



## State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

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Scott Hassett, Secretary

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October 18, 2004

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

FILE CODE: 4530-1  
FID#: 737009020

Mr. David Harpole  
Wisconsin Public Service Corporation  
Vice President - Energy Supply Projects  
700 North Adams Street  
P.O. Box 19002  
Green Bay, WI 54307-9002

Dear Mr. Harpole:

Your application for an air pollution control construction permit has been processed in accordance with s. 285.61, Wis. Stats.

The enclosed permit is issued to provide authorization for your source to construct and initially operate an Electric Generating Facility at the Weston Power Plant referred to as Weston 4 - North Site in accordance with the requirements and conditions set forth within Parts I and II of the permit. Please read it carefully. This permit expires forty eight (48) months from the date of issuance. The source(s) covered in this permit may not operate after this permit expires unless a complete operating permit application for the source(s) has been submitted. Compliance information required to complete the operation permit application for the source(s) included in this construction permit should be submitted at least 4 months prior to the permit expiration date.

Enclosed with the permit is a bill for the cost of reviewing and acting upon your air pollution control permit. This bill is due and payable within 30 days of the date of the issuance of the permit. The remittance should be made payable to Wisconsin Department of Natural Resources and returned to the address on the bill. Please return one copy of the bill with your payment.

A copy of this permit should be available at the source for inspection by any authorized representative of the Department. Questions about this permit should be directed to Wisconsin Department of Natural Resources, West Central Region, Wausau Service Center, 5301 Rib Mountain Drive, Wausau, WI 54401.

### NOTICE OF APPEAL RIGHTS

If you believe that you have a right to challenge this decision, you should know that Wisconsin statutes establish time periods within which requests to review Department decisions must be filed.

To request a contested case hearing pursuant to s. 285.81, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to serve a petition for a contested case hearing on the Secretary of the Department of Natural Resources. Any such petition for hearing shall set forth specifically the issues sought to be reviewed, the interest of the petitioner, the reasons why a hearing is warranted and the relief desired.

For judicial review of a decision pursuant to ss. 227.52 and 227.53, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to file your petition with the appropriate circuit court

and serve the petition on the Department. Such a petition for judicial review shall name the Department of Natural Resources as the respondent.

This notice is provided pursuant to s. 227.48(2), Wis. Stats.

STATE OF WISCONSIN  
DEPARTMENT OF NATURAL RESOURCES

Raj Vakharia, Review Engineer.  
Permits & Stationary Source Modeling Section  
Bureau of Air Management

cc: Air Enforcement Branch - EPA, Region V  
Rhonda O'Leary, Wausau Service Center, Air Program  
David Bender/Bruce Neilus, Sierra Club, 354 W. Main Street, Madison, WI 53703

Enclosure

**BEFORE THE DEPARTMENT OF NATURAL RESOURCES  
AIR MANAGEMENT PROGRAM  
FINDINGS OF FACT  
CONCLUSIONS OF LAW  
AND DECISION**

**Findings of Fact**

The Department of Natural Resources (DNR) finds that:

- 1) Wisconsin Public Service Corporation - Weston Plant, Wisconsin, has applied for an air pollution control construction permit. The authorized representative of the facility is David Harpole, Vice President - Energy Supply Projects.
- 2) Wisconsin Public Service Corporation - Weston Plant submitted an air pollution control permit application and plans and specifications and any additional information describing the air pollution source between September 15, 2003 and October 14, 2004.
- 3) DNR has reviewed Wisconsin Public Service Corporation - Weston Plant's air permit application, plans, specifications and other information available to DNR.
- 4) DNR has prepared an analysis and a Preliminary Determination on the approvability of the permit application.
- 5) This permit is for the construction of an air pollution source.
- 6) DNR has complied with the procedures set forth in s. 285.61, Wis. Stats.
- 7) The proposed air pollution source meets all of the applicable criteria in s. 285.63, Wis. Stats.
- 8) DNR has complied with the requirements of s. 1.11, Wis. Stats., and ch. NR 150, Wis. Adm. Code.

**Conclusions of Law**

DNR concludes that:

- 1) DNR has authority under s. 285.11(1), Wis. Stats., to promulgate rules contained in chs. NR 400-499, Wis. Adm. Code, including but not limited to rules containing emission limits, compliance schedules and compliance determination methods.
- 2) DNR has the authority under ss. 285.11(1), (5), and (6), 285.27 (1) and (2) and 285.65, Wis. Stats., and chs. NR 400-499, Wis. Adm. Code, to establish emission limits for sources of air pollution.
- 3) DNR has the authority to issue air pollution control permits and to include conditions in such permits under ss. 285.60, 285.61, 285.63 and 285.65, Wis. Stats.
- 4) The emission limits included in this permit are authorized by ss. 285.65, Wis. Stats., and chs. NR 400-499, Wis. Adm. Code.

- 5) DNR is required to comply with s. 1.11, Wis. Stats., and ch. NR 150, Wis. Adm. Code, in conjunction with issuing an air pollution control permit.

### **Decision**

Wisconsin Public Service Corporation - Weston Plant is authorized to construct and initially operate an Electric Generating Facility at the Weston Power Plant referred to as Weston 4 - North Site described in the plans and specifications dated between September 15, 2003 and October 14, 2004 in conformity with the emission limits, monitoring, recordkeeping and reporting requirements and specific and general conditions set forth in this permit.

AIR POLLUTION CONTROL CONSTRUCTION PERMIT

EI FACILITY NO. 737009020

PERMIT NO. 03-RV-248

STACK NO.(S). S04, S25, S26A-S26L, S27, S28,  
S30, S40,S41-S50, S56, S61-S66

SOURCE NO.(S). B04, B25, B27-B29,  
P26, P30, P40,P41-  
P50, P56, P61-P66

THIS CONSTRUCTION PERMIT EXPIRES FORTY EIGHT (48) MONTHS FROM THE DATE OF ISSUANCE OR WHEN THE OPERATION PERMIT IS ISSUED FOR THE EMISSION UNITS INCLUDED IN THIS PERMIT, WHICHEVER COMES FIRST.

Name of Source: Wisconsin Public Service Corporation - Weston Plant

Street Address: 2501 Morrison Avenue  
Rothschild, WI 54474

Responsible Official & Title: David Harpole, Vice President - Energy Supply Projects

is authorized to construct and initially operate an Electric Generating Facility referred to as Weston 4 – North Site described in the plans and specifications submitted between September 15, 2003 and October 14, 2004 in conformity with the conditions herein.

This authorization requires compliance by the permit holder with the emission limitations, monitoring requirements and other terms and conditions set forth in Parts I and II hereof.

Dated at Madison, Wisconsin this 19th day of October, 2004.

STATE OF WISCONSIN  
DEPARTMENT OF NATURAL RESOURCES  
For the Secretary

By /s/ Lloyd L Eagan  
Lloyd L. Eagan, Director  
Bureau of Air Management

**PART I: APPLICABLE LIMITATIONS**

<b>A. S04, B04 – Super Critical Pulverized Coal (SCPC) Boiler (Weston 4).</b>	
<b>Pollutant:</b> 1. Particulate Matter Emissions	
<b>a. Limitations:</b> 0.02 pound per million Btu heat input (103.52 pounds per hour) averaged over any consecutive 3–hour period. (Best Available Control Technology, BACT) [s. NR 415.06(2)(c), Wis. Adm. Code; s. NR 405.08(2), Wis. Adm. Code; s. NR 440.20(3), Wis. Adm. Code; s. 285.65(3), Wis. Stats.] See Note 1	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
<p>(1) Initial compliance emission tests shall be conducted within the 180 days after the start of operation of the boiler to show compliance with the emission limitation.<sup>1</sup> [s. NR 439.07, Wis. Adm. Code]</p> <p>(2) <u>Stack Parameters:</u> These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed.</p> <p>(a) The height of the stack S04 shall be at least 500 feet above ground level. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]</p> <p>(b) The inside diameter at the outlet of the stack S04 may not exceed 20 feet. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]</p> <p>(3) Particulate matter emissions shall be controlled using a fabric filter baghouse system to meet the BACT emission limit. [s. NR 405.08(2), Wis. Adm. Code]</p> <p>(4) The fabric filter baghouse system shall be in line and shall be operated at all times when the boiler is in operation and coal is being fired. [s. NR 406.10, Wis. Adm. Code; s. NR 407.09(4)(a).1, Wis. Adm. Code]</p> <p>(5) The operating pressure drop range across the fabric filter baghouse system shall be determined during the initial testing period. [s. 285.65(3), Wis. Stats.]</p> <p>(6) The pressure drop across the fabric filter baghouse system shall be maintained within the range identified by condition I.A.1.b.(5). [s. NR 407.09(4)(a)1., Wis. Adm. Code]</p> <p>(7) The permittee shall perform the compliance emission tests required under condition I.A.1.b.(1) every 24 months within 60 days from the date of the last stack test as long as the permit remains valid. [s. 285.65(10), Wis. Stats.; s. 285.65(3), Wis. Stats.]</p>	<p>(1) <u>Reference Test Method for Particulate Matter Emissions:</u> Whenever compliance emission testing is required, US EPA Method 5 or 5B including backhalf (Method 202) or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. Wisconsin Public Service Corporation has raised concerns that Method 5 and 202 (including use of the “nitrogen purge”, the subtraction of ammonium chloride and ammonium sulfates, as optional procedures allowed under Method 202) may not adequately account for “artifacts” being created in the test methods and has requested that another alternative method be approved for testing particulates. If WPSC can demonstrate that artifacts are not adequately accounted for in Method 5 and 202, the DNR will support WPSC’s request and will work with EPA to identify acceptable alternative methods for testing particulates to address the artifacts issue, such as a controlled condensation system, and DNR will actively pursue resolution of this issue with EPA and WPSC and will make any necessary adjustment to the permit conditions to address this issue. [s. NR 439.06(1), Wis. Adm. Code; s. NR 440.20(8)(b)2., Wis. Adm. Code; s. 285.65(7), Wis. Stats.]</p> <p>(2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(3) The permittee shall record the pressure drop across the fabric filter baghouse system once for every 8 hours of operation. [s. NR 439.055(2)(b)1., Wis. Adm. Code]</p> <p>(4) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the fabric filter baghouse system, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(5) The permittee shall continuously monitor the operating pressure drop across the fabric filter system and shall sound an audible alarm, whenever the operating pressure drop is below minimum pressure drop identified in I.A.1.b.(5) is exceeded. [s. NR 439.055(1)(b)1., Wis. Adm. Code]</p> <p>(6) The permittee shall respond to every “out of range” pressure drop alarm in accordance with the provisions of 40 CFR 64.7(d)(1). [s. 285.65(3), Wis. Stats.]</p> <p>(7) The permittee shall comply with the NSPS monitoring, recordkeeping and reporting requirements per s. NR 440.20(9), Wis. Adm. Code. A copy of the requirements attached with the permit. [s. 285.65(3), Wis. Stats.]</p> <p>(8) The permittee shall keep appropriate records on the manufacturer’s</p>

<sup>1</sup> If the compliance emission tests cannot be conducted within 180 days after the start of initial operation, the permit holder may request and the Department may approve, in writing, an extension of time to conduct the test(s).

	design specifications information for the natural gas burners to demonstrate compliance with permit condition I.A.1.b. (9). [s. 285.65(7), Wis. Stats., s. 285.65(10), Wis. Stats.]
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Note 1: The boiler is subject to New Source Performance Standards (NSPS) requirements for particulate matter under s. NR 440.20(3), Wis. Adm. Code and is 0.03 pound per million Btu and 99% reduction when combusting solid fuel. The BACT limit for particulate matter is more restrictive than the particulate matter emission limits under NSPS, thus the boiler is expected to meet the particulate matter emission limits under NSPS.

<b>A. S04, B04 – Super Critical Pulverized Coal (SCPC) Boiler (Weston 4).</b>	
<b>Pollutant: 1. Particulate Matter Emissions [CONTINUED]</b>	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
<p>(8) The permittee shall comply with the NSPS compliance determination procedures and methods per s. NR 440.20(6), Wis. Adm. Code and s. NR 440.20(8), Wis. Adm. Code. A copy of the requirements attached with the permit. [s. 285.65(3), Wis. Stats.]</p> <p>(9) The total heat input capacity for all natural gas heaters on B04 may not exceed 500 mmBtu/hr. This condition is established to ensure the particulate matter limit is not exceeded when natural gas is fired in the boiler and the baghouse is not on line. [s. 285.65(3), Wis. Stats., s. 285.65(7), Wis. Stats.]</p>	

**A. S04, B04 – Super Critical Pulverized Coal (SCPC) Boiler (Weston 4).**

**Pollutant:** 2. Particulate Matter Emissions less than 10 microns (PM<sub>10</sub>)

**a. Limitations:** 0.018 pound per million Btu heat input averaged over any consecutive 3–hour period. (BACT) [s. NR 405.08(2), Wis. Adm. Code and s. 285.65(3), Wis. Stats.]

**b. Compliance Demonstration:**

(1) Initial compliance emission tests shall be conducted within 180 days after the start of operation of the boiler to show compliance with the emission limitation.<sup>1</sup> [s. NR 439.07, Wis. Adm. Code]

(2) **Stack Parameters:** These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed.

(a) The height of the stack S04 shall be at least 500 feet above ground level. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]

(b) The inside diameter at the outlet of the stack S04 may not exceed 20 feet. [s. 285.65(3), Wis. Stats. s. NR 406.10, Wis. Adm. Code]

(3) Particulate matter emissions shall be controlled using a fabric filter baghouse system to meet the BACT emission limit. [s. NR 405.08(2), Wis. Adm. Code]

(4) The fabric filter baghouse system shall be in line and shall be operated at all times when the boiler is in operation and coal is being fired. [s. NR 406.10, Wis. Adm. Code; s. NR 407.09(4)(a).1, Wis. Adm. Code]

(5) The operating pressure drop range across the fabric filter baghouse system shall be determined during the initial testing period. [s. 285.65(3), Wis. Stats.]

(6) The pressure drop across the fabric filter baghouse system shall be maintained within the range identified by condition I.A.2.b.(5). [s. NR 407.09(4)(a)1., Wis. Adm. Code]

(7) The permittee shall perform the compliance emission tests required under condition I.A.2.b.(1) every 24 months within 60 days from the date of the last stack test as long as the permit remains valid. [s. 285.65(10), Wis. Stats., s. 285.65(3), Wis. Stats.]

(8) The total heat input capacity for all natural gas heaters on B04 may not exceed 500 mmBtu/hr. This condition is established to ensure the PM10 limit is not exceeded when natural gas is fired in the boiler and the baghouse is not on line. [s. 285.65(3), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

(1) **Reference Test Method for Particulate Matter Emissions:** Whenever compliance emission testing is required, US EPA Method 5 or 5B including backhalf (Method 202) , or Method 201A and 202 ,or Method CTM 039, or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(1), Wis. Adm. Code; s. NR 440.20(8)(b)2., Wis. Adm. Code; s. 285.65(7), Wis. Stats. ]

(2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code]

(3) The permittee shall record the pressure drop across the fabric filter baghouse system once for every eight hours of operation hours whenever the boiler is in operation.[s. NR 439.055(2)(b)1., Wis. Adm. Code]

(4) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the fabric filter baghouse system, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code]

(5) The permittee shall continuously monitor the pressure drop across the fabric filter system and shall sound an audible alarm, whenever the operating pressure drop is below the minimum pressure drop identified in I.A.2.b.(5) is exceeded. [s. NR 439.055(1)(b)1., Wis. Adm. Code]

(6) The permittee shall respond to every “out of range” pressure drop alarm in accordance with the provisions of 40 CFR 64.7(d)(1). [s. 285.65(3), Wis. Stats.]

(7) The permittee shall keep appropriate records on the manufacturer’s design specifications information for the natural gas burners to demonstrate compliance with permit condition I.A.2.b. (8). [s. 285.65(7), Wis. Stats., s. 285.65(10), Wis. Stats.]

(8) The permittee shall keep appropriate records on the manufacturer’s design specifications information for the natural gas burners to demonstrate compliance with permit condition I.B.1.b. (8). [s. 285.65(7), Wis. Stats., s. 285.65(10), Wis. Stats.]

<sup>1</sup> If the compliance emission tests cannot be conducted within 180 days after the start of initial operation, the permit holder may request and the Department may approve, in writing, an extension of time to conduct the test(s).

**A. S04, B04 – Super Critical Pulverized Coal (SCPC) Boiler (Weston 4).**

**Pollutant:** 3. Sulfur Dioxide (SO<sub>2</sub>)

**a. Limitations:** (1) 0.10 pound per million Btu heat input for all periods, including startup, shut down and routine atomizer change out, averaged over any consecutive 30-day period, and 0.09 pound per million Btu heat input for all periods, including startup, shut down and routine atomizer change out, averaged over any 12 consecutive months. (BACT) (2) Uncontrolled sulfur dioxide emission rate in the coal shall be limited to 1.23 pounds per million Btu, averaged over any consecutive 30-day period. (BACT) (3) 3491.8 pounds per hour on a 3-hour average and 1508.9 pounds per hour on a 24-hour average. (BACT) These pounds per hour and pounds per 24-hour emission limits are only applicable to days when scheduled routine maintenance of the sulfur control system is required (routine atomizer change out). (BACT) [s. NR 405.08(2), Wis. Adm. Code; s. NR 440.20(4), Wis. Adm. Code; s. 285.65(3), Wis. Stats.]

When determining compliance with the limits on an hourly and daily average, the permittee shall only account for the hours, and days when the boiler operated.

See Notes 1, 2 and 3

**b. Compliance Demonstration:**

(1) Initial compliance emission tests shall be conducted within 180 days after the start of operation of the boiler to show compliance with the emission limitation. [s. NR 439.07, Wis. Adm. Code]

(2) Sulfur Dioxide Emissions shall be controlled by the use of dry flue gas desulfurization (FGD) System to meet the BACT emission limits. [s. NR 405.08(2), Wis. Adm. Code]

(3) The flow rate of the aqueous lime/recycled ash slurry to the FGD system and the pressure drop across the scrubber shall be periodically monitored and maintained within the range specified under condition I.A.3.c.(4). [s. 285.65(3), Wis. Stats.]

