittee must use the F-Factor methodology and equations in sections 12.2 and 12.3 of EPA Method 19 of appendix A-7 to part 60 of this chapter to convert the measured mercury concentrations that result from the performance test to pounds per million Btu heat input emission rates.
[45 CSR §§2-8.1.a & 8.1.b., .40 CFR §§63.11210(a), (i) , §63.11212, Table 4 to Subpart JJJJJJ of Part 63 – Performance (Stack) Testing Requirements]

4.3.2. On a triennial basis after completion of the initial testing as required in Condition 4.3.1., the permittee shall conduct subsequent testing to demonstration compliance with the CO and mercury limits in items f and g respectively of Condition 4.1.1. Such testing shall be conducted no more than 37 months after the previous performance test and in accordance with applicable procedures and methods as outline in Conditions 3.3.1. and 4.3.1.
[40 CFR §63.11220(a)]

4.3.3. Within 60 days after the date of completing each performance test for mercury as required by Conditions 4.3.1. or 4.3.2., the permittee must submit the results of the performance tests, including any associated fuel analyses, required by this subpart to EPA's WebFIRE database by using CEDRI that is accessed through EPA's CDX (www.epa.gov/cdx). Performance test data must be submitted in the file format generated through use of EPA's Electronic Reporting Tool (ERT) (see http://www.epa.gov/ttn/chief/ert/index.html). Only data collected using test methods on the ERT Web site are subject to this requirement for submitting reports electronically to WebFIRE. Owners or operators who claim that some of the information being submitted for performance tests is confidential business information (CBI) must submit a complete ERT file including information claimed to be CBI on a compact disk or other commonly used electronic storage media (including, but not limited to, flash drives) to EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT file with the CBI omitted must be submitted to EPA via CDX as described earlier in this paragraph. At the discretion of the delegated authority, the permittee must also submit these reports, including CBI, to the delegated authority in the format specified by the delegated authority. For any performance test conducted using test methods that are not listed on the ERT Web site, the owner or operator

shall submit the results of the performance test in paper submissions to the Administrator at the appropriate address listed in §63.13.
[40 CFR §63.11225(e)(1)]

4.4. Recordkeeping Requirements

4.4.1. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit, and time of sampling or measurements;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of the analyses; and

f. The operating conditions existing at the time of sampling or measurement.

4.4.2. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

4.4.3. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

a. The equipment involved.

b. Steps taken to minimize emissions during the event.

c. The duration of the event.

d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

e. The cause of the malfunction.

f. Steps taken to correct the malfunction.

g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

4.4.4. The permittee shall keep the following records in accordance with 40 CFR §63.11223(b)(6) as required in Condition 4.1.1.k.

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 using a portable combustion analyzer

b. A description of any corrective actions taken as a part of the tune-up; and

c. The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period.

[40 CFR §§63.11223(b)]

4.4.5. The permittee must the records information specified in the following:

a. As required in 40 CFR §63.10(b)(2)(xiv), the permittee must keep a copy of each notification and report that the permittee submitted to comply with this subpart and all documentation supporting any Initial Notification or Notification of Compliance Status that the permittee submitted.

b. The permittee must keep records to document conformance with the work practices, emission reduction measures, and management practices required by 40 CFR §63.11214 and 40 CFR §63.11223 as specified in paragraphs (c)(2)(i) through (vi) of this section.

c. Records must identify each boiler, the date of initial tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned.

d. The permittee must keep a copy of the energy assessment report.

e. The permittee must also keep records of monthly fuel (coal) use by the boiler, including the type(s) of fuel and amount(s) used.

f. Records of the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment.

g. Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR §63.11205(a), including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.

h. The permittee must keep the records of all inspection and monitoring data required by Conditions 4.2.4., 4.2.5., and 4.2.6. (§40 CFR §63.11221 and 63.11222), and the information identified in paragraphs (c)(6)(i) through (vi) of this section for each required inspection or monitoring.

i. For the bag leak detection system, the permittee must keep the following records:

i. Records of the bag leak detection system output.

ii. Records of bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection system settings.

iii. The date and time of all bag leak detection system alarms, and for each valid alarm, the time the permittee initiated corrective action, the corrective action taken, and the date on which corrective action was completed.