(4) The boiler may be fired on coal and natural gas only. [s. NR 405.08(2), Wis. Adm. Code; s. NR 406.10, Wis. Adm. Code; s. 285.65(3), Wis. Stats]

(5) (a) The permittee shall demonstrate compliance with the coal sulfur limit in I.A.3.a.(2)] by utilizing coal sampling and analysis of the coal as it is shipped from the mine. (b) The permittee shall provide the sampling and analysis protocol at least four months prior to the initial operation of the boiler to the Department for approval. (c) In the event that mine sampling and analysis is unavailable, the permittee shall use as received fuel sampling and analysis procedures in accordance with s. NR 439.08, Wis. Adm. Code to demonstrate compliance with this limit. (d) In lieu of fuel sampling and analysis, the permittee may demonstrate compliance with the coal sulfur limit in I.A.3.a.(2) by using emissions data measured by a continuous emission monitoring system at the inlet to the FGD system. [s. 285.65(3), Wis. Stats.; s. NR 439.08, Wis. Adm. Code]

**c. Test Methods, Recordkeeping, and Monitoring:**

(1) Reference Test Method for Sulfur Dioxide Emissions: Whenever compliance emission testing is required, US EPA Method 6, 6A or 6C or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(2), Wis. Adm. Code]

(2) (a) The permittee shall install, calibrate, maintain and operate a continuous emission monitoring system, and record the output of the system, for measuring the sulfur dioxide and oxygen or carbon dioxide content of the flue gases at each location where sulfur dioxide emissions are monitored. (b) Continuous emissions monitoring systems shall be installed and operated in accordance with 40 CFR Part 75, s. NR 440.20(7)(b), Wis. Adm. Code and s. NR 439.06(2), Wis. Adm. Code. (c) Continuous SO<sub>2</sub> emission monitors located at the inlet and outlet to the SO<sub>2</sub> control device shall be used to measure the control efficiency of the SO<sub>2</sub> control device. [s. 285.65(10), Wis. Stats.]

(3) The permittee shall use continuous emission monitoring methods and procedures under s. NR 440.20(7)(b), Wis. Adm. Code and s. NR 439.09, Wis. Adm. Code to comply with the NSPS monitoring requirements. [s. NR 439.09, Wis. Adm. Code]

(4) The permittee shall provide to the department, at least 4 months prior to the expiration of the construction permit, information on the operational liquid flow rate to the FGD system to be used for monitoring the aqueous lime/recycled ash slurry flow rate to the FGD system, and the pressure drop range across the scrubber and, as required under condition I.A.3.b.(2), and shall incorporate this information into the Malfunction Prevention and Abatement Plan. (MPAP) [s. 285.65(10), Wis. Stats.]

(5) The permittee shall submit quarterly reports to the Department on the information required under condition I.A.3.b.(5) for each train of coal received during the calendar quarter. [s. 285.65(3), Wis. Stats., s. 285.65(10), Wis. Stats.]

Note 1: The proposed boiler is subject to NSPS requirement for sulfur dioxide under s. NR 440.20(4), Wis. Adm. Code. The NSPS limit for sulfur dioxide varies depending upon fuel sulfur content, with either a 90% reduction and 1.2 pound per million Btu limitations or a 70% reduction when emissions are below 0.60 pound per million Btu. The NSPS limits apply at all times except during periods of startup, shut down or when emergency conditions exist and the procedures under s. NR 440.20(6)(d), Wis. Adm. Code is implemented. The BACT limits for sulfur dioxide is more restrictive than the sulfur dioxide emission limits under NSPS, thus the boiler is expected to meet the sulfur dioxide emission limits under NSPS.

Note 2: The permittee has indicated in their application that routine maintenance may be required as frequently as 1000 hours, especially during initial operations when they are not yet familiar with the SO<sub>2</sub> controls. The permittee

needs the ability to space out the routine maintenance if warranted. During the initial operation, the permittee will develop an optimum time between change outs that won't be more frequent than 1000 hours.

Note 3: 720.72 pounds per hour from S01 when emissions from S02 are limited to 840.0 pounds per hour. These limits are based on 24-hour averages. These emission limits are only applicable to days when schedule routine maintenance of the sulfur control system on B04, S04 is required. These limits will be included in the permit because the source was reviewed with these emission rates and it was determined that no 3-hour and 24-hour sulfur dioxide ambient air quality standards would be violated when operated at these emission limit rates.

<b>A. S04, B04 – Super Critical Pulverized Coal (SCPC) Boiler (Weston 4).</b>	
<b>Pollutant: 3. Sulfur Dioxide (SO2) [continued]</b>	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
<p>(6) The permittee shall demonstrate compliance with the sulfur dioxide emission limits contained in I.A.3.a. (1) and (3) using emissions data measured by the continuous emission monitoring system required by I.A.3.c. (2) as follows:</p> <p>(a) Daily average concentration shall be calculated each calendar day by combining the sulfur dioxide concentration and diluent concentration (in % O2 or % CO2) measurement consistent with the procedures specified in 40 CFR Part 75 Appendix F. 12 consecutive months concentrations shall be calculated based on the calculations of the daily concentrations. (b) The permittee shall use CEMs data for unit 4 to demonstrate compliance with emission limits in I.A.3.a.(3) . Please see Note 3. (c) Continuous SO2 emission monitors located at the inlet and outlet to the SO2 control device shall be used in accordance with 40 CFR Part 75. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]</p> <p>(7) The permittee shall perform the compliance emission tests required under condition I.A.3.b.(1) every 24 months within 60 days from the date of the last stack test as long as the permit remains valid. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]</p> <p>(8) The permittee shall comply with the NSPS compliance determination procedures and methods per s. NR 440.20(6), Wis. Adm. Code and s. NR 440.20(8), Wis. Adm. Code. A copy of the requirements attached with the permit. [s. 285.65(3), Wis. Stats.]</p> <p>(9) (a) Sulfur dioxide emissions shall be limited to 621 pounds per hour averaged over any consecutive 3-hour period and sulfur dioxide emissions shall be limited to 589pounds per hour averaged over any consecutive 24-hour period. These conditions are established to ensure compliance with PSD increments and NAAQS. At these emission rates the air quality standards are expected to be protected. These limits are applicable to days when no scheduled routine maintenance of the sulfur control system (atomizer change out) is required. [s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats.] (b) The permittee shall use the CEMs data to demonstrate compliance with permit condition I.A.3.b. (9)(a). [s. 285.65(3), Wis. Stats.]</p>	<p>(6) The permittee shall comply with the NSPS reporting requirements per s. NR 440.20(9), Wis. Adm. Code. A copy of the requirements attached with the permit. [s. 285.65(3), Wis. Stats.]</p> <p>(7) The permittee shall keep appropriate records to comply with permit condition I.A.3.b.(8) and I.A.3.a.(3) [s. 285.65(3), Wis. Stats.]</p> <p>(8) The permittee shall keep appropriate records to ensure compliance with permit condition I.A.3.b.(3). [s. 285.65(3), Wis. Stats.]</p> <p>(9) The permittee will keep appropriate records (date the atomizer were changed, the hours the boiler operated since the last atomizer changed) to show compliance with permit condition I.A.3.(a)(3). [s. 285.65(3), Wis. Stats.]</p>

**A. S04, B04 – Super Critical Pulverized Coal (SCPC) Boiler (Weston 4).**

**Pollutant:** 4. Oxides of Nitrogen (NOx)

**Limitations:** (1) 0.07 pound per million Btu heat input, averaged over any consecutive 30-day period during normal operations, not including startup and shutdown. (BACT) [s. NR 405.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.]; (2) 0.06 pound per million Btu heat input for all periods including startup and shut down, averaged over any consecutive 12-month period. (BACT) [s. NR 405.08(2), Wis. Adm. Code; s. NR 440.20(5)a.1., Wis. Adm. Code; s. 285.65(3), Wis. Stats.]

When determining compliance with the limits on an hourly and daily average, the permittee shall only account for the hours, and days when the boiler operated.

See Notes 1, 2

**b. Compliance Demonstration:**

(1) Initial compliance emission tests shall be conducted within 180 days after the start of operation of the boiler to show compliance with the emission limitation.<sup>2</sup> [s. NR 439.07, Wis. Adm. Code]

(2) Nitrogen Oxide Emissions shall be controlled using low NOx burners, good combustion practices and a Selective Catalytic Reduction (SCR) System to meet the BACT emission limits. [s. NR 405.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.]

(3) The permittee shall demonstrate compliance with the NOx emission limit as follows:

(a) NOx emissions shall be calculated based on each calendar day.

Daily average shall be determined by calculating the arithmetic average of all applicable operating hourly emission rates for a calendar day

(b) 24 hour emissions shall be calculated by combining the NOx concentration and diluent concentration (in % O2 or % CO2) measurement consistent with the procedures specified in 40 CFR Part 75 Appendix F.

(c) consecutive 30-day periods and 12 consecutive months concentrations shall be calculated based on the calculations of the daily concentrations. [s. 285.65(3), Wis. Stats.]

(4) The permittee shall maintain the ranges of the parameters identified in condition I.A.4.c.(5)a.-d., to meet good combustion practices and/or maintain proper operation of the SCR. [s. 285.65(3), Wis. Stats.]

(5) The permittee shall perform the compliance emission tests required under condition I.A.4.b.(1) every 60 months within 60 days from the date of the last stack test as long as the permit remains valid. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

(1) Reference Test Method for Nitrogen Oxide Emissions: Whenever compliance emission testing is required, US EPA Method 7, 7E or an alternate method approved in writing by the Department shall be used to demonstrate compliance. [s. NR 439.06(6), Wis. Adm. Code]

(2) The permittee shall install and operate continuous emissions monitoring systems (CEMs) for NOx and carbon dioxide or oxygen within 60 days after initial start up of the boiler. The CEMs shall be calibrated within 90 days after initial start up of the boiler. Continuous emissions monitoring systems shall be installed and operated in accordance with 40 CFR Part 75, s. NR 440.20(7)(d), Wis. Adm. Code and s. NR 439.06(6)(b), Wis. Adm. Code requirements.[s. 285.65(3), Wis. Stats.; s. NR 439.06, Wis. Adm. Code]

(3) The permittee shall certify the CEMs in accordance with 40 CFR Part 75 Appendix A. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]

(4) The permittee shall keep appropriate records of the strip chart, round chart or data acquisition (DAS) system/electronic data storage continuously. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]

(5) During operation, the facility will calculate or continuously monitor and record the unit heat input and the following operating parameters on an hourly basis.

a. Furnace outlet temperature, including SCR inlet temperature, °F

b. Secondary Air Flow

c. Primary Air Flow

d. Fuel Flow Rate

e. Residence Time (by calculation only)

[s. 285.65(10), Wis. Stats.]

(6) During the initial performance testing, the permittee shall perform simultaneous monitoring of the parameters identified in condition I.A.4.c.(5) to establish operational ranges for incorporation into the operation permit. [s. 285.65(10), Wis. Stats]

(7) The permittee shall install, calibrate, maintain and operate instrumentation to monitor the parameters identified by condition I.A.4.c.(5)a. - d. [s. 285.65(3) and (10), Wis. Stats.]

<sup>2</sup> If the compliance emission tests cannot be conducted within 180 days after the start of initial operation, the permit holder may request and the Department may approve, in writing, an extension of time to conduct the test(s).

**A. S04, B04 – Super Critical Pulverized Coal (SCPC) Boiler (Weston 4).**

**Pollutant:** 4. Oxides of Nitrogen (NOx) [CONTINUED]

**b. Compliance Demonstration:**

(6) The permittee shall comply with the NSPS compliance determination procedures and methods per s. NR 440.20(6), Wis. Adm. Code. A copy of the requirements attached with the permit. [s. 285.65(3), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

(8) The permittee shall comply with the NSPS reporting requirements per s. NR 440.20(9), Wis. Adm. Code. A copy of the requirements attached with the permit. [s. 285.65(3), Wis. Stats.]

(9) The permittee shall keep appropriate records to show that the boiler is equipped with low NOx burners. [s. 285.65(3), Wis. Stats.]

Note 1: Startup begins with flame on and ends when the ammonia injection starts and the SCR inlet gas temperature is greater than 580 degrees F. Shutdown begins when the ammonia injection stops and the SCR inlet flue gas temperature drops below 580 degrees F. Shutdown ends with flame out

Note 2: The boiler is subject to NSPS requirements under s. NR 440.20(5)(a)1., Wis. Adm. Code for nitrogen oxides. The NSPS limit is 0.50 pound per million Btu. The NSPS emission limits for nitrogen oxides apply at all times except during periods of startup, shut down or malfunction. The BACT limit for nitrogen oxides under I.A.4.a.(1), is more restrictive than the nitrogen oxides emission limits under NSPS, thus the boiler is expected to meet the emission limit for nitrogen oxides under NSPS.

**A. S04, B04 – Super Critical Pulverized Coal (SCPC) Boiler (Weston 4).**

**Pollutant:** 5. Carbon Monoxide (CO)

**Limitations:** (1) 0.15 pound per million Btu heat input averaged over any calendar day (excluding startup and/or shut down). [s. NR 405.08, Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65 (7), Wis. Stats.] (2) 3399 tons in any 12 consecutive months for all periods, including startup and shut down. (BACT) [s. NR 405.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65 (7), Wis. Stats.]

When determining compliance with the limits on an hourly and daily average, the permittee shall only account the hours, and days when the boiler operated.

See Notes 1 and 2.

**b. Compliance Demonstration:**

(1) Initial compliance emission tests shall be conducted within 180 days after the start of operation of the boiler to show compliance with the emission limitation.<sup>3</sup> [s. NR 439.07, Wis. Adm. Code]

(2) Carbon Monoxide Emissions shall be controlled using low NOx burners and good combustion practices to meet BACT limits. [s. NR 405.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.]

(3) The permittee shall demonstrate compliance with the carbon monoxide emission limits as follows:

(a) Daily average shall be determined by calculating the arithmetic average of all applicable hourly emission rates for a calendar day.

(b) The hourly emission rate shall be calculated by combining the CO concentration and diluent concentration (in % O<sub>2</sub> or % CO<sub>2</sub>) measurement consistent with the procedures specified in 40 CFR Part 75 Appendix F. The conversion factor, (K), shall be 0.7266 x 10E-7 lb CO/ft<sup>3</sup> – ppm.

(c) The annual emission limit in I.A.5.a.(2) shall be calculated using and totaling the hourly calculated emission rate. [s. 285.65(3), Wis. Stats.]

(4) The permittee shall maintain the ranges of the parameters identified in condition I.A.5.c.(3)a.-d., to meet good combustion practices. [s. 285.65(3), Wis. Stats.]

(5) The permittee shall perform the compliance emission tests required under condition I.A.5.b.(1) every 60 months within 60 days from the date of the last stack test as long as the permit remains valid. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

(1) Reference Test Method for Carbon Monoxide Emissions: Whenever compliance emission testing is required, US EPA Method 10, 10B, or an alternate method approved in writing by the Department or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(4), Wis. Adm. Code]

(2) The permittee shall install and operate continuous emissions monitoring systems (CEMs) for CO and oxygen or CO<sub>2</sub> within 60 days after initial start up of the boiler. The CEMs shall be calibrated within 90 days after initial start up of the boiler. Continuous emissions monitoring systems shall be installed and operated in accordance with 40 CFR Part 60 Appendix B, and s. NR 439.06(4), Wis. Adm. Code requirements. [s. 285.65(3), Wis. Stats.; s. NR 439.06, Wis. Adm. Code]

(3) During operation, the facility will calculate or continuously monitor and record the unit heat input and the following operating parameters on an hourly basis.

- a. Furnace outlet temperature, °F
  - b. Secondary Air Flow
  - c. Primary Air Flow
  - d. Fuel Flow Rate
  - e. Residence Time (by calculation only)
- [s. 285.65(10), Wis. Stats.]

(4) During the initial performance testing, the permittee shall perform simultaneous monitoring of the parameters identified in condition I.A.5.c.(3) to establish operational ranges for incorporation into the operation permit. [s. 285.65(10), Wis. Stats.]

(5) The permittee shall install, calibrate, maintain and operate instrumentation to monitor the parameters identified by condition I.A.5.c.(3)a.-d. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]

(6) Continuous emission monitoring methods and procedures shall comply with the requirements of s. NR 439.09, Wis. Adm. Code. [s. NR 439.09, Wis. Adm. Code]

(7) The permittee shall keep appropriate records to show that the boiler is equipped with low NOx burners. [s. 285.65(3), Wis. Stats.]

(8) The permittee shall keep records to show that they did not exceed the emission limit in I.A.5.a.(2) and condition I.A.5.b.(3). [s. 285.65(3), Wis. Stats.]

<sup>3</sup> If the compliance emission tests cannot be conducted within 180 days after the start of initial operation, the permit holder may request and the Department may approve, in writing, an extension of time to conduct the test(s).

Note 1: Startup period begins with flame on and ends when the ammonia injection starts and the SCR inlet gas temperature is greater than 580 degrees F. Shutdown begins when the ammonia injection stops and the SCR inlet flue gas temperature drops below 580 degrees F. Shutdown ends with flame out

Note 2: This limit is based on a BACT limit, 0.15 pound per million Btu heat input x heat input of the boiler x 5173.07 mmBtu/hr x 8,760 hours/year operation x ton/2000 lbs.

<b>A. S04, B04 – Super Critical Pulverized Coal (SCPC) Boiler 4 (Weston 4).</b>	
<b>Pollutant:</b> 6. Volatile Organic Compounds (VOC)	
<p><b>(a) Limitations: (1)</b> 0.0036 pound per million Btu heat input averaged over any calendar day. (BACT) [s. NR 405.08, Wis. Adm. Code; s. 285.65(7), Wis. Stats.]; <b>(2)</b> 81.60 tons in any 12 consecutive months for all periods, including startup and shut down. s. NR 405.08, Wis. Adm. Code; s. 285.65(7), Wis. Stats.] When determining compliance with the limits on an hourly and daily average, the permittee shall only account for the hours, and days when the boiler operated. See Notes 1 and 2</p>	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
<p>(1) Initial compliance emission tests shall be conducted within 180 days after the start of operation of the boiler to show compliance with the emission limitation.<sup>4</sup> [s. NR 439.07, Wis. Adm. Code]</p> <p>(2) VOC Emissions shall be controlled using low NOx burners and good combustion practices to meet BACT limits. [s. NR 419.03, Wis. Adm. Code; s. 285.65(3), Wis. Stats.]</p> <p>(3) The permittee shall maintain the ranges of the parameters identified in condition I.A.6.c.(2)a.-d., to meet good combustion practices when the boiler is operating and coal is being fired (BACT). [s. 285.65(3), Wis. Stats.]</p> <p>(4) The permittee shall demonstrate compliance with the volatile organic compound emission limit contained in I.A.6.(a). as follows:</p> <p>(a) VOC emissions shall be calculated based on each calendar day. See Note 3</p> <p>(b) The permittee shall calculate an hourly average emission rate based on measured data using CO CEMs required in I.A.5.b. (4) by combining the CO concentration and diluent concentration (in %O<sub>2</sub> or % CO<sub>2</sub>) measurement, consistent with the procedures specified in 40 CFR Part 75 Appendix F, in the following equation: VOC actual = VOC limit X (CO actual/CO limit) [s. 285.65(3), Wis. Stats.]</p> <p>(5) The permittee shall provide the following information to the Department for approval at least 4 months prior to the initial operation:</p> <p>(a) Compliance demonstration method that will be used and the records that will be kept to comply with the emission limit in I.A.6.a.(2). The Department will use this information to write the operation permit. [s. 285.65(3), Wis. Stats.]</p>	<p>(1) <u>Reference Test Method for VOC Emissions:</u> Whenever compliance emission testing is required, US EPA Method 25A and/or 18 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(3), Wis. Adm. Code]</p> <p>(2) During operation, the facility will calculate or continuously monitor and record the unit heat input and the following operating parameters on an hourly basis.</p> <ol style="list-style-type: none"> <li>Furnace outlet temperature, °F</li> <li>Secondary Air Flow</li> <li>Primary Air Flow</li> <li>Fuel Flow Rate</li> <li>Residence Time (by calculation only)</li> </ol> <p>[s. 285.65(10), Wis. Stats.]</p> <p>(3) During the initial performance testing, the permittee shall perform simultaneous monitoring of the parameters identified in condition I.A.6.c.(2) to establish operational ranges for incorporation into the operation permit. [s. 285.65(10), Wis. Stats.]</p> <p>(4) The permittee shall install, calibrate, maintain and operate instrumentation to monitor the parameters identified by condition I.A.6.c.(2)a.-d. [s. 285.65(3) and (10), Wis. Stats.]</p> <p>(5) The permittee shall keep appropriate records to show that the boiler is equipped with low NOx burners. [s. 285.65(3), Wis. Stats.]</p> <p>(6) The permittee shall monitor the temperature of the flue gas entering the SCR and keep records of the flue gas temperature entering the SCR to show compliance with Note 1. [s. 285.65(3), Wis. Stats.]</p>

Note 1: Startup period begins with flame on and ends when the ammonia injection starts and the SCR inlet gas temperature is greater than 580 degrees F. Shutdown begins when the ammonia injection stops and the SCR inlet flue gas temperature drops below 580 degrees F. Shutdown ends with flame out

<sup>4</sup> If the compliance emission tests cannot be conducted within 180 days after the start of initial operation, the permit holder may request and the Department may approve, in writing, an extension of time to conduct the test(s).

Note 2: This limit is based on a BACT limit, 0.0036 pound per million Btu heat input x heat input of the boiler, 5173X07mmBtu/hr x 8,760 hours/year operation x ton/2000 lbs.

<b>A. S04, B04 – Super Critical Pulverized Coal (SCPC) Boiler (Weston 4).</b>	
<b>Pollutant:</b> 7. Lead Emissions	
<b>a. Limitations:</b> 0.13 pound per hour. (BACT) [s. NR 405.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65 (7), Wis. Stats]	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
<p>(1) Initial compliance emission tests shall be conducted within 180 days after the start of operation of the boiler to show compliance with the emission limitation.<sup>5</sup> [s. NR 439.07, Wis. Adm. Code]</p> <p>(2) Lead emissions shall be controlled using a fabric filter baghouse system to meet the BACT limit. [ s. 285.65(3), Wis. Stats.]</p> <p>(3) The fabric filter baghouse system shall be in line and shall be operated at all times when the boiler is in operation and coal is being fired. [s. NR 406.10 and s. NR 407.09(4)(a)1., Wis. Adm. Code]</p> <p>(4) The operating pressure drop range across the fabric filter baghouse system shall be determined during the initial testing period. [s. 285.65(3), Wis. Stats.]</p> <p>(5) The pressure drop across the fabric filter baghouse system shall be maintained within the range identified by condition I.A.7.b.(4). [s. NR 407.09(4)(a)1., Wis. Adm. Code]</p> <p>(6) The permittee shall perform the compliance emission tests required under condition I.A.7.b.(1) every 60 months from the date of the last stack test as long as the permit remains valid. [s. 285.65(10), Wis. Stats.; s. 285.65(3), Wis. Stats.]</p>	<p>(1) <u>Reference Test Method for Lead Emissions:</u> Whenever compliance emission testing is required, US EPA Method 12 or Method 29 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(8), Wis. Adm. Code]</p> <p>(2) The permittee shall record the pressure drop across the fabric filter baghouse system once for every eight hours of operation. [s. NR 439.055(2)(b)1., Wis. Adm. Code]</p> <p>(3) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the fabric filter baghouse system, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(4) Instrumentation to monitor the pressure drop across the fabric filter baghouse system shall be installed and operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code]</p>

<sup>5</sup> If the compliance emission tests cannot be conducted within 180 days after the start of initial operation, the permit holder may request and the Department may approve, in writing, an extension of time to conduct the test(s).

**A. S04, B04 – Super Critical Pulverized Coal (SCPC) Boiler (Weston 4).**

**Pollutant:** 8. Mercury Emissions

**a. Limitations:** 1.7 pound per trillion Btu Heat Input in any 12 consecutive months . The 1.7 pound per trillion British thermal units (lb/TBtu) mercury limit in any 12 consecutive months (which is based on assumed control efficiency of 83% and an uncontrolled mercury level of 10 lb/TBtu) will be demonstrated using a Hg CEMs. If Hg CEMS are not certified by US EPA by the end of the construction phase of the project, WPS will comply with I.A.8.b. (4) and (5) until the CEMS become available and are certified by US EPA (BACT, MACT). [ss. NR 405.08, Wis. Adm. Code; s. 285.65(7), Wis. Stats.]

**b. Compliance Demonstration:**

- (1) Initial compliance emission tests shall be conducted within 180 days after the start of operation of the boiler to show compliance with the emission limitation.<sup>6</sup> [s. NR 439.07, Wis. Adm. Code]
- (2) (a) Mercury emissions shall be controlled using a fabric filter baghouse system coupled with the sorbent injection system to meet the BACT limit. (b) The minimum sorbent feed rate shall be the lb per Mcf of exhaust gas rate recommended by the vendor in order to achieve the 1.7 x 10<sup>-6</sup> lb/mmBtu emission limit at the maximum uncontrolled mercury level, or at a rate determined by an optimization study conducted for the control of Hg. (c) WPSC shall submit a plan to conduct an optimization study for the control of Hg to the Department for review and approval at least 4 months prior to the initial operation of the boiler. (d) The optimization study shall evaluate the effect of increased sorbent injection, increased slurry in the spray dryer and the optimization of the SCR unit. (e) The optimization study, which will be completed within 18 months of initial operation, will determine actual operating conditions and achievable Hg reductions. [ s. 285.65(3), Wis. Stats., s. 285.65(7), Wis. Stats.]
- (3) (a) Compliance demonstration identified earlier in this permit for the baghouse system, section I.A.1, shall be used as compliance demonstration techniques for mercury emissions. (b) The permittee shall provide information, on the parameters the facility will monitor for the sorbent injection system to demonstrate compliance with the emission limit, to the Department at least four (4) months prior to the expiration of the construction permit, [s. 285.65(3), Wis. Stats.]
- (4) The permittee shall perform 4 stack tests within 18 months of the initial operation and then perform biannual stack test, the first of which shall be performed at the beginning of the initial operation period and every 6 months until the initial operation period has been completed. (b) The permittee shall perform the compliance emission tests required under condition I.A.8.b.(1) every 60 months from the date of the last stack test as long as the permit remains valid. [s. 285.65(10), Wis. Stats.; s. 285.65(3), Wis. Stats.] Please see note 2
- (5) (a)The permittee shall determine mercury emission through coal sampling and analysis. The permittee shall monitor monthly average mercury content and higher heating value in the coal. (b) The data obtained from the monthly coal sampling and analysis shall be correlated with the results of the latest emission compliance test for the purpose of calculating mercury emission rate. [s. NR 405.08, Wis. Adm. Code] Please see Note 2
- (6) The permittee shall submit the results of the compliance testing to the Department and the Department will review the test results and adjust the emissions limit to more accurate reduction levels for mercury when the operation permit is issued. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

- (1) Reference Test Method for Mercury Emissions: Whenever compliance emission testing is required, US EPA Method 324 and the Ontario Hydro method or an alternative method approved in writing by the department, shall be used to demonstrate compliance. [s. NR 439.06(8), Wis. Adm. Code]
- (2) The permittee shall record the pressure drop across the fabric filter baghouse system once for every eight hours of operation. [s. NR 439.055(2)(b)1., Wis. Adm. Code]
- (3) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the fabric filter baghouse system, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code]
- (4) Instrumentation to monitor the pressure drop across the fabric filter baghouse system shall be installed and operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code]
- (5) The permittee will keep appropriate records to ensure that the sorbent injection system is operating appropriately as required under the conditions I.A.8.b.(3).(b). [s. 285.65(3), Wis. Stats.]
- (6) The permittee shall keep a continuous record of the sorbent feed rate in lb per Mcf of exhaust gas. [s. 285.65(7), Wis. Stats.]
- (7) The permittee shall keep a copy of the final test report for each Hg compliance test. [s. 285.65(7), Wis. Stats.]

<sup>6</sup> If the compliance emission tests cannot be conducted within 180 days after the start of initial operation, the permit holder may request and the Department may approve, in writing, an extension of time to conduct the test(s).

<b>A. S04, B04 – Super Critical Pulverized Coal (SCPC) Boiler (Weston 4).</b>	
<b>Pollutant:</b> 9. Emissions of Fluorides	
<b>a. Limitations:</b> 0.000217 pound per million Btu heat input (1.12 pounds per hour). (BACT) [s. NR 405.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65 (7) Wis. Stats.]	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
(1) Initial compliance emission tests shall be conducted within 180 days after the start of operation of the boiler to show compliance with the emission limitation. <sup>7</sup> [s. NR 439.07, Wis. Adm. Code]	(1) <u>Reference Test Method for Emissions of Fluorides:</u> Whenever compliance emission testing is required, US EPA Method 13B or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(8), Wis. Adm. Code]
(2) Emissions of fluorides shall be controlled by a fabric filter baghouse system and a dry FGD system. [s. NR 406.10, Wis. Adm. Code, s. 285.65(3), Wis. Stats.]	
(3) Compliance demonstration identified earlier in this permit for fabric filter baghouse system and the dry FGD system, section I.A.3, I.A.1. shall be used as compliance demonstration techniques for fluoride emissions as well. [s. 285.65(3), Wis. Stats.]	
<b>Pollutant:</b> 10. Visible Emissions	
<b>a. Limitations:</b> 20% opacity or number 1 on the Ringlemann chart. [s. NR 431.05, Wis. Adm. Code, s. NR 440.20(3)(b), Wis. Adm. Code] See Note 1	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
(1) Opacity shall be controlled using a fabric filter baghouse system. [s. 285.65(3), Wis. Stats.]	(1) <u>Reference Test Method for Visible Emissions:</u> Whenever compliance emission testing is required, US EPA Method 9 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(9)(a)1., Wis. Adm. Code]
(2) The fabric filter baghouse system shall be in line and shall be operated at all times when the boiler is in operation and coal is being fired. [s. NR 406.10, Wis. Adm. Code; s. NR 407.09(4)(a)1., Wis. Adm. Code]	(2) The permittee shall install, calibrate, maintain and operate a continuous monitoring system, and record the output of the system, for measuring the opacity of emissions discharged to the atmosphere. [s. NR 440.20(7)(a), Wis. Adm. Code, s. 285.65(10), Wis. Stats.]
	(3) Continuous opacity monitoring methods and procedures shall comply with the requirements of s. NR 440.20(7)(a), Wis. Adm. Code and s. NR 439.09, Wis. Adm. Code. [s. NR 439.09, Wis. Adm. Code; s. 285.65(3), Wis. Stats.]
	(4) The continuous opacity monitor (COM) may be located after the baghouse. [s. 285.65(3), Wis. Stats.]

Note 1: No owner or operator may cause to be discharged into the atmosphere any gases which exhibit greater than 20% opacity (6-minute average), except for one 6-minute period per hour of not more than 27% opacity per s. NR 440.20(3)(b), Wis. Adm. Code.

<sup>7</sup> If the compliance emission tests cannot be conducted within 180 days after the start of initial operation, the permit holder may request and the Department may approve, in writing, an extension of time to conduct the test(s).

<b>A. S04, B04 – Super Critical Pulverized Coal (SCPC) Boiler (Weston 4).</b>	
<b>Pollutant:</b> 11. Beryllium	
<b>a. Limitations:</b> 1.3 pound per trillion Btu heat input. (BACT) [s. NR 405.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65 (7) Wis. Stats.]	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
<p>(1) Initial compliance emission tests shall be conducted within 180 days after the start of operation of the boiler to show compliance with the emission limitation.<sup>8</sup> [s. NR 439.07, Wis. Adm. Code]</p> <p>(2) Emissions of beryllium shall be controlled by a fabric filter baghouse system to meet the BACT limit. [s. NR 406.10, Wis. Adm. Code; s. 285.65(3), Wis. Stats.]</p> <p>(3) Compliance demonstration identified earlier in this permit for fabric filter baghouse system, section I.A.1. shall be used as compliance demonstration techniques for beryllium emissions as well. [s. 285.65(3), Wis. Stats.]</p> <p>(4) The permittee shall perform the compliance emission tests required under condition I.A.11.b.(1) every 60 months from the date of the last stack test as long as the permit remains valid. [s. 285.65(10), Wis. Stats.; s. 285.65(3), Wis. Stats.]</p> <p>(5) The permittee shall monitor beryllium emissions through coal sampling and analysis. The permittee shall monitor beryllium content and higher heating value in the coal. (b) The data obtained from the coal sampling and analysis shall be correlated with the results of the latest emission compliance test for the purpose of calculating beryllium emission rate. The sampling protocol shall be the same as required under condition I.A.3.b.(5). [s. NR 405.08, Wis. Adm. Code].</p>	<p>(1) Reference <u>Test Method for Emissions of Beryllium</u>: Whenever compliance emission testing is required, US EPA Method 29 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(8), Wis. Adm. Code]</p> <p>(2) The permittee shall record the pressure drop across the fabric filter baghouse system once for every eight hours of operation.. [s. NR 439.055(2)(b)1., Wis. Adm. Code]</p> <p>(3) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the fabric filter baghouse system, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(4) Instrumentation to monitor the pressure drop across the fabric filter baghouse system shall be installed and operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code]</p>

<sup>8</sup> If the compliance emission tests cannot be conducted within 180 days after the start of initial operation, the permit holder may request and the Department may approve, in writing, an extension of time to conduct the test(s).

<b>A.S04, B04– Super Critical Pulverized Coal (SCPC) Boiler (Weston 4).</b>	
<b>Pollutant:</b> 12. Hazardous air pollutants (inorganic solid HAPs, inorganic acid HAPs, Organic HAPs) regulated under sec. 112 of the Clean Air Act.	
<b>a. Limitations:</b> (1) The permittee shall use fabric filter baghouse and comply with the PM/PM10 limits in I.A.1.a to meet case by case MACT for inorganic solid HAPs; (2) The permittee shall use a dry flue gas desulfurization system (FGD) and comply with the emission limitation of condition I.A.3.a.(1) to meet case by case MACT limits for inorganic acid HAPs; (3) The permittee shall comply with and meet the VOC emission limits to comply with case by case MACT for organic HAPs [s. 285.65(13), Wis. Stats.]	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
<p>(1) Inorganic HAPs emission shall be controlled using a fabric filter baghouse system. [s. 285.65(3), Wis. Stats.]</p> <p>(2) The compliance demonstration method identified in section I.A.1.b. shall be used as compliance demonstration techniques for inorganic HAPs emission limitations in I.A.12.a.(1). [s. 285.65(3), Wis. Stats.]</p> <p>(3) Inorganic acid HAPs emission shall be controlled using a dry flue gas desulfurization system (FGD) [s. 285.65(3), Wis. Stats.]</p> <p>(4) The compliance demonstration method identified in section I.A.3.b. shall be used as compliance demonstration techniques for inorganic acid HAPs emission limitations in I.A.12.a. (2). [s. 285.65(3), Wis. Stats.]</p> <p>(5) Organic HAPs emission shall be controlled using good combustion practices. [s. 285.65(3), Wis. Stats.]</p> <p>(6) The compliance demonstration method identified in section I.A.6.b. shall be used as compliance demonstration techniques for organic HAPs emission limitations in I.A.12.a. (3). [s. 285.65(3), Wis. Stats.]</p>	<p>(1) <u>Reference Test Method for organic HAPs Emissions; inorganic solid HAPs, and inorganic acid HAPs:</u> Whenever compliance testing is required, a compliance test protocol approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(8), Wis. Adm. Code]</p>

<b>A.S04, B04– Super Critical Pulverized Coal (SCPC) Boiler (Weston 4).</b>	
<b>Pollutant:</b> 13 Ammonia Emissions	
<b>a. Limitations:</b> (1) 3 ppm volume dry corrected to 3% percent oxygen and 55.52 pounds per hour <sup>9</sup> [ s. NR 445.04(1), Wis. Adm. Code]	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
<p>(1) The permittee shall demonstrate compliance with applicable ammonia hourly emission limit by performing a stack test using USEPA conditional test Method 027, within 180 days after initial start up of the boiler<sup>10</sup>.</p> <p>(a) Compliance emission tests shall be conducted at 100% load operation.</p> <p>(b) If operation at the 100% load is not feasible, the source shall operate at a capacity level that is approved by the Department in writing. [s. NR 439.075(3), Wis. Adm. Code]</p> <p>(2) The permittee shall perform the compliance emission tests required under condition I.A.13.b.(1) every 60 months from the date of the last stack test as long as the permit remains valid. [s. 285.65(10), Wis. Stats.; s. 285.65(3), Wis. Stats.]</p>	<p>(1) <u>Reference Test Method for Ammonia:</u> Whenever compliance testing for ammonia is required, USEPA Method 027, or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(8), Wis. Adm. Code]</p>

<sup>9</sup> These emissions do not result from combustion. Aqueous ammonia is used as the reagent for the SCR. Ammonia that does not react is exhausted out of the stack.

<sup>10</sup> If the compliance emission tests cannot be conducted within 180 days after the start of initial operation, the permit holder may request and the Department may approve, in writing, an extension of time to conduct the test(s).