[40 CFR §63.11225(c), 45 CSR §2-8.3.c., & 45 CSR §10-8.3.c.]

4.5. Reporting Requirements

4.5.1. The permittee shall submit a "Notification of Compliance Status" for Auxiliary Boiler to the Director before the close of business on the sixtieth (60^{th}) day after completion of the initial compliance demonstration as required in Condition 4.3.2. Such "Notification of Compliance Status" shall be in accordance with the following (40 CFR §63.11225(a)(4)(i) through (vi)) and signed by a responsible official in accordance with Condition 3.5.1.

a. The permittee must submit the information required in 40 CFR §63.9(h)(2), except the information listed in 40 CFR §63.9(h)(2)(i)(B), (D), (E), and (F). If the permittee conduct any performance tests or CMS performance evaluations, the permittee must submit that data as specified in paragraph (e). If the permittee conduct any opacity or visible emission observations, or other monitoring procedures or methods, the permittee must submit that data to the Administrator at the appropriate address listed in 40 CFR §63.13. contain the information specified in 40 CFR §40 CFR §63.7545(e)(1), and (8), which included a statement the initial tune-up for boiler was completed.

b. "This facility complies with the requirements in 40 CFR §63.11214 to conduct an initial tune-up of the boiler."

c. "This facility has had an energy assessment performed according to 40 CFR §63.11214(c)."

d. For units that install bag leak detection systems: This facility complies with the requirements in 40 CFR §63.11224(f)."

e. "No secondary materials that are solid waste were combusted in any affected unit."

f. The notification must be submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written Notification of Compliance Status must be submitted to the Administrator at the appropriate address listed in 40 CFR §63.13

[40CFR§63.11225(a)(4)]

4.5.2. The permittee shall submit "Annual Compliance Reports" to the Director for the boiler with the first report being submitted by no later than March 15, 2017 and subsequent reports are due every March 15 from thereafter for the previous calendar year. Such reports shall contain the information specified in 40 CFR §§63.11225(b)(1) through (4) which are:

a. Permittee and facility name, and address;

b. Statement by a responsible official, with the official's name, title, phone number, email address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart. The permittee notification must include the following certification(s) of compliance, as applicable, and signed by a responsible official.

i. "No secondary materials that are solid waste were combusted in any affected unit."

ii. "This facility complies with the requirement in §§63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."

c. If the source experiences any deviations from the applicable requirements during the reporting period, include a description of deviations, the time periods during which the deviations occurred, and the corrective actions taken.

d. The total fuel use by each affected boiler subject to an emission limit, for each calendar month within the reporting period, including, but not limited to, a description of the fuel, whether the fuel has received a non-waste determination by the permittee or EPA through a petition process to be a non-waste under §241.3(c), whether the fuel(s) were processed from discarded non-hazardous secondary materials within the meaning of §241.3, and the total fuel usage amount with units of measure.

[40CFR §63.11225(b)]

4.5.3. The permittee shall submit quarterly visible emission report to the Director. Such reports shall be post marked 30 days of the end of the quarter. This report shall identify any instance that a visible emission observation indicated an exceedance of the standard in Condition 4.1.1.c. A description of the excursion or cause of the exceedance, any corrective action taken, and the beginning and ending times for the exceedance shall be included in the report.

To the extent that an exceedance is due to a malfunction, the reporting requirement of 45 CSR §2-9.3. shall be followed.

In the event that no exceedance of the standard occurred or the no observations were taken, the permittee shall state that in the report. Such reports shall be submitted in accordance with Condition 3.5.1.

[45 CSR §2A-7.2c.]

CERTIFICATION OF DATA ACCURACY

I, the undersigned, hereby certify that, based on information and belief formed after reasonable inquiry, all information contained in the attached _____, representing the period beginning _____ and ending _____, and any supporting documents appended hereto, is true, accurate, and complete.

Signature[1] _____ _____
(please use blue ink) Responsible Official or Authorized Representative Date

Name & Title _____ _____
(please print or type) Name Title

Telephone No. _____ Fax No. _____

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[1] This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:

a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

(i) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars), or

(ii) the delegation of authority to such representative is approved in advance by the Director;

b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;

c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of U.S. EPA); or

d. The designated representative delegated with such authority and approved in advance by the Director.