<b>A. S04, B04– Super Critical Pulverized Coal (SCPC) Boiler.</b>	
<b>Pollutant:</b> 14. Sulfuric Acid Mist (H2SO4)	
<b>a. Limitations:</b> 0.005 pound per million Btu heat input, based upon a 24-hour average. (BACT) [s. NR 405.08(2), Wis. Adm. Code]	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
<p>(1) Initial compliance emission tests shall be conducted within 180 days after the start of operation of the boiler to show compliance with the emission limitation.<sup>11</sup> [s. NR 439.07, Wis. Adm. Code]</p> <p>(2) Sulfuric acid mist emissions shall be controlled by a FGD system to meet the BACT limits. [s. NR 405.08(2), Wis. Adm. Code]</p> <p>(3) The boiler may only be fired on coal and natural gas. [s. NR 405.08(2), Wis. Adm. Code; s. NR 406.10, Wis. Adm. Code; s. 285.65(3), Wis. Stats.]</p> <p>(4) The permittee shall perform the compliance emission tests required under condition I.A.14.b.(1) every 60 months from the date of the last stack test as long as the permit remains valid. [s. NR 439.075(3)(b) Wis. Adm. Code]</p> <p>(5) The flow rate of aqueous lime/recycled ash slurry to the FGD system and the pressure drop across the scrubber shall be periodically monitored and maintained within the range specified under condition I.A.14.c.(2). [s. 285.65(3), Wis. Stats.]</p> <p>(6) During the initial performance testing, the permittee shall perform simultaneous monitoring of the parameters identified in condition I.A.14.c.(3) to establish operational ranges for incorporation into the operation permit. [s. 285.65(10), Wis. Stats.]</p> <p>(7) The permittee shall maintain the ranges of the parameters identified in condition I.A.14.c.(3)a.-d., to meet good combustion practices. [s. 285.65(3), Wis. Stats.]</p>	<p>(1) <u>Reference Test Method for Sulfur Acid Mist Emissions:</u> Whenever compliance emission testing is required, US EPA Method 8 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(8), Wis. Adm. Code]</p> <p>(2) The permittee shall provide to the department, at least 4 months prior to the expiration of the construction permit, information on the operational liquid flow rate to the FGD system to be used for monitoring the aqueous lime/recycled ash slurry flow rate to the FGD system, and the pressure drop range across the scrubber as required under condition I.A.14.b.(6). [s. 285.65(10), Wis. Stats.]</p> <p>(3) During operation, the facility will calculate or continuously monitor and record the unit heat input and the following operating parameters on an hourly basis.</p> <p>a. Furnace outlet temperature, °F (SCR temperature)</p> <p>b. Secondary Air Flow</p> <p>c. Primary Air Flow</p> <p>d. Fuel Flow Rate or heat input as measure by CEM(#/MMBtu)</p> <p>e. Residence Time (by calculation only)</p> <p>[s. 285.65(10), Wis. Stats.]</p> <p>(4) The permittee shall install, calibrate, maintain and operate instrumentation to monitor the parameters identified by condition I.A.14.c.(4)a.-d and I.A.14.c.(2). [s. 285.65(3) and (10), Wis. Stats.]</p>

<sup>11</sup> If the compliance emission tests cannot be conducted within 180 days after the start of initial operation, the permit holder may request and the Department may approve, in writing, an extension of time to conduct the test(s).

<b>A. S04, B04– Super Critical Pulverized Coal (SCPC) Boiler (Weston 4).</b>	
<b>Pollutant:</b> 15. Hydrogen Chloride	
<b>a. Limitations:</b> 10.94 pounds per hour, based upon a 24-hour average (MACT), regulated under sec. 112 of the Clean Air Act. [s. 285.65(3), Wis. Stats.]	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
<p>(1) Initial compliance emission tests shall be conducted within 180 days after the start of operation of the boiler to show compliance with the emission limitation. [s. NR 439.07, Wis. Adm. Code]</p> <p>(2) Hydrogen Chloride emissions shall be controlled by the use of dry flue gas desulfurization (FGD) Systems to meet the MACT limits. [s. NR 405.08(2), Wis. Adm. Code]</p> <p>(3) The boiler may only be fired on coal and natural gas. [s. NR 405.08(2) , Wis. Adm. Code; s. NR 406.10, Wis. Adm. Code; s. 285.65(3), Wis. Stats.]</p> <p>(4) The permittee shall perform the compliance emission tests required under condition I.A.15.b.(1) every 60 months from the date of the last stack test as long as the permit remains valid. [s. NR 439.075(3)(b) Wis. Adm. Code]</p> <p>(5) The flow rate of aqueous lime/recycled ash slurry to the FGD system and the pressure drop across the scrubber shall be periodically monitored and maintained within the range specified under condition I.A.15.c.(2). [s. 285.65(3), Wis. Stats.]</p>	<p>(1) <u>Reference Test Method for Hydrogen Chloride Emissions:</u> Whenever compliance emission testing is required, US EPA Method 26A or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(8), Wis. Adm. Code]</p> <p>(2) The permittee shall provide to the department, at least 4 months prior to the expiration of the construction permit, information on the operational liquid flow rate to the FGD system to be used for monitoring the aqueous lime/recycled ash slurry flow rate to the FGD system, and the pressure drop range across the scrubber as required under condition I.A.15.b.(5), and shall incorporate this information into the Malfunction Prevention and Abatement Plan. [s. 285.65(10), Wis. Stats.]</p> <p>(3) Instrumentation to monitor the aqueous lime/recycled ash slurry to the dry flue gas desulfurization (FGD) system and pressure drop gauge Across shall be installed and operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code]</p>

<b>B. B25, S25 – Weston Unit 4 Auxiliary Boiler</b>	
<b>Pollutant:</b> 1 Particulate Matter (PM/PM10)	
<p>a. <b>Limitations:</b> (1) The emissions may not exceed 0.0075 pound per million Btu (1.712 pounds per hour) when firing natural gas. (BACT); (2) The use of good combustion practices. (BACT); (3) The total hours of operation may not exceed 2,000 hours in any 12 consecutive months. [s. NR 405.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats.]</p>	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
<p>(1) Initial compliance emission tests shall be conducted within 180 days after the start of operation of the boiler to show compliance with the emission limitation.12 [s. NR 439.07, Wis. Adm. Code]</p> <p>(2) The permittee shall determine the hourly emissions using fuel consumption records and emissions factor determined by stack testing. [s. 285.65(3), Wis. Stats.]</p> <p>(3) <u>Stack Parameters</u> These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed.</p> <p>(a) The height of the stack S25 shall be at least 255.0 feet above ground level. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]</p> <p>(b) The inside diameter at the outlet of the stack S25 may not exceed 4.0 feet. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]</p> <p>(4) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit to demonstrate compliance with good combustion practices: (a) A copy of the original equipment manufacturer (OEM) procedures that should be followed to maintain the boiler and (b) A list of items that will be checked and maintained and their frequency, to ensure that the boiler is operating properly. This information will be used by the Department to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats., s. 285.65(10), Wis. Stats.]</p> <p>(5) The permittee shall keep daily records in hours the boiler operated. The records in total hours the boiler operated in any 12 consecutive months shall be kept to show compliance with I.B.1.a.(3). [s. 285.65(3), Wis. Stats.]</p>	<p>(1) <u>Reference Test Method for Particulate Matter Emissions:</u> Whenever compliance emission testing is required, test procedures in 40 CFR 60 and US EPA Method 5, including backhalf (Method 202) or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(1), Wis. Adm. Code]</p> <p>(2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(3) The permittee shall keep records on the hours of operation as required in condition I.B.1.b.(5). [s. 285.65(10), Wis. Stats., s. 285.65(3), Wis. Stats.]</p> <p>(4) The permittee shall retain on site, plans and specifications that indicate the boiler's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(5) The permittee shall record information on the maintenance required in condition I.B.1.b.(4). [s. NR 439.04(1)(a)6, Wis. Adm. Code]</p>

12 If the compliance emission tests cannot be conducted within 180 days after the start of initial operation, the permit holder may request and the Department may approve, in writing, an extension of time to conduct the test(s).

**B. B25, S25 – Weston Unit 4 Auxiliary Boiler**

**Pollutant:** 2. Particulate Matter Emissions less than 10 microns (PM<sub>10</sub>)

**a. Limitations:** (1) The emissions may not exceed 0.0075 pound per million Btu (1.712 pounds per hour) when firing natural gas. (BACT); (2) The use of good combustion practices. (BACT); (3) The total hours of operation may not exceed 2,000 hours in any 12 consecutive months. [s. NR 405.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats.]

**b. Compliance Demonstration:**

(1) Initial compliance emission tests shall be conducted within 180 days after the start of operation of the boiler to show compliance with the emission limitation.<sup>13</sup> [s. NR 439.07, Wis. Adm. Code]

(2) The permittee shall determine the hourly emissions using fuel consumption records and emissions factor determined by stack testing. [s. 285.65(3), Wis. Stats.]

(3) Stack Parameters These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed.

(a) The height of the stack S25 shall be at least 255 feet above ground level. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]

(b) The inside diameter at the outlet of the stack S25 may not exceed 4.0 feet. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]

(4) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit to demonstrate compliance with good combustion practices: (a) A copy of the original equipment manufacturer (OEM) procedures that should be followed to maintain the boiler; and (b) A list of items that will be checked and maintained and their frequency, to ensure that boiler is operating properly. This information will be used by the Department to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.] (5) The permittee shall keep daily records in hours the boiler operated. The records in total hours the boiler operated in any 12 consecutive months shall be kept to show compliance with I.B.2.a. (3). [s. 285.65(3), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

(1) Reference Test Method for Particulate Matter Emissions: Whenever compliance emission testing is required, US EPA Method 5, including backhalf (Method 202) or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(1), Wis. Adm. Code]

(2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code]

(3) The permittee shall keep records on the hours of operation as required in condition I.B.2.b.(5). [s. 285.65(10), Wis. Stats.; s. 285.65(3), Wis. Stats.]

(4) The permittee shall retain on site, plans and specifications that indicate the boiler's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]

(5) The permittee shall record information on the maintenance required in condition I.B.2.b.(4). [s. NR 439.04(1)(a)6, Wis. Adm. Code]

<sup>13</sup> If the compliance emission tests cannot be conducted within 180 days after the start of initial operation, the permit holder may request and the Department may approve, in writing, an extension of time to conduct the test(s).

**B. B25, S25 – Weston Unit 4 Auxiliary Boiler**

**Pollutant:** 3. Sulfur Dioxide (SO<sub>2</sub>)

**a. Limitations:** (1) The emissions may not exceed 0.0006 pound per million Btu (0.14 pound per hour) when firing natural gas. (BACT); (2) The use of good combustion practices. (BACT); (3) The total hours of operation may not exceed 2,000 hours in any 12 consecutive months. [s. NR 405.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats.]

**b. Compliance Demonstration:**

- (1) The permittee shall determine the hourly emissions using fuel consumption records and vendor provided or AP-42 emission factors. [s. 285.65(3), Wis. Stats.]
- (2) The permittee shall fire natural gas. This condition is established to meet BACT emission limit. [ s. NR 405.08(2), Wis. Adm. Code]
- (3) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit to demonstrate compliance with good combustion practices: (a) A copy of the original equipment manufacturer (OEM) procedures that should be followed to maintain the boiler; and (b) A list of items that will be checked and maintained and their frequency, to ensure that boiler is operating properly. This information will be used by the Department to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]
- (4) The permittee shall keep daily records in hours the boiler operated. The records in total hours the boiler operated in any 12 consecutive months shall be kept to show compliance with I.B.3.a.(3) [s. 285.65(3), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

- (1) Reference Test Method for Sulfur Dioxide Emissions: Whenever compliance emission testing is required, US EPA Method 6, 6A or 6C or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(2), Wis. Adm. Code]
- (2) The permittee shall keep records on the hours of operation as required in condition I.B.3.b.(4). [s. 285.65(10), Wis. Stats.; s. 285.65(3), Wis. Stats.]
- (3) The permittee shall keep retain on site, plans and specifications that indicate the boiler's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]
- (4) The permittee shall record information on the maintenance required in condition I.B.3.b.(3). [s. NR 439.04(1)(a)6, Wis. Adm. Code]

<b>B. B25, S25 – Weston Unit 4 Auxiliary Boiler</b>	
<b>Pollutant:</b> 4. Oxides of Nitrogen (NOx)	
<p><b>a. Limitations:</b> (1) The emissions may not exceed 0.10 pound per million Btu (22.9 pounds per hour) when firing natural gas. (BACT); (2) The use of good combustion practices and use of low NOx burners (BACT); (3) The total hours of operation may not exceed 2,000 hours in any 12 consecutive months. [s. NR 405.08(2), Wis. Adm. Code; s. NR 440.205(5)(a), Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats.] See Note 1</p>	
<p><b>b. Compliance Demonstration:</b></p> <p>(1) The permittee shall determine the hourly emissions using fuel consumption record and vendors or AP-42 emission factors. [s. 285.65(3), Wis. Stats.]</p> <p>(2) The permittee shall fire natural gas. This condition is established to meet BACT emission limit. [ s. NR 405.08(2), Wis. Adm. Code]</p> <p>(3) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit to demonstrate compliance with good combustion practices: (a) A copy of the original equipment manufacturer (OEM) procedures that should be followed to maintain the boiler; and (b) A list of items that will be checked and maintained and their frequency, to ensure that boiler is operating properly. This information will be used by the Department to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]</p> <p>(4) The permittee shall keep daily records in hours the boiler operated. The records in total hours the boiler operated in any 12 consecutive months shall be kept to show compliance with I.B.4.a.(3). [s. 285.65(3), Wis. Stats.]</p> <p>(5) The permittee shall comply with the NSPS compliance requirements per s. NR 440.205(7)(c), Wis. Adm. Code. A copy of the requirements included with the permit. [s/ 285.65(3), Wis. Stats.]</p>	<p><b>c. Test Methods, Recordkeeping, and Monitoring:</b></p> <p>(1) <u>Reference Test Method for Nitrogen Oxide Emissions:</u> Whenever compliance emission testing is required, test procedures in 40 CFR 60, US EPA Method 7 or an alternate method approved in writing by the Department shall be used to demonstrate compliance. [s. NR 439.06(6), Wis. Adm. Code]</p> <p>(2) The permittee shall keep records on the hours of operation as required in condition I.B.4.b.(4). [s. 285.65(10), Wis. Stats., s. 285.65(3), Wis. Stats.]</p> <p>(3) The permittee shall keep retain on site, plans and specifications that indicate the boiler's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(4) The permittee shall record information on the maintenance required in condition I.B.4.b.(3). [s. NR 439.04(1)(a)6, Wis. Adm. Code]</p> <p>(5) The permittee shall keep manufacturer's information that shows that low NOx burners were installed. [s. 285.65(3), Wis. Stats.]</p> <p>(6) The permittee shall comply with the NSPS emission monitoring requirements per s. NR 440.205(9), Wis. Adm. Code. A copy of the requirements included with the permit. [s/ 285.65(3), Wis. Stats.]</p> <p>(7) The permittee shall comply with the NSPS reporting and recordkeeping requirements per s. NR 440.205(10), Wis. Adm. Code. A copy of the requirements included with the permit. [s/ 285.65(3), Wis. Stats.]</p>

Note 1: The auxiliary boiler is subject to NSPS for NOx under s. NR 440.205(5)(a), Wis. Adm. Code. For a high heat release rate the NSPS limit is 0.20 lb/mmBtu. The proposed BACT limit is more restrictive than the NSPS limit for nitrogen oxides, thus the auxiliary boiler is expected to meet the NSPS limit for nitrogen oxides.

**B. B25, S25 – Weston Unit 4 Auxiliary Boiler**

**Pollutant:** 5. Carbon Monoxide

**a. Limitations:** (1) The emissions may not exceed 0.08 pound per million Btu (18.4 pounds per hour) when firing natural gas (BACT); (2) The use of good combustion practices and use of low NOx burners. (BACT); (3) The total hours of operation may not exceed 2,000 hours in any 12 consecutive months. [s. NR 405.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats.]

**b. Compliance Demonstration:**

(1) The permittee shall determine the hourly emissions using fuel consumption records and AP-42 factor or vendor provided emissions factor [s. 285.65(3), Wis. Stats.]

(2) The permittee shall fire natural gas. This condition is established to meet BACT emission limit. [ s. NR 405.08(2), Wis. Adm. Code]

(3) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit to demonstrate compliance with good combustion practices: (a) A copy of the original equipment manufacturer (OEM) procedures that should be followed to maintain the boiler; and (b) A list of items that will be checked and maintained and their frequency, to ensure that boiler is operating properly. This information will be used by the Department to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]

(4) The permittee shall keep daily records in hours the boiler operated. The records in total hours the boiler operated in any 12 consecutive months shall be kept to show compliance with I.B.5.a.(3). [s. 285.65(3), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

(1) Reference Test Method for Carbon Monoxide Emissions: Whenever compliance emission testing is required, test procedures in 40 CFR Part 60, Appendix A, US EPA Method 10, or an alternate method approved in writing by the Department shall be used to demonstrate compliance. [s. NR 439.06(4), Wis. Adm. Code]

(2) The permittee shall keep records on the hours of operation as required in condition I.B.5.b.(4). [s. 285.65(10), Wis. Stats.; s. 285.65(3), Wis. Stats.]

(3) The permittee shall keep retain on site, plans and specifications that indicate the boiler's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]

(4) The permittee shall record information on the maintenance required in condition I.B.5.b.(3). [s. NR 439.04(1)(a)6, Wis. Adm. Code]

**B. B25, S25 – Weston Unit 4 Auxiliary Boiler**

**Pollutant:** 6. Volatile Organic Compounds (VOC)

**(a) Limitations:** (1) The emissions may not exceed 0.0054 pound per million Btu (1.24 pounds per hour) when firing natural gas (BACT); (2) The use of good combustion practices and use of low NOx burners. (BACT); (3) The total hours of operation may not exceed 2,000 hours in any 12 consecutive months. [s. NR 405.08, Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats.]

**b. Compliance Demonstration:**

- (1) The permittee shall determine the hourly emissions using fuel consumption records and AP-42 emissions factor or vendor provided emission factors. [s. 285.65(3), Wis. Stats.]
- (2) The permittee shall fire natural gas. This condition is established to meet BACT emission limit. [ s. NR 405.08(2), Wis. Adm. Code]
- (3) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit to demonstrate compliance with good combustion practices: (a) A copy of the original equipment manufacturer (OEM) procedures that should be followed to maintain the boiler; and (b) A list of items that will be checked and maintained and their frequency, to ensure that boiler is operating properly. This information will be used by the Department to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]
- (4) The permittee shall keep daily records in hours the boiler operated. The records in total hours the boiler operated in any 12 consecutive months shall be kept to show compliance with I.B.6.a.(3). [s. 285.65(3), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

- (1) Reference Test Method for VOC Emissions: Whenever compliance emission testing is required, test procedures in 40 CFR Part 60, US EPA Method 25 or 18, or an alternate method approved in writing by the Department shall be used to demonstrate compliance. [s. NR 439.06(3), Wis. Adm. Code]
- (2) The permittee shall keep records on the hours of operation as required in condition I.B.6.b.(4). [s. 285.65(10), Wis. Stats.; s. 285.65(3), Wis. Stats.]
- (3) The permittee shall keep retain on site, plans and specifications that indicate the boiler's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]
- (4) The permittee shall record information on the maintenance required in condition I.B.6.b.(3). [s. NR 439.04(1)(a)6, Wis. Adm. Code]

**B. B25, S25 – Weston Unit 4 Auxiliary Boiler**

**Pollutant:** 7. Lead Emissions

**a. Limitations:** (1) The emissions may not exceed 8.84 E-08 pound per hour when firing natural gas. (BACT); (2) The use of good combustion practices. (BACT); (3) The total hours of operation may not exceed 2,000 hours in any 12 consecutive months. [s. NR 405.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats.]

**b. Compliance Demonstration:**

(1) The permittee shall determine the hourly emissions using fuel consumption records and vendor provided or AP-42 emissions factor. [s. 285.65(3), Wis. Stats.]

(2) The permittee shall fire natural gas. This condition is established to meet BACT emission limit. [ s. NR 405.08(2), Wis. Adm. Code]

(3) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit to demonstrate compliance with good combustion practices: (a) A copy of the original equipment manufacturer (OEM) procedures that should be followed to maintain the boiler and (b) A list of items that will be checked and maintained and their frequency, to ensure that the boiler is operating properly. This information will be used by the Department to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]

(4) The permittee shall keep daily records in hours the boiler operated. The records in total hours the boiler operated in any 12 consecutive months shall be kept to show compliance with I.B.7.a.(3). [s. 285.65(3), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

(1) Reference Test Method for Lead Emissions: Whenever compliance emission testing is required, US EPA Method 12 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(8), Wis. Adm. Code]

(2) The permittee shall keep records on the hours of operation as required in condition I.B.7.b.(4). [s. 285.65(10), Wis. Stats., s. 285.65(3), Wis. Stats.]

(3) The permittee shall keep retain on site, plans and specifications that indicate the boiler's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]

(4) The permittee shall record information on the maintenance required in condition I.B.7.b.(3). [s. NR 439.04(1)(a)6, Wis. Adm. Code]

**B. B25, S25 – Weston Unit 4 Auxiliary Boiler**

**Pollutant:** 8. Mercury Emissions

**a. Limitations:** (1) The emissions may not exceed 0.000059 pound per hour when firing natural gas. (BACT); (2) The use of good combustion practices and firing clean fuel (natural gas). (BACT); (3) The total hours of operation may not exceed 2,000 hours in any 12 consecutive months. [s. NR 405.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats.]

**b. Compliance Demonstration:**

(1) The permittee shall determine the hourly emissions using fuel consumption records and vendor provided or AP42 emissions factor. [s. 285.65(3), Wis. Stats.]

(2) The permittee shall fire natural gas. This condition is established to meet BACT emission limit. [ s. NR 405.08(2), Wis. Adm. Code]

(3) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit to demonstrate compliance with good combustion practices: (a) A copy of the original equipment manufacturer (OEM) procedures that should be followed to maintain the boiler and (b) A list of items that will be checked and maintained and their frequency, to ensure that the boiler is operating properly. This information will be used by the Department to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]

(4) The permittee shall keep daily records in hours the boiler operated. The records in total hours the boiler operated in any 12 consecutive months shall be kept to show compliance with I.B.8.a.(3). [s. 285.65(3), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

(1) Reference Test Method for Mercury Emissions: Whenever compliance emission testing is required, US EPA Method 29 or an alternative method approved in writing by the department shall be used to demonstrate compliance. [s. NR 439.06(8), Wis. Adm. Code]

(2) The permittee shall keep records on the hours of operation as required in condition I.B.8.b.(4). [s. 285.65(10), Wis. Stats., s. 285.65(3), Wis. Stats.]

(3) The permittee shall keep retain on site, plans and specifications that indicate the boiler's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]

(4) The permittee shall record information on the maintenance required in condition I.B.8.b.(3). [s. NR 439.04(1)(a)6, Wis. Adm. Code]

<b>B. B25, S25 – Weston Unit 4 Auxiliary Boiler</b>	
<b>Pollutant:</b> 9. Emissions of Fluorides	
<b>a. Limitations:</b> (1) The emissions may not exceed 0.00027 pound per million Btu ( 0.062 pound per hour) when firing natural gas. (BACT); (2) The use of good combustion practices and firing clean fuel (natural gas). (BACT); (3) The total hours of operation may not exceed 2,000 hours in any 12 consecutive months. [s. NR 405.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats.]	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
(1) The permittee shall determine the hourly emissions using fuel consumption records and vendor provided or AP-42 emissions factor. [s. 285.65(3), Wis. Stats.]  (2) The permittee shall fire natural gas. This condition is established to meet BACT emission limit. [ s. NR 405.08(2), Wis. Adm. Code]  (3) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit to demonstrate compliance with good combustion practices: (a) A copy of the original equipment manufacturer (OEM) procedures that should be followed to maintain the boiler and (b) A list of items that will be checked and maintained and their frequency, to ensure that the boiler is operating properly. This information will be used by the Department to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]  (4) The permittee shall keep daily records in hours the boiler operated. The records in total hours the boiler operated in any 12 consecutive months shall be kept to show compliance with I.B.9.a. (3). [s. 285.65(3), Wis. Stats.]	(1) <u>Reference Test Method for Emissions of Fluorides:</u> Whenever compliance emission testing is required, US EPA Method 13B or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(8), Wis. Adm. Code]  (2) The permittee shall keep records on the hours of operation as required in condition I.B.9.b.(4). [s. 285.65(10), Wis. Stats., s. 285.65(3), Wis. Stats.]  (3) The permittee shall keep retain on site, plans and specifications that indicate the boiler's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]  (4) The permittee shall record information on the maintenance required in condition I.B.9.b.(3). [s. NR 439.04(1)(a)6, Wis. Adm. Code]
<b>LL. B25, S25 Weston Unit 4 Auxiliary Boiler</b>	
<b>Pollutant:</b> 10. Visible Emissions	
<b>a. Limitations:</b> 20% opacity or number 1 on the Ringlemann chart. [s. NR 431.05, Wis. Adm. Code, s. NR 440.207(4)(c), Wis. Adm. Code] See Note 1	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
(1) The permittee shall fire natural gas. This condition is established to meet BACT emission limit. [s. NR 405.08(2), Wis. Adm. Code]	(1) <u>Reference Test Method for Visible Emissions:</u> Whenever compliance emission testing is required, US EPA Method 9 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(9)(a)1., Wis. Adm. Code]  (2) The permittee shall keep retain on site, plans and specifications that indicate the boiler's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]

Any gases emitted from the stack shall not have an opacity greater than 20% (6 minutes average). The exception is one 6 minute period per hour when the opacity not exceeding 27%. The opacity standard does not apply during periods of startup and shut down or malfunction..

**B. B25, S25 – Weston Unit 4 Natural Gas-Fired Auxiliary Boiler**

**Pollutant:** 11. Hazardous air pollutants regulated under sec. 112 of the Clean Air Act.

**a. Limitations:** (1) 400 ppm Carbon Monoxide by volume on a dry basis corrected to 3% O<sub>2</sub> (30-day rolling average). Note 1 [s. 285.65(13), Wis. Stats.] (2) The total hours of operation may not exceed 2,000 hours in any 12 consecutive months. [s. 285.65(7), Wis. Stats.]

**b. Compliance Demonstration:**

(1) Initial compliance demonstration shall be the performance evaluation of the continuous monitoring system for carbon monoxide according to § 63.7525(a). The initial compliance demonstration shall be done no later than 180 days after startup of the boiler. [s. 285.65(13), Wis. Stats.]

(2) The permittee shall install, operate, and maintain a continuous emission monitoring system (CEMS) for carbon monoxide according to the following procedures:

(a) each CEMS shall be installed, operated, and maintained according to Performance Specification (PS) 4A of 40 CFR part 60, appendix B, and according to the site-specific monitoring plan developed according to §63.7505(d);

(b) the permittee shall conduct a performance evaluation of each CEMS according to the requirements in §63.8 and according to PS 4A of 40 CFR part 60, appendix B;

(c) the CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period;

(d) the CEMS data must be reduced as specified in §63.8(g)(2);

(e) the permittee shall calculate and record a 30-day rolling average emission rate on a daily basis;

(f) the permittee shall not use data recorded during periods of monitoring malfunctions, associated repairs, out-of-control periods, required QA/QC activities, or when the boiler is operating at less than 50% of its rated capacity in the calculation for condition B.11.b.(2)(e). Periods for which the monitoring system is out of control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

[s. 285.65(13), Wis. Stats.]

(3) The permittee shall keep daily records in hours the boiler operated. The records in total hours the boiler operated in any 12 consecutive months shall be kept to show compliance with I.B.11.a. (2). [s. 285.65(3), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

(1) Reference Test Method for organic HAPs Emissions; inorganic solid HAPs, and inorganic acid HAPs: Whenever compliance emission testing is required a method approved in writing by the Department shall be used to demonstrate compliance. [s. NR 439.06(8), Wis. Adm. Code]

(2) The permittee shall keep records on the hours of operation as required under condition I.B.11.b.(4). [s. 285.65(10), Wis. Stats.; s. 285.65(3), Wis. Stats.]

(3) The permittee shall develop a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in § 63.6(e)(3). [s. 285.65(13), Wis. Stats.]

(4) The permittee shall report each instance in which the emission limit in B.11.a.(1) was not met. This includes reporting instances during startup, shutdown, or malfunction when the applicable emission limit was not met. These instances are deviations from the emission limits and work practice standards. [s. 285.65(13), Wis. Stats.]

(5) During periods of startup, shutdown, and malfunction, the permittee shall operate in accordance with the SSMP. Deviations that occur during a period of startup, shutdown, or malfunction are not violations if demonstrated to the Administrator's satisfaction that the facility was operating in accordance with the SSMP. The administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations according to the provisions in § 63.6(e). [s. 285.65(13), Wis. Stats.]

(6) The permittee shall submit a Notification of Intent to conduct a performance test or evaluation at least 30 days before the performance test is scheduled to begin. [s. 285.65(13), Wis. Stats.]

(7) The permittee shall submit a Notification of Compliance Status including all performance evaluation results before the close of business on the 60<sup>th</sup> day following the completion of the performance evaluation required under B.11.b.(2)(b). [s. 285.65(13), Wis. Stats.]

(8) The permittee shall submit a compliance report semiannually. The first compliance report shall cover the period from boiler startup through June 30<sup>th</sup> or December 31<sup>st</sup>, whichever period is less than or equal to 6 months, and be postmarked no later than July 31 or January 31. Each subsequent compliance report shall cover the semiannual reporting period from January 1 through June 30 or from July 1 through December 31 and be postmarked no later than July 31 or January 31 respectively. [s. 285.65(13), Wis. Stats.]

(9) The compliance report shall contain the following information:  
(a) Company name and address;  
(b) Statement by responsible official certifying the truth, accuracy, and completeness of the report content;  
(c) Date of report and beginning and ending dates of the reporting period;  
(d) Type and amount of the total fuel usage;

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|  | <ul style="list-style-type: none"><li>(e) a summary of the results of performance tests and documentation of any operating limits that were reestablished during this test, if applicable;</li><li>(f) a signed statement indicating that you burned no new types of fuel;</li><li>(g) whether there were any startup, shutdown, or malfunction periods during the reporting period and whether the actions taken were consistent with your SSMP. If there were startup, shutdown, or malfunctions, the compliance report must include the information in §63.10(d)(5)(i);</li><li>(h) If there were no deviations from any emission limits, operating limits, or work practice standards during the reporting period, a statement that to that affect shall be included in the report;</li><li>(i) If there were no periods during which the CEM was out of control as specified in §63.8(c)(7) during the reporting period, a statement that to that affect shall be included in the report.</li></ul> <p>[s. 285.65(13), Wis. Stats.]</p> |
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Note 1: The case-by-case MACT is identical to the signed MACT for Industrial, Commercial and Institutional Boilers. The final MACT has been signed but as of June 24, 2004 has not been published in the Federal Register.

**B. B25, S25 – Weston Unit 4 Auxiliary Boiler**

**Pollutant:** 12. Sulfuric Acid Mist (H<sub>2</sub>SO<sub>4</sub>)

**a. Limitations:** (1) The emissions may not exceed 0.021 pound per hour when firing natural gas. (BACT); (2) The use of good combustion practices. (BACT); (3) The total hours of operation may not exceed 2,000 hours in any 12 consecutive months. [s. NR 405.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats.]

**b. Compliance Demonstration:**

- (1) The permittee shall fire natural gas. This condition is established to meet BACT emission limit. [ s. NR 405.08(2), Wis. Adm. Code]
- (2) The permittee shall determine the hourly emissions using fuel consumption records, and vendor provided or AP-42 emission factors. [s. 285.65(3), Wis. Stats.]
- (3) The permittee shall keep daily records in hours the boiler operated. The records in total hours the boiler operated in any 12 consecutive months shall be kept to show compliance with I.B.12.a. (3). [s. 285.65(3), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

- (1) Reference Test Method for Sulfur Acid Mist Emissions: Whenever compliance emission testing is required, US EPA Method 8 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(8), Wis. Adm. Code]
- 2) The permittee shall keep records on the hours of operation as required in condition I.B.12.b.(3). [s. 285.65(10), Wis. Stats., s. 285.65(3), Wis. Stats.]
- (3) The permittee shall keep retain on site, plans and specifications that indicate the boiler's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]

**C. F26 – Cooling Tower**

**Pollutant:** 1. Particulate Matter Emissions (PM)

**a. Limitations:** (1) The permittee shall apply Best Available Control Technology (BACT). BACT shall be met by: (a) The use of high efficiency drifts eliminators that will control drift to 0.002% and (b) Total hourly emissions may not exceed 3.76 pounds per hour. [s. NR 405.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats.] (c) No owner or operator of a new industrial process cooling tower may use chromium based water treatment chemicals in industrial process cooling tower on or after September 8, 1994. [s. NR 468.30(3)(b), Wis. Adm. Code, s. 285.65(3), Wis. Stats.]

**b. Compliance Demonstration:**

(1) The permittee shall monitor and record the water usage and the hours of operation this process operated on a daily basis. [ss. 285.65(3) and 285.65(10), Wis. Stats.]

(2) The permittee shall demonstrate compliance with the BACT for PM/PM10 emission rate by operating the cooling tower and drift eliminators in accordance with the manufacturer's specifications. [s. 285.65(3), Wis. Stats.]

(3) The permittee shall keep records of the material safety data sheets (MSDS) of all the chemical used to treat water in the cooling tower. These records shall be used to show compliance of the limit in I.C.1.a.(c). [s. 285.65(3), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

(1) The records required under I.C.1.b.(1) shall be maintained for a period of at least five years and shall be made available to the Department upon request. [s. NR 439.04(1)(d) and (2), Wis. Adm. Code]

(2) The permittee shall keep records of all the MSDS of the treatment chemicals used at the facility. [s. 285.65(3), Wis. Stats.]

(3) The permittee shall retain copies of the notification required under s. NR 468.30(4)(a) and (b), Wis. Adm. Code at the facility for a minimum of 5 years. The notification shall be made available to Department staff on request during normal business hours.

**D. S27, B27 – Diesel Booster Pump**

**Pollutant:** 1. Particulate Matter Emissions (PM)

**a. Limitations:** (1) The emissions may not exceed 0.58 pound per hour. (BACT); (2) The hours of operation may not exceed 200 hours in any 12 consecutive month period.; (3) The use of fuel oil having a maximum sulfur content of 0.003% by weight . (BACT); (4) The use of good combustion practices. (BACT) [s. NR 405.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats.]

**b. Compliance Demonstration:**

(1) Initial compliance emission tests shall be conducted within 180 days after the start of operation of the process to show compliance with the emission limitation in condition I.D.1.a.(1).14 [s. NR 439.07, Wis. Adm. Code]

(2) The permittee shall determine the hourly emissions using fuel consumption and certified test data as required by 40 CFR Part 60. [s. 285.65(3), Wis. Stats.]

(3) **Stack Parameters** These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed.

(a) The height of the stack S27 shall be at least 30 feet above ground level. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]

(b) The inside diameter at the outlet of the stack S27 may not exceed 0.67 feet. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]

(4) The permittee shall fire fuel oil having a maximum sulfur content of 0.003% by weight . This condition is established to meet BACT emission limit. [s. NR 405.08(2), Wis. Adm. Code]

(5) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit to demonstrate compliance with good combustion practices : (a) A copy of the original equipment manufacturer (OEM) procedures that should be followed to maintain the booster pump; and (b) A list of items that will be checked and maintained and their frequency, to ensure that booster pump is operating properly. This information will be used by the Department to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

(1) Reference Test Method for Particulate Matter Emissions: Whenever compliance emission testing is required, test procedures in 40 CFR 60 and US EPA Method 5, including backhalf (Method 202) or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(1), Wis. Adm. Code]

(2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code]

(3) The permittee shall record the monthly hours of operation, to demonstrate compliance with condition I.D.1.a.(2). [s. 285.65(10), Wis. Stats.; s. 285.65(3), Wis. Stats.]

(4) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]

(5) The permittee shall record information on the maintenance required in condition I.D.1.b.(5). [s. NR 439.04(1)(a)6, Wis. Adm. Code]

14 If the compliance emission tests cannot be conducted within 180 days after the start of initial operation, the permit holder may request and the Department may approve, in writing, an extension of time to conduct the test(s).

<b>D. S27, B27 – Diesel Booster Pump</b>	
<b>Pollutant:</b> 2. Particulate Matter Emissions less than 10 microns (PM <sub>10</sub> )	
<b>a. Limitations:</b> (1) The emissions may not exceed 0.58 pound per hour. (BACT); (2) The hours of operation may not exceed 200 hours in any 12 consecutive month period.; (3) The use of fuel oil having a maximum sulfur content of 0.003% by weight . (BACT); (4) The use of good combustion practices. (BACT). [s. NR 405.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats.]	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
<p>(1) Initial compliance emission tests shall be conducted within 180 days after the start of operation of the process to show compliance with the emission limitation in condition I.D.2.a.(1).15 [s. NR 439.07, Wis. Adm. Code]</p> <p>(2) The permittee shall determine the hourly emissions using operating parameters and certified test data as required by 40 CFR Part 60. [s. 285.65(3), Wis. Stats.]</p> <p>(3) <u>Stack Parameters</u> These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed.</p> <p>(a) The height of the stack S27 shall be at least 30 feet above ground level. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]</p> <p>(b) The inside diameter at the outlet of the stack S27 may not exceed 0.67 feet. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]</p> <p>(4) The permittee shall fire fuel oil having a maximum sulfur content of 0.003% by weight. This condition is established to meet BACT emission limit. [s. NR 405.08(2), Wis. Adm. Code]</p> <p>(5) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit to demonstrate compliance with good combustion practices: (a) A copy of the original equipment manufacturer (OEM) procedures that should be followed to maintain the booster pump; and (b) A list of items that will be checked and maintained and their frequency, to ensure that booster pump is operating properly. This information will be used by the Department to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]</p>	<p>(1) <u>Reference Test Method for Particulate Matter Emissions:</u> Whenever compliance emission testing is required, US EPA Method 5, including backhalf (Method 202) or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(1), Wis. Adm. Code]</p> <p>(2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(3) The permittee shall record the monthly hours of operation, to demonstrate compliance with condition I.D.2.a.(2). [s. 285.65(10), Wis. Stats.; s. 285.65(3), Wis. Stats.]</p> <p>(4) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(5) The permittee shall record information on the maintenance required in condition I.D.2.b.(5). [s. NR 439.04(1)(a)6, Wis. Adm. Code]</p>

15 If the compliance emission tests cannot be conducted within 180 days after the start of initial operation, the permit holder may request and the Department may approve, in writing, an extension of time to conduct the test(s).

<b>D. S27, B27 – Diesel Booster Pump</b>	
<b>Pollutant:</b> 3. Sulfur Dioxide (SO <sub>2</sub> )	
<p><b>a. Limitations:</b> (1) The emissions may not exceed 0.54 pound per hour. (BACT); (2) The hours of operation may not exceed 200 hours in any 12 consecutive month period.; (3) The use of ultra low sulfur fuel oil having a maximum sulfur content of 0.003% by weight . (BACT); (4) The use of good combustion practices. (BACT) [s. NR 405.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats.]</p>	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
<p>(1) The permittee shall determine the hourly emissions using fuel consumption records, fuel sulfur content and vendor provided or AP-42 emission factors. [s. 285.65(3), Wis. Stats.]</p> <p>(2) The permittee shall fire fuel oil having a maximum sulfur content of 0.003% by weight. This condition is established to meet BACT emission limit. [s. NR 405.08(2), Wis. Adm. Code]</p> <p>(3) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit to demonstrate compliance with good combustion practices: (a) A copy of the original equipment manufacturer (OEM) procedures that should be followed to maintain the booster pump; and (b) A list of items that will be checked and maintained and their frequency, to ensure that booster pump is operating properly. This information will be used by the Department to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]</p>	<p>(1) <u>Reference Test Method for Sulfur Dioxide Emissions:</u> Whenever compliance emission testing is required, US EPA Method 6, 6A or 6C or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(2), Wis. Adm. Code]</p> <p>(2) The permittee shall record the monthly hours of operation, to demonstrate compliance with condition I.D.3.a.(2). [s. 285.65(10), Wis. Stats.; s. 285.65(3), Wis. Stats.]</p> <p>(3) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(4) The permittee shall record information on the maintenance required in condition I.D.3.b.(3). [s. NR 439.04(1)(a)6, Wis. Adm. Code]</p>

**D. S27, B27 – Diesel Booster Pump**

**Pollutant:** 3. Sulfur Dioxide (SO2) [continued]

**b. Compliance Demonstration:**

(a) (4) A representative sample shall be taken from each fuel lot of fuel oil received. The sample shall be analyzed by the permittee for the sulfur content by weight using procedures outline in s. NR 439.08(2), Wis. Adm. Code and the analysis shall be retained by the permittee for a period of at least five years. [s. 285.65(3), Wis. Stats.]

(5) The Department will accept, in lieu of an analysis on each fuel lot under (4) above, an analysis of a representative sample of the fuel lot of distillate fuel oil from which the fuel lot was taken. [s. 285.65(3), Wis. Stats.]

(6) The permittee shall retain copies of its distillate fuel oil supplier's fuel sulfur and heat content analyses at the facility for each fuel lot of distillate fuel oil received pursuant to 40 CFR 60.334 for a period of five years. [s. NR 439.04(2), Wis. Adm. Code, s. 285.65(3), Wis. Stats.]

(7) The permittee shall further obtain certification from the fuel supplier that the applicable methods in s. NR 439.08(2), Wis. Adm. Code, were followed, if applicable, by the supplier in the preparation of said sulfur and heat content analyses. The fuel lot's quantity of fuel oil shall be included with the copies of these analyses. [s. 285.65(3), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

(5) The permittee shall keep records required under condition I.D.3.b.(4) – (7). [s. NR 439.04(1)(d), Wis. Adm. Code]

<b>D. S27, B27 – Diesel Booster Pump</b>	
<b>Pollutant:</b> 4. Oxides of Nitrogen (NOx)	
<p><b>a. Limitations:</b> (1) The emissions may not exceed 8.21 pounds per hour (0.82 tpy). (BACT); (2) The hours of operation may not exceed 200 hours in any 12 consecutive month period.; (3) The use of ultra low sulfur fuel oil having a maximum sulfur content of 0.003% by weight . (BACT); (4) The use of good combustion practices and ignition timing retard . (BACT) [s. NR 405.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats.]</p>	
<p><b>b. Compliance Demonstration:</b></p> <p>(1) The permittee shall determine the hourly emissions using fuel consumption records and vendor provided or AP-42 emission factors. [s. 285.65(3), Wis. Stats.]</p> <p>(2) The permittee shall fire fuel oil having a maximum sulfur content of 0.003% by weight. This condition is established to meet BACT emission limit. [s. NR 405.08(2), Wis. Adm. Code]</p> <p>(3) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit to demonstrate compliance with good combustion practices: (a) A copy of the original equipment manufacturer (OEM) procedures that should be followed to maintain the booster pump and (b) A list of items that will be checked and maintained and their frequency, to ensure that booster pump is operating properly. This information will be used by the Department to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]</p> <p>(4) The permittee shall maintain and calibrate the engine to peak performance once every 200 hours of operation or once every other year, whichever is more frequent. [ss. 285.63(1)(a) and 285.65(3), Wis. Stats.]</p>	<p><b>c. Test Methods, Recordkeeping, and Monitoring:</b></p> <p>(1) <u>Reference Test Method for Nitrogen Oxide Emissions:</u> Whenever compliance emission testing is required, test procedures in 40 CFR 60, US EPA Method 7 or an alternate method approved in writing by the Department shall be used to demonstrate compliance. [s. NR 439.06(6), Wis. Adm. Code]</p> <p>(2) The permittee shall record the monthly hours of operation, to demonstrate compliance with condition I.D.4.a.(2). [s. 285.65(10), Wis. Stats.; s. 285.65(3), Wis. Stats.]</p> <p>(3) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(4) The permittee shall record information on the maintenance required in condition I.D.4.b.(3). [s. NR 439.04(1)(a)6, Wis. Adm. Code]</p>

<b>D. S27, B27 – Diesel Booster Pump</b>	
<b>Pollutant:</b> 5. Carbon Monoxide (CO)	
<b>a. Limitations:</b> (1) The emissions may not exceed 1.77 pounds per hour. (BACT); (2) The hours of operation may not exceed 200 hours in any 12 consecutive month period.; (3) The use of fuel oil having a maximum sulfur content of 0.003% by weight . (BACT); (4) The use of good combustion practices. (BACT) [s. NR 405.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats.]	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
<p>(1) The permittee shall determine the hourly emissions using fuel consumption records and vendor provided or AP-42 emission factors. [s. 285.65(3), Wis. Stats.]</p> <p>(2) The permittee shall fire fuel oil having a maximum sulfur content of 0.003% by weight. This condition is established to meet BACT emission limit. [s. NR 405.08(2), Wis. Adm. Code]</p> <p>(3) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit to demonstrate compliance with good combustion practices: (a) A copy of the original equipment manufacturer (OEM) procedures that should be followed to maintain the booster pump and (b) A list of items that will be checked and maintained and their frequency, to ensure that booster pump is operating properly. This information will be used by the Department to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]</p> <p>(4) The permittee shall maintain and calibrate the engine to peak performance once every 200 hours of operation or once every other year, whichever is more frequent. [ss. 285.63(1)(a) and 285.65(3), Wis. Stats.]</p>	<p>(1) <u>Reference Test Method for Carbon Monoxide Emissions:</u> Whenever compliance emission testing is required, US EPA Method 10, or an alternate method approved in writing by the Department shall be used to demonstrate compliance. [s. NR 439.06(4), Wis. Adm. Code]</p> <p>(2) The permittee shall record the monthly hours of operation, to demonstrate compliance with condition I.D.5.a.(2). [s. 285.65(10), Wis. Stats.; s. 285.65(3), Wis. Stats.]</p> <p>(3) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(4) The permittee shall record information on the maintenance required in condition I.D.5.b.(3). [s. NR 439.04(1)(a)6, Wis. Adm. Code]</p>

<b>D. S27, B27 – Diesel Booster Pump</b>	
<b>Pollutant:</b> 6. Volatile Organic Compounds (VOC)	
<p><b>a. Limitations:</b> (1) The emissions may not exceed 0.70 pound per hour. (BACT); (2) The hours of operation may not exceed 200 hours in any 12 consecutive month period from.; (3) The use of fuel oil having a maximum sulfur content of 0.003% by weight . (BACT); (4) The use of good combustion practices. (BACT) [s. NR 405.08, Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats.]</p>	
<p><b>b. Compliance Demonstration:</b></p> <p>(1) The permittee shall determine the hourly emissions using fuel consumption records and vendor provided or AP-42 emission factors. [s. 285.65(3), Wis. Stats.]</p> <p>(2) The permittee shall fire fuel oil having a maximum sulfur content of 0.003% by weight . [s. NR 405.08(2), Wis. Adm. Code]</p> <p>(3) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit to demonstrate compliance with good combustion practices: (a) A copy of the original equipment manufacturer (OEM) procedures that should be followed to maintain the booster pump and; (b) A list of items that will be checked and maintained and their frequency, to ensure that booster pump is operating properly. This information will be used by the Department to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]</p>	<p><b>c. Test Methods, Recordkeeping, and Monitoring:</b></p> <p>(1) <u>Reference Test Method for VOC Emissions:</u> Whenever compliance emission testing is required, test procedures in 40 CFR Part 60, Appendix A, US EPA Method 25 or 18, or an alternate method approved in writing by the Department shall be used to demonstrate compliance. [s. NR 439.06(3), Wis. Adm. Code]</p> <p>(2) The permittee shall record the monthly hours of operation, to demonstrate compliance with condition I.D.6.a.(2). [s. 285.65(10), Wis. Stats.; s. 285.65(3), Wis. Stats.]</p> <p>(3) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(4) The permittee shall record information on the maintenance required in condition I.D.6.b.(3). [s. NR 439.04(1)(a)6, Wis. Adm. Code]</p>

<b>D. S27, B27 – Diesel Booster Pump</b>	
<b>Pollutant:</b> 7. Lead Emissions	
<p><b>a. Limitations:</b> (1) The emissions may not exceed 1.76 E -05 pound per hour. (BACT); (2) The hours of operation may not exceed 200 hours in any 12 consecutive month period.; (3) The use of fuel oil having a maximum sulfur content of 0.003% by weight . (BACT); (4) The use of good combustion practices. (BACT) [s. NR 405.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats.]</p>	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
<p>(1) The permittee shall determine the hourly emissions using fuel consumption records and vendor provided or AP-42 emission factors. [s. 285.65(3), Wis. Stats.]</p> <p>(2) The permittee shall fire fuel oil having a maximum sulfur content of 0.003% by weight. This condition is established to meet BACT emission limit. [s. NR 405.08(2), Wis. Adm. Code]</p> <p>(3) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit to demonstrate compliance with good combustion practices: (a) A copy of the original equipment manufacturer (OEM) procedures that should be followed to maintain the booster pump; and (b) A list of items that will be checked and maintained and their frequency, to ensure that booster pump is operating properly. This information will be used by the Department to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]</p>	<p>(1) <u>Reference Test Method for Lead Emissions:</u> Whenever compliance emission testing is required, US EPA Method 12 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(5), Wis. Adm. Code]</p> <p>(2) The permittee shall record the monthly hours of operation, to demonstrate compliance with condition I.D.7.a.(2). [s. 285.65(10), Wis. Stats.; s. 285.65(3), Wis. Stats.]</p> <p>(3) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(4) The permittee shall record information on the maintenance required in condition I.D.7.b.(3). [s. NR 439.04(1)(a)6, Wis. Adm. Code]</p>

<b>D. S27, B27 – Diesel Booster Pump</b>	
<b>Pollutant:</b> 8. Mercury Emissions	
<b>a. Limitations:</b> (1) The emissions may not exceed 0.00000588 pound per hour. (BACT); (2) The hours of operation may not exceed 200 hours in any 12 consecutive month period.; (3) The use of fuel oil having a maximum sulfur content of 0.003% by weight . (BACT); (4) The use of good combustion practices. (BACT) [s. NR 405.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats.]	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
<p>(1) The permittee shall determine the hourly emissions using fuel consumption records and vendor provided or AP-42 emission factors. [s. 285.65(3), Wis. Stats.]</p> <p>(2) The permittee shall fire fuel oil having a maximum sulfur content of 0.003% by weight. This condition is established to meet BACT emission limit. [s. NR 405.08(2), Wis. Adm. Code]</p> <p>(3) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit to demonstrate compliance with good combustion practices: (a) A copy of the original equipment manufacturer (OEM) procedures that should be followed to maintain the booster pump; and (b) A list of items that will be checked and maintained and their frequency, to ensure that booster pump is operating properly. This information will be used by the Department to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]</p>	<p>(1) <u>Reference Test Method for Mercury Emissions:</u> Whenever compliance emission testing is required, US EPA Method 29 or an alternative method approved in writing by the department shall be used to demonstrate compliance. [s. NR 439.06(8), Wis. Adm. Code]</p> <p>(2) The permittee shall record the monthly hours of operation, to demonstrate compliance with condition I.D.8.a.(2). [s. 285.65(10), Wis. Stats.; s. 285.65(3), Wis. Stats.]</p> <p>(3) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(4) The permittee shall record information on the maintenance required in condition I.D.8.b.(3). [s. NR 439.04(1)(a)6, Wis. Adm. Code]</p>

<b>D. S27, B27 – Diesel Booster Pump</b>	
<b>Pollutant:</b> 9. Emissions of Fluorides	
<b>a. Limitations:</b> (1) The emissions may not exceed 0.00172 pound per hour. (BACT); (2) The hours of operation may not exceed 200 hours in any 12 consecutive month period from.; (3) The use of fuel oil having a maximum sulfur content of 0.003% by weight . (BACT); (4) The use of good combustion practices. (BACT) [s. NR 405.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats]	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
(1) The permittee shall determine the hourly emissions using fuel consumption records and vendor provided or AP-42 emission factors. [s. 285.65(3), Wis. Stats.]  (2) The permittee shall fire fuel oil having a maximum sulfur content of 0.003% by weight. This condition is established to meet BACT emission limit. [s. NR 405.08(2), Wis. Adm. Code]  (3) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit to demonstrate compliance with good combustion practices: (a) A copy of the original equipment manufacturer (OEM) procedures that should be followed to maintain the booster pump and (b) A list of items that will be checked and maintained and their frequency, to ensure that booster pump is operating properly. This information will be used by the Department to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]	(1) <u>Reference Test Method for Emissions of Fluorides:</u> Whenever compliance emission testing is required, US EPA Method 13B or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(8), Wis. Adm. Code]  (2) The permittee shall record the monthly hours of operation, to demonstrate compliance with condition I.D.9.a.(2). [s. 285.65(10), Wis. Stats.; 285.65(3), Wis. Stats.]  (3) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]  (4) The permittee shall record information on the maintenance required in condition I.D.9.b.(3). [s. NR 439.04(1)(a)6, Wis. Adm. Code]
<b>Pollutant:</b> 10. Visible Emissions	
<b>a. Limitations:</b> 20% opacity or number 1 on the Ringlemann chart. [s. NR 431.05, Wis. Adm. Code] See Note 1	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
(1) The permittee shall fire fuel oil having a maximum sulfur content of 0.003% by weight. This condition is established to meet BACT emission limit. [s. NR 405.08(2), Wis. Adm. Code]	(1) <u>Reference Test Method for Visible Emissions:</u> Whenever compliance emission testing is required, US EPA Method 9 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(9)(a)1., Wis. Adm. Code]  (2) The permittee shall keep retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]

Note 1: No owner or operator may cause to be discharged into the atmosphere any gases which exhibit greater than 20% opacity (6-minute average), except when combustion equipment is being cleaned or a new fire started. At these times opacity may not exceed 80% for 6-minutes in any one hour per s. NR 431.05(1). Combustion equipment may not be cleaned nor a fire started more than 3 times per day.

<b>D. S27, B27 – Diesel Booster Pump</b>	
<b>Pollutant:</b> 11. Sulfuric Acid Mist (H <sub>2</sub> SO <sub>4</sub> )	
<b>a. Limitations:</b> (1) The emissions may not exceed 8.32 E-02 pound per hour. (BACT); (2) The hours of operation may not exceed 200 hours in any 12 consecutive month period.; (3) The use of fuel oil having a maximum sulfur content of 0.003% by weight . (BACT); (4) The use of good combustion practices. (BACT) [s. NR 405.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats.]	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
(1) The permittee shall fire fuel oil having a maximum sulfur content of 0.003% by weight. This condition is established to meet BACT emission limit. [s. NR 405.08(2), Wis. Adm. Code]	(1) <u>Reference Test Method for Sulfur Acid Mist Emissions:</u> Whenever compliance emission testing is required, US EPA Method 8 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(8), Wis. Adm. Code]
(2) The permittee shall determine the hourly emissions using fuel consumption records, and vendor provided or AP-42 emission factors. [s. 285.65(3), Wis. Stats.]	(2) The permittee shall record the monthly hours of operation, to demonstrate compliance with condition I.D.11.a.(2). [s. 285.65(10), Wis. Stats.; s. 285.65(3), Wis. Stats.]
	(3) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. 285.65(3), Wis. Stats.]
	(4) The permittee shall keep records required under condition I.D.3.b.(4) – (7) to demonstrate compliance with the sulfur content in the fuel. [s. NR 439.04(1)(d), Wis. Adm. Code; s. 285.65(3), Wis. Stats.]

**E. S28, B28 – Main Diesel Fire Pump**

**Pollutant:** 1. Particulate Matter Emissions (PM)

**a. Limitations:** (1) The emissions may not exceed 1.01 pounds per hour. (BACT); (2) The hours of operation may not exceed 200 hours in any 12 consecutive month period.; (3) The use of fuel oil having a maximum sulfur content of 0.003% by weight . (BACT); (4) The use of good combustion practices. (BACT) [s. NR 405.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats.]

**b. Compliance Demonstration:**

(1) Initial compliance emission tests shall be conducted within 180 days after the start of operation of the process to show compliance with the emission limitation in condition I.E.1.a. (1).16 [s. NR 439.07, Wis. Adm. Code]

(2) The permittee shall determine the hourly emissions using fuel consumption and certified test data as required by 40 CFR Part 60. [s. 285.65(3), Wis. Stats.]

(3) **Stack Parameters** These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed.

(a) The height of stack S28 shall be at least 20 feet above ground level. [s. 285.65(3), Wis. Stats; s. NR 406.10, Wis. Adm. Code]

(b) The inside diameter at the outlet of the stack S28 may not exceed 0.83 feet. [s. 285.65(3), Wis. Stats; s. NR 406.10, Wis. Adm. Code]

(4) The permittee shall fire fuel oil having a maximum sulfur content of 0.003% by weight . This condition is established to meet BACT emission limit. [s. NR 405.08(2), Wis. Adm. Code]

(5) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit to demonstrate compliance with good combustion practices : (a) A copy of the original equipment manufacturer (OEM) procedures that should be followed to maintain the fire pump; and (b) A list of items that will be checked and maintained and their frequency, to ensure that fire pump is operating properly. This information will be used by the Department to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

(1) Reference Test Method for Particulate Matter Emissions: Whenever compliance emission testing is required, test procedures in 40 CFR 60 and US EPA Method 5, including backhalf (Method 202) or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(1), Wis. Adm. Code]

(2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code]

(3) The permittee shall record the monthly hours of operation, to demonstrate compliance with condition I.E.1.a.(2). [s. 285.65(10), Wis. Stats.; s. 285.65(3), Wis. Stats.]

(4) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]

(5) The permittee shall record information on the maintenance required in condition I.E.1.b.(5). [s. NR 439.04(1)(a)6, Wis. Adm. Code]

16 If the compliance emission tests cannot be conducted within 180 days after the start of initial operation, the permit holder may request and the Department may approve, in writing, an extension of time to conduct the test(s).

**E. S28, B28 – Main Diesel Fire Pump**

**Pollutant:** 2. Particulate Matter Emissions less than 10 microns (PM<sub>10</sub>)

**a. Limitations:** (1) The emissions may not exceed 1.01 pounds per hour. (BACT); (2) The hours of operation may not exceed 200 hours in any 12 consecutive month period.; (3) The use of fuel oil having a maximum sulfur content of 0.003% by weight . (BACT); (4) The use of good combustion practices. (BACT). [s. NR 405.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats.]

**b. Compliance Demonstration:**

(1) Initial compliance emission tests shall be conducted within 180 days after the start of operation of the process to show compliance with the emission limitation.<sup>17</sup> [s. NR 439.07, Wis. Adm. Code]

(2) The permittee shall determine the hourly emissions using operating parameters and certified test data as required by 40 CFR Part 60. [s. 285.65(3), Wis. Stats.]

(3) Stack Parameters These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed.

(a) The height of stack S28 shall be at least 20 feet above ground level. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]

(b) The inside diameter at the outlet of the stack S28 may not exceed 0.83 feet. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]

(4) The permittee shall fire fuel oil having a maximum sulfur content of 0.003% by weight. This condition is established to meet BACT emission limit. [s. NR 405.08(2), Wis. Adm. Code]

(5) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit to demonstrate compliance with good combustion practices: (a) A copy of the original equipment manufacturer (OEM) procedures that should be followed to maintain the fire pump; and (b) A list of items that will be checked and maintained and their frequency, to ensure that fire pump is operating properly. This information will be used by the Department to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

(1) Reference Test Method for Particulate Matter Emissions: Whenever compliance emission testing is required, US EPA Method 5, including backhalf (Method 202) or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(1), Wis. Adm. Code]

(2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code]

(3) The permittee shall record the monthly hours of operation, to demonstrate compliance with condition I.E.2.a.(2). [s. 285.65(10), Wis. Stats.; s. 285.65(3), Wis. Stats.]

(4) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]

(5) The permittee shall record information on the maintenance required in condition I.E.2.b.(5). [s. NR 439.04(1)(a)6, Wis. Adm. Code]

<sup>17</sup> If the compliance emission tests cannot be conducted within 180 days after the start of initial operation, the permit holder may request and the Department may approve, in writing, an extension of time to conduct the test(s).

<b>E. S28, B28 – Main Diesel Fire Pump</b>	
<b>Pollutant:</b> 3. Sulfur Dioxide (SO <sub>2</sub> )	
<p><b>a. Limitations:</b> (1) The emissions may not exceed 0.94 pound per hour. (BACT); (2) The hours of operation may not exceed 200 hours in any 12 consecutive month period.; (3) The use of ultra low sulfur fuel oil having a maximum sulfur content of 0.003% by weight . (BACT); (4) The use of good combustion practices. (BACT) [s. NR 405.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats.]</p>	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
<p>(1) The permittee shall determine the hourly emissions using fuel consumption records, fuel sulfur content and vendor provided or AP-42 emission factors. [s. 285.65(3), Wis. Stats.]</p> <p>(2) The permittee shall fire fuel oil having a maximum sulfur content of 0.003% by weight. This condition is established to meet BACT emission limit. [s. NR 405.08(2), Wis. Adm. Code]</p> <p>(3) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit to demonstrate compliance with good combustion practices: (a) A copy of the original equipment manufacturer (OEM) procedures that should be followed to maintain the fire pump; and (b) A list of items that will be checked and maintained and their frequency, to ensure that fire pump is operating properly. This information will be used by the Department to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]</p>	<p>(1) <u>Reference Test Method for Sulfur Dioxide Emissions:</u> Whenever compliance emission testing is required, US EPA Method 6, 6A or 6C or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(2), Wis. Adm. Code]</p> <p>(2) The permittee shall record the monthly hours of operation, to demonstrate compliance with condition I.E.3.a.(2). [s. 285.65(10), Wis. Stats.; s. 285.65(3), Wis. Stats.]</p> <p>(3) The permittee shall keep retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(4) The permittee shall record information on the maintenance required in condition I.E.3.b.(3). [s. NR 439.04(1)(a)6, Wis. Adm. Code]</p>

**E. S28, B28 – Main Diesel Fire Pump**

**Pollutant:** 3. Sulfur Dioxide (SO<sub>2</sub>) [continued]

**b. Compliance Demonstration:**

(4) A representative sample shall be taken from each fuel lot of fuel oil received. The sample shall be analyzed by the permittee for the sulfur content by weight using procedures outline in s. NR 439.08(2), Wis. Adm. Code and the analysis shall be retained by the permittee for a period of at least five years. [s. 285.65(3), Wis. Stats.]

(5) The Department will accept, in lieu of an analysis on each fuel lot under (4) above, an analysis of a representative sample of the fuel lot of distillate fuel oil from which the fuel lot was taken. [s. 285.65(3), Wis. Stats.]

(6) The permittee shall retain copies of its distillate fuel oil supplier's fuel sulfur and heat content analyses at the facility for each fuel lot of distillate fuel oil received pursuant to 40 CFR 60.334 for a period of five years. [s. NR 439.04(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.]

(7) The permittee shall further obtain certification from the fuel supplier that the applicable methods in s. NR 439.08(2), Wis. Adm. Code, were followed, if applicable, by the supplier in the preparation of said sulfur and heat content analyses. The fuel lot's quantity of fuel oil shall be included with the copies of these analyses. [s. 285.65(3), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

(5) The permittee shall keep records required under condition I.E.3.b.(4) – (7). [s. NR 439.04(1)(d), Wis. Adm. Code]

<b>E. S28, B28 – Main Diesel Fire Pump</b>	
<b>a. Pollutant:</b> 4. Oxides of Nitrogen (NOx)	
<b>a. Limitations:</b> (1) The emissions may not exceed 14.26 pounds per hour (1.43 tpy). (BACT); (2) The hours of operation may not exceed 200 hours in any 12 consecutive month period.; (3) The use of ultra low sulfur fuel oil having a maximum sulfur content of 0.003% by weight . (BACT); (4) The use of good combustion practices and ignition timing retard . (BACT) [s. NR 405.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats.]	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
<p>(1) The permittee shall determine the hourly emissions using fuel consumption records and vendor provided or AP-42 emission factors. [s. 285.65(3), Wis. Stats.]</p> <p>(2) The permittee shall fire fuel oil having a maximum sulfur content of 0.003% by weight. This condition is established to meet BACT emission limit. [s. NR 405.08(2), Wis. Adm. Code]</p> <p>(3) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit to demonstrate compliance with good combustion practices: (a) A copy of the original equipment manufacturer (OEM) procedures that should be followed to maintain the fire pump and (b) A list of items that will be checked and maintained and their frequency, to ensure that fire pump is operating properly. This information will be used by the Department to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]</p> <p>(4) The permittee shall maintain and calibrate the engine to peak performance once every 200 hours of operation or once every other year, whichever is more frequent. [ss. 285.63(1)(a) and 285.65(3), Wis. Stats.]</p>	<p>(1) <u>Reference Test Method for Nitrogen Oxide Emissions:</u> Whenever compliance emission testing is required, test procedures in 40 CFR 60, US EPA Method 7 or an alternate method approved in writing by the Department shall be used to demonstrate compliance. [s. NR 439.06(6), Wis. Adm. Code]</p> <p>(2) The permittee shall record the monthly hours of operation, to demonstrate compliance with condition I.E.4.a.(2). [s. 285.65(10), Wis. Stats.; s. 285.65(3), Wis. Stats.]</p> <p>(3) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(4) The permittee shall record information on the maintenance required in condition I.E.4.b.(3). [s. NR 439.04(1)(a)6, Wis. Adm. Code]</p>

<b>E. S28, B28 – Main Diesel Fire Pump</b>	
<b>Pollutant:</b> 5. Carbon Monoxide (CO)	
<b>a. Limitations:</b> (1) The emissions may not exceed 3.07 pounds per hour. (BACT); (2) The hours of operation may not exceed 200 hours in any 12 consecutive month period.; (3) The use of fuel oil having a maximum sulfur content of 0.003% by weight . (BACT); (4) The use of good combustion practices. (BACT) [s. NR 405.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats.]	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
<p>(1) The permittee shall determine the hourly emissions using fuel consumption records and vendor provided or AP-42 emission factors. [s. 285.65(3), Wis. Stats.]</p> <p>(2) The permittee shall fire fuel oil having a maximum sulfur content of 0.003% by weight. This condition is established to meet BACT emission limit. [s. NR 405.08(2), Wis. Adm. Code]</p> <p>(3) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit to demonstrate compliance with good combustion practices: (a) A copy of the original equipment manufacturer (OEM) procedures that should be followed to maintain the fire pump and (b) A list of items that will be checked and maintained and their frequency, to ensure that fire pump is operating properly. This information will be used by the Department to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]</p> <p>(4) The permittee shall maintain and calibrate the engine to peak performance once every 200 hours of operation or once every other year, whichever is more frequent. [ss. 285.63(1)(a) and 285.65(3), Wis. Stats.]</p>	<p>(1) <u>Reference Test Method for Carbon Monoxide Emissions:</u> Whenever compliance emission testing is required, US EPA Method 10, or an alternate method approved in writing by the Department shall be used to demonstrate compliance. [s. NR 439.06(4), Wis. Adm. Code]</p> <p>(2) The permittee shall record the monthly hours of operation, to demonstrate compliance with condition I.E.5.a.(2). [s. 285.65(10), Wis. Stats.; s. 285.65(3), Wis. Stats.]</p> <p>(3) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(4) The permittee shall record information on the maintenance required in condition I.E.5.b.(3). [s. NR 439.04(1)(a)6, Wis. Adm. Code]</p>

<b>E. S28, B28 – Main Diesel Fire Pump</b>	
<b>Pollutant:</b> 6. Volatile Organic Compounds (VOC)	
<p><b>a. Limitations:</b> (1) The emissions may not exceed 1.14 pounds per hour. (BACT); (2) The hours of operation may not exceed 200 hours in any 12 consecutive month period.; (3) The use of fuel oil having a maximum sulfur content of 0.003% by weight . (BACT); (4) The use of good combustion practices. (BACT) [s. NR 405.08, Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats.]</p>	
<p><b>b. Compliance Demonstration:</b></p> <p>(1) The permittee shall determine the hourly emissions using fuel consumption records and vendor provided or AP-42 emission factors. [s. 285.65(3), Wis. Stats.]</p> <p>(2) The permittee shall fire fuel oil having a maximum sulfur content of 0.003% by weight . [s. NR 405.08(2), Wis. Adm. Code]</p> <p>(3) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit to demonstrate compliance with good combustion practices: (a) A copy of the original equipment manufacturer (OEM) procedures that should be followed to maintain the fire pump and; (b) A list of items that will be checked and maintained and their frequency, to ensure that fire pump is operating properly. This information will be used by the Department to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]</p>	<p><b>c. Test Methods, Recordkeeping, and Monitoring:</b></p> <p>(1) <u>Reference Test Method for VOC Emissions:</u> Whenever compliance emission testing is required, test procedures in 40 CFR Part 60, Appendix A, US EPA Method 25 or 18, or an alternate method approved in writing by the Department shall be used to demonstrate compliance. [s. NR 439.06(3), Wis. Adm. Code]</p> <p>(2) The permittee shall record the monthly hours of operation, to demonstrate compliance with condition I.E.6.a.(2). [s. 285.65(10), Wis. Stats.; s. 285.65(3), Wis. Stats.]</p> <p>(3) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(4) The permittee shall record information on the maintenance required in condition I.E.6.b.(3). [s. NR 439.04(1)(a)6, Wis. Adm. Code]</p>

<b>E. S28, B28 – Main Diesel Fire Pump</b>	
<b>Pollutant:</b> 7. Lead Emissions	
<p><b>a. Limitations:</b> (1) The emissions may not exceed 2.83E-05 pound per hour. (BACT); (2) The hours of operation may not exceed 200 hours in any 12 consecutive month period.; (3) The use of fuel oil having a maximum sulfur content of 0.003% by weight . (BACT); (4) The use of good combustion practices. (BACT) [s. NR 405.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats.]</p>	
<p><b>b. Compliance Demonstration:</b></p> <p>(1) The permittee shall determine the hourly emissions using fuel consumption records and vendor provided or AP-42 emission factors. [s. 285.65(3), Wis. Stats.]</p> <p>(2) The permittee shall fire fuel oil having a maximum sulfur content of 0.003% by weight. This condition is established to meet BACT emission limit. [s. NR 405.08(2), Wis. Adm. Code]</p> <p>(3) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit to demonstrate compliance with good combustion practices: (a) A copy of the original equipment manufacturer (OEM) procedures that should be followed to maintain the fire pump; and (b) A list of items that will be checked and maintained and their frequency, to ensure that fire pump is operating properly. This information will be used by the Department to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]</p>	<p><b>c. Test Methods, Recordkeeping, and Monitoring:</b></p> <p>(1) <u>Reference Test Method for Lead Emissions:</u> Whenever compliance emission testing is required, US EPA Method 12 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(5), Wis. Adm. Code]</p> <p>(2) The permittee shall record the monthly hours of operation, to demonstrate compliance with condition I.E.7.a.(2). [s. 285.65(10), Wis. Stats.; s. 285.65(3), Wis. Stats.]</p> <p>(3) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(4) The permittee shall record information on the maintenance required in condition I.E.7.b.(3). [s. NR 439.04(1)(a)6, Wis. Adm. Code]</p>

<b>E. S28, B28 – Main Diesel Fire Pump</b>	
<b>Pollutant:</b> 8. Mercury Emissions	
<b>a. Limitations:</b> (1) The emissions may not exceed 0.00000944 pound per hour. (BACT); (2) The hours of operation may not exceed 200 hours in any 12 consecutive month period.; (3) The use of fuel oil having a maximum sulfur content of 0.003% by weight . (BACT); (4) The use of good combustion practices. (BACT) [s. NR 405.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats.]	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
<p>(1) The permittee shall determine the hourly emissions using fuel consumption records and vendor provided or AP-42 emission factors. [s. 285.65(3), Wis. Stats.]</p> <p>(2) The permittee shall fire fuel oil having a maximum sulfur content of 0.003% by weight. This condition is established to meet BACT emission limit. [s. NR 405.08(2), Wis. Adm. Code]</p> <p>(3) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit to demonstrate compliance with good combustion practices: (a) A copy of the original equipment manufacturer (OEM) procedures that should be followed to maintain the fire pump; and (b) A list of items that will be checked and maintained and their frequency, to ensure that fire pump is operating properly. This information will be used by the Department to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]</p>	<p>(1) <u>Reference Test Method for Mercury Emissions:</u> Whenever compliance emission testing is required, US EPA Method 29 or an alternative method approved in writing by the department shall be used to demonstrate compliance. [s. NR 439.06(8), Wis. Adm. Code]</p> <p>(2) The permittee shall record the monthly hours of operation, to demonstrate compliance with condition I.E.8.a.(2). [s. 285.65(10), Wis. Stats.; s. 285.65(3), Wis. Stats.]</p> <p>(3) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(4) The permittee shall record information on the maintenance required in condition I.E.8.b.(3). [s. NR 439.04(1)(a)6, Wis. Adm. Code]</p>

<b>E. S28, B28 – Main Diesel Fire Pump</b>	
<b>Pollutant:</b> 9. Emissions of Fluorides	
<b>a. Limitations:</b> (1) The emissions may not exceed 0.00277 pound per hour. (BACT); (2) The hours of operation may not exceed 200 hours in any 12 consecutive month period.; (3) The use of fuel oil having a maximum sulfur content of 0.003% by weight . (BACT); (4) The use of good combustion practices. (BACT) [s. NR 405.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats]	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
(1) The permittee shall determine the hourly emissions using fuel consumption records and vendor provided or AP-42 emission factors. [s. 285.65(3), Wis. Stats.]  (2) The permittee shall fire fuel oil having a maximum sulfur content of 0.003% by weight. This condition is established to meet BACT emission limit. [s. NR 405.08(2), Wis. Adm. Code]  (3) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit to demonstrate compliance with good combustion practices: (a) A copy of the original equipment manufacturer (OEM) procedures that should be followed to maintain the fire pump and (b) A list of items that will be checked and maintained and their frequency, to ensure that fire pump is operating properly. This information will be used by the Department to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]	(1) <u>Reference Test Method for Emissions of Fluorides:</u> Whenever compliance emission testing is required, US EPA Method 13B or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(8), Wis. Adm. Code]  (2) The permittee shall record the monthly hours of operation, to demonstrate compliance with condition I.E.9.a.(2). [s. 285.65(10), Wis. Stats.; 285.65(3), Wis. Stats.]  (3) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]  (4) The permittee shall record information on the maintenance required in condition I.E.9.b.(3). [s. NR 439.04(1)(a)6, Wis. Adm. Code]
<b>Pollutant:</b> 10. Visible Emissions	
<b>a. Limitations:</b> 20% opacity or number 1 on the Ringlemann chart. [s. NR 431.05, Wis. Adm. Code] See Note 1	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
(1) The permittee shall fire fuel oil having a maximum sulfur content of 0.003% by weight. This condition is established to meet BACT emission limit. [s. NR 405.08(2), Wis. Adm. Code]	(1) <u>Reference Test Method for Visible Emissions:</u> Whenever compliance emission testing is required, US EPA Method 9 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(9)(a)1., Wis. Adm. Code]  (2) The permittee shall keep retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]

Note 1: No owner or operator may cause to be discharged into the atmosphere any gases which exhibit greater than 20% opacity (6-minute average), except when combustion equipment is being cleaned or a new fire started. At these times opacity may not exceed 80% for 6-minutes in any one hour per s. NR 431.05(1). Combustion equipment may not be cleaned nor a fire started more than 3 times per day.

<b>E. S28, B28 – Main Diesel Fire Pump</b>	
<b>Pollutant:</b> 11. Sulfuric Acid Mist (H <sub>2</sub> SO <sub>4</sub> )	
<b>Limitations:</b> (1) The emissions may not exceed 1.4E-01 pound per hour. (BACT); (2) The hours of operation may not exceed 200 hours in any 12 consecutive month period.; (3) The use of fuel oil having a maximum sulfur content of 0.003% by weight . (BACT); (4) The use of good combustion practices. (BACT) [s. NR 405.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats.]	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
<p>(1) The permittee shall fire fuel oil having a maximum sulfur content of 0.003% by weight. This condition is established to meet BACT emission limit. [s. NR 405.08(2), Wis. Adm. Code]</p> <p>(2) The permittee shall determine the hourly emissions using fuel consumption records, and vendor provided or AP-42 emission factors. [s. 285.65(3), Wis. Stats.]</p>	<p>(1) <u>Reference Test Method for Sulfur Acid Mist Emissions:</u> Whenever compliance emission testing is required, US EPA Method 8 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(8), Wis. Adm. Code]</p> <p>(2) The permittee shall record the monthly hours of operation, to demonstrate compliance with condition I.E.11.a.(2). [s. 285.65(10), Wis. Stats.; 285.65(3), Wis. Stats.]</p> <p>(3) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. 285.65(3), Wis. Stats.]</p> <p>(4) The permittee shall keep records required under condition I.E.3.b.(4) – (7) to demonstrate compliance with the sulfur content in the fuel. [s. NR 439.04(1)(d), Wis. Adm. Code, s. 285.65(3), Wis. Stats.]</p>

**F. S30, P30- System 1 – New Reclaim Tunnel Exit #34**

**Pollutant:** 1. Particulate Matter Emissions (PM/PM10)

**a. Limitations:** 0.01 grains per dry standard cubic foot of exhaust gas and 0.79 pound per hour. (BACT) [s. NR 415.06(2), Wis. Adm. Code; s. NR 405.08, Wis. Adm. Code; s. 285.65(3), Wis. Stats.]

**b. Compliance Demonstration:**

- (1) Initial compliance emission tests shall be conducted within 180 after the start of operation of the process to show compliance with the emission limitation.18 [s. NR 439.07, Wis. Adm. Code]
- (2) Stack Parameters These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed.
  - (a) The height of the stack S30 shall be at least 25 feet above ground level. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]
  - (b) The inside diameter at the outlet of the stack S30 may not exceed 2.17 feet. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]
- (3) Particulate matter emissions shall be controlled using a fabric filter baghouse system. [ s. NR 405.08(2), Wis. Adm. Code]
- (4) The fabric filter baghouse system shall be in line and shall be operated at all times when the process is in operation to meet the BACT limits. [s. NR 406.10, Wis. Adm. Code; s. NR 407.09(4)(a)1., Wis. Adm. Code]
- (5) The operating pressure drop range across the fabric filter baghouse system shall be determined during the initial testing period. [s. 285.65(3), Wis. Stats.]
- (6) The pressure drop across the fabric filter baghouse system shall be maintained within the range identified by condition I.F.1.b.(5). [s. NR 407.09(4)(a)1., Wis. Adm. Code]

**c. Test Methods, Recordkeeping, and Monitoring:**

- (1) Reference Test Method for Particulate Matter Emissions: Whenever compliance emission testing is required, US EPA Method 5, including backhalf (Method 202) or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(1), Wis. Adm. Code]
- (2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code]
- (3) The permittee shall record the pressure drop across the fabric filter baghouse system once for every eight hours of operation hours whenever the process is in operation. [s. NR 439.055(2)(b)1., Wis. Adm. Code]
- (4) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the fabric filter baghouse system, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code]
- (5) Instrumentation to monitor the pressure drop across the fabric filter baghouse system shall be installed and operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code]

18 If the compliance emission tests cannot be conducted within 180 days after the start of initial operation, the permit holder may request and the Department may approve, in writing, an extension of time to conduct the test(s).

**F. S30, P30- System 1 – New Reclaim Tunnel Exit #34**

**Pollutant:** 2. Visible Emissions

**a. Limitations:** 10% opacity. [s. NR 431.05, Wis. Adm. Code; s. NR 405.09, Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats.]

**b. Compliance Demonstration:**

(1) The fabric filter baghouse system shall be in line and shall be operated at all times when the process is in operation. [s. NR 406.10, Wis. Adm. Code; s. NR 407.09(4)(a)1., Wis. Adm. Code]

(2) The pressure drop across the fabric filter baghouse system shall be maintained within the range identified by condition I.F.1.b.(5). [s. NR 407.09(4)(a)1., Wis. Adm. Code]

**c. Test Methods, Recordkeeping, and Monitoring:**

(1) Reference Test Method for Visible Emissions: Whenever compliance emission testing is required, US EPA Method 9 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(9)(a)1., Wis. Adm. Code]

(2) The permittee shall record the pressure drop across the fabric filter baghouse system once for every eight hours of operation hours whenever the process is in operation. [s. NR 439.055(2)(b)1., Wis. Adm. Code]

(3) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the fabric filter baghouse system, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code]

(4) Instrumentation to monitor the pressure drop across the fabric filter baghouse system shall be installed and operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code]

**G. S41, P41 – System 2 – New Junction House 2, #31**

**Pollutant:** 1. Particulate Matter Emissions (PM/PM10)

**a. Limitations:** 0.01 grains per dry standard cubic foot of exhaust gas and 2.59 pounds PM/PM10 per hour. (BACT) [s. NR 415.06(2)(c), Wis. Adm. Code; s. NR 405.08, Wis. Adm. Code; s. 285.65(3), Wis. Stats.]

**b. Compliance Demonstration:**

(1) Initial compliance emission tests shall be conducted within 180 days after the start of operation of the process to show compliance with the emission limitation.<sup>19</sup> [s. NR 439.07, Wis. Adm. Code]

(2) Stack Parameters These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed.

(a) The height of the stack S41 shall be at least 75 feet above ground level. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]

(b) The inside diameter at the outlet of the stack S41 may not exceed 3.83 feet. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]

(3) Particulate matter emissions shall be controlled using a fabric filter baghouse system to meet the BACT limits. [s. NR 405.08(2), Wis. Adm. Code]

(4) The fabric filter baghouse system shall be in line and shall be operated at all times that the process is in operation. [s. NR 406.10, Wis. Adm. Code; s. NR 407.09(4)(a)1., Wis. Adm. Code]

(5) The operating pressure drop range across the fabric filter baghouse system shall be determined during the initial testing period. [s. 285.65(3), Wis. Stats.]

(6) The pressure drop across the fabric filter baghouse system shall be maintained within the range identified by condition I.G.1.b.(5). [s. NR 407.09(4)(a)1., Wis. Adm. Code]

(7) The process shall be monitored in accordance with a Fugitive Dust Control Plan. The Department may request the permittee to review and amend the plan if necessary to maintain emissions in compliance with emission limits. [s. 285.65(3), Wis. Stats.]

(8) Whenever fugitive dust emissions are observed from the process, the permittee shall take corrective actions to prevent fugitive dust from becoming airborne. [s. 285.65(3), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

(1) Reference Test Method for Particulate Matter Emissions: Whenever compliance emission testing is required, US EPA Method 5, including backhalf (Method 202) or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(1), Wis. Adm. Code]

(2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code]

(3) The permittee shall record the pressure drop across the fabric filter baghouse system once for every eight hours of operation hours whenever the dust collection system is in operation. [s. NR 439.055(2)(b)1., Wis. Adm. Code]

(4) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the fabric filter baghouse system, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code]

(5) Instrumentation to monitor the pressure drop across the fabric filter baghouse system shall be installed and operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code]

<sup>19</sup> If the compliance emission tests cannot be conducted within 180 days after the start of initial operation, the permit holder may request and the Department may approve, in writing, an extension of time to conduct the test(s).

**G. S41, P41 – System 2 – New Junction House 2, #31**

**Pollutant:** 2. Visible Emissions

**a. Limitations:** 10% opacity. [s. NR 431.05, Wis. Adm. Code; s. NR 405.09, Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats.]

**b. Compliance Demonstration:**

- (1) The fabric filter baghouse system shall be in line and shall be operated at all times that the process is in operation. [s. NR 406.10, Wis. Adm. Code; s. NR 407.09(4)(a)1., Wis. Adm. Code]
- (2) The pressure drop across the fabric filter baghouse system shall be maintained within the range identified by condition I.G.1.b.(5). [s. NR 407.09(4)(a)1., Wis. Adm. Code]
- (3) The process shall be monitored in accordance with a Fugitive Dust Control Plan. The Department may request the permittee to review and amend the plan if necessary to maintain emissions in compliance with emission limits. [s. 285.65(3), Wis. Stats.]
- (4) Whenever fugitive dust emissions are observed from the process, the permittee shall take corrective actions to prevent fugitive dust from becoming airborne. [s. 285.65(3), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

- (1) Reference Test Method for Visible Emissions: Whenever compliance emission testing is required, US EPA Method 9 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(9)(a)1., Wis. Adm. Code]
- (2) The permittee shall record the pressure drop across the fabric filter baghouse system once for every eight hours of operation hours whenever the dust collection system is in operation. [s. NR 439.055(2)(b)1., Wis. Adm. Code]
- (3) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the fabric filter baghouse system, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code]
- (4) Instrumentation to monitor the pressure drop across the fabric filter baghouse system shall be installed and operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code]

**H. S42, P42 – System 3 – New Junction House #3, #32**

**Pollutant:** 1. Particulate Matter Emissions (PM/PM10)

**a. Limitations:** 0.01 grains per dry standard cubic foot of exhaust gas and 0.79 pound per hour. (BACT) [s. NR 415.06(2)(c), Wis. Adm. Code; s. NR 405.08, Wis. Adm. Code; s. 285.65(3), Wis. Stats.]

**b. Compliance Demonstration:**

(1) Initial compliance emission tests shall be conducted within 180 days after the start of operation of the process to show compliance with the emission limitation.<sup>20</sup> [s. NR 439.07, Wis. Adm. Code]

(2) **Stack Parameters:** These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed.

(a) The height for the stack S42 shall be at least 95 feet Above ground level. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]

(b) The inside diameter at the outlet of the stack S42 may not exceed 2.17 feet. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]

(3) Particulate matter emissions shall be controlled using a fabric filter baghouse system to meet the BACT limits. [s. NR 405.08(2), Wis. Adm. Code]

(4) The fabric filter baghouse system shall be in line and shall be operated at all times that the process is in operation. [s. NR 406.10, Wis. Adm. Code; s. NR 407.09(4)(a)1., Wis. Adm. Code]

(5) The operating pressure drop range across the fabric filter baghouse system shall be determined during the initial testing period. [s. 285.65(3), Wis. Stats.]

(6) The pressure drop across the fabric filter baghouse system shall be maintained within the range identified by condition I.H.1.b.(5). [s. NR 407.09(4)(a)1., Wis. Adm. Code]

(7) The process shall be monitored in accordance with a Fugitive Dust Control Plan. The Department may request the permittee to review and amend the plan if necessary to maintain emissions in compliance with emission limits. [s. 285.65(3), Wis. Stats.]

(8) Whenever fugitive dust emissions are observed from the process, the permittee shall take corrective actions to prevent fugitive dust from becoming airborne. [s. 285.65(3), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

(1) Reference Test Method for Particulate Matter Emissions: Whenever compliance emission testing is required, US EPA Method 5, including backhalf (Method 202) or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(1), Wis. Adm. Code]

(2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code]

(3) The permittee shall record the pressure drop across the fabric filter baghouse system once for every eight hours of operation hours whenever the dust collection system is in operation. [s. NR 439.055(2)(b)1., Wis. Adm. Code]

(4) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the fabric filter baghouse system, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code]

(5) Instrumentation to monitor the pressure drop across the fabric filter baghouse system shall be installed and operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code]

<sup>20</sup> If the compliance emission tests cannot be conducted within 180 days after the start of initial operation, the permit holder may request and the Department may approve, in writing, an extension of time to conduct the test(s).

**H. S42, P42 – System 3 – New Junction House #3, #32**

**Pollutant:** 2. Visible Emissions

**a. Limitations:** 10% opacity. [s. NR 431.05, Wis. Adm. Code; s. NR 405.09, Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats.]

**b. Compliance Demonstration:**

(1) The fabric filter baghouse system shall be in line and shall be operated at all times that the process is in operation. [s. NR 406.10, Wis. Adm. Code; s. NR 407.09(4)(a)1., Wis. Adm. Code]

(2) The pressure drop across the fabric filter baghouse system shall be maintained within the range identified by condition I.H.1.b.(5). [s. NR 407.09(4)(a)1., Wis. Adm. Code]

(3) The process shall be monitored in accordance with a Fugitive Dust Control Plan. The Department may request the permittee to review and amend the plan if necessary to maintain emissions in compliance with emission limits. [s. 285.65(3), Wis. Stats.]

(4) Whenever fugitive dust emissions are observed from the process, the permittee shall take corrective actions to prevent fugitive dust from becoming airborne. [s. 285.65(3), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

(1) Reference Test Method for Visible Emissions: Whenever compliance emission testing is required, US EPA Method 9 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(9)(a)1., Wis. Adm. Code]

(2) The permittee shall record the pressure drop across the fabric filter baghouse system once for every eight hours of operation hours whenever the dust collection system is in operation. [s. NR 439.055(2)(b)1., Wis. Adm. Code]

(3) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the fabric filter baghouse system, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code]

(4) Instrumentation to monitor the pressure drop across the fabric filter baghouse system shall be installed and operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code]

**I. S43, P43 – System 4 – Unit 4 Silo Fill System, #7**

**Pollutant:** 1. Particulate Matter Emissions (PM/PM10)

**a. Limitations:** 0.01 grains per dry standard cubic foot of exhaust gas and 3.84 pounds per hour. (BACT) [s. NR 415.06(2)(c), Wis. Adm. Code; s. NR 405.08, Wis. Adm. Code; s. 285.65(3), Wis. Stats.]

**b. Compliance Demonstration:**

(1) Initial compliance emission tests shall be conducted within 180 days after the start of operation of the process to show compliance with the emission limitation.<sup>21</sup> [s. NR 439.07, Wis. Adm. Code]

(2) Stack Parameters: These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed.

(a) The height of the stack S43 shall be at least 260 feet Above ground level. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]

(b) The inside diameter at the outlet of the stack S43 may not exceed 4.83 feet. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]

(3) Particulate matter emissions shall be controlled using a fabric filter baghouse system to meet the BACT limits. [s. NR 405.08(2), Wis. Adm. Code]

(4) The fabric filter baghouse system shall be in line and shall be operated at all times that the dust collection system is in operation. [s. NR 406.10, Wis. Adm. Code; s. NR 407.09(4)(a)1., Wis. Adm. Code]

(5) The operating pressure drop range across the fabric filter baghouse system shall be determined during the initial testing period. [s. 285.65(3), Wis. Stats.]

(6) The pressure drop across the fabric filter baghouse system shall be maintained within the range identified by condition I.I.1.b.(5). [s. NR 407.09(4)(a)1., Wis. Adm. Code]

(7) The process shall be monitored in accordance with a Fugitive Dust Control Plan. The Department may request the permittee to review and amend the plan if necessary to maintain emissions in compliance with emission limits. [s. 285.65(3), Wis. Stats.]

(8) Whenever fugitive dust emissions are observed from the process, the permittee shall take corrective actions to prevent fugitive dust from becoming airborne. [s. 285.65(3), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

(1) Reference Test Method for Particulate Matter Emissions: Whenever compliance emission testing is required, US EPA Method 5, including backhalf (Method 202) or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(1), Wis. Adm. Code]

(2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code]

(3) The permittee shall record the pressure drop across the fabric filter baghouse system once for every eight hours of operation hours whenever the dust collection system is in operation. [s. NR 439.055(2)(b)1., Wis. Adm. Code]

(4) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the fabric filter baghouse system, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code]

(5) Instrumentation to monitor the pressure drop across the fabric filter baghouse system shall be installed and operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code]

<sup>21</sup> If the compliance emission tests cannot be conducted within 180 days after the start of initial operation, the permit holder may request and the Department may approve, in writing, an extension of time to conduct the test(s).

**I. S43, P43 – System 4 – Unit 4 Silo Fill System, #7**

**Pollutant:** 2. Visible Emissions

**a. Limitations:** 10% opacity. [s. NR 431.05, Wis. Adm. Code; s. NR 405.09, Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats.]

**b. Compliance Demonstration:**

(1) The fabric filter baghouse system shall be in line and shall be operated at all times that the process is in operation. [s. NR 406.10, Wis. Adm. Code, s. NR 407.09(4)(a)1., Wis. Adm. Code]

(2) The pressure drop across the fabric filter baghouse system shall be maintained within the range identified by condition I.I.1.b.(5). [s. NR 407.09(4)(a)1., Wis. Adm. Code]

(3) The process shall be monitored in accordance with a Fugitive Dust Control Plan. The Department may request the permittee to review and amend the plan if necessary to maintain emissions in compliance with emission limits. [s. 285.65(3), Wis. Stats.]

(4) Whenever fugitive dust emissions are observed from the process, the permittee shall take corrective actions to prevent fugitive dust from becoming airborne. [s. 285.65(3), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

(1) Reference Test Method for Visible Emissions: Whenever compliance emission testing is required, US EPA Method 9 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(9)(a)1., Wis. Adm. Code]

(2) The permittee shall record the pressure drop across the fabric filter baghouse system once for every eight hours of operation hours whenever the dust collection system is in operation. [s. NR 439.055(2)(b)1., Wis. Adm. Code]

(3) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the fabric filter baghouse system, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code]

(4) Instrumentation to monitor the pressure drop across the fabric filter baghouse system shall be installed and operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code]

<b>J. S44, P44 – System 1 – Line Storage Silo Bin Vent #22</b>	
<b>Pollutant:</b> 1. Particulate Matter Emissions (PM/PM10)	
<b>a. Limitations:</b> 0.01 grains per dry standard cubic foot of exhaust gas and 0.10 pound per hour. (BACT) [s. NR 415.06(2)(c), Wis. Adm. Code; s. NR 405.08, Wis. Adm. Code; s. 285.65(3), Wis. Stats.]	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
<p>(1) Initial compliance emission tests shall be conducted within 180 days after the start of operation of the process to show compliance with the emission limitation.22 [s. NR 439.07, Wis. Adm. Code]</p> <p>(2) <u>Stack Parameters</u> These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed.</p> <p>(a) The height of the stack S44 shall be at least 70 feet Above ground level. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]</p> <p>(b) The inside diameter at the outlet of the stack S44 may not exceed 0.67 feet. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]</p> <p>(3) Particulate matter emissions shall be controlled using a fabric filter baghouse system to meet the BACT limits. [s. NR 405.08(2), Wis. Adm. Code]</p> <p>(4) The fabric filter baghouse system shall be in line and shall be operated at all times that the process in operation. [s. NR 406.10, Wis. Adm. Code; s. NR 407.09(4)(a)1., Wis. Adm. Code]</p> <p>(5) The operating pressure drop range across the fabric filter baghouse system shall be determined during the initial testing period. [s. 285.65(3), Wis. Stats.]</p> <p>(6) The pressure drop across the fabric filter baghouse system shall be maintained within the range identified by condition I.J.1.b.(5). [s. NR 407.09(4)(a)1., Wis. Adm. Code]</p> <p>(7) The process shall be monitored in accordance with a Fugitive Dust Control Plan. The Department may request the permittee to review and amend the plan if necessary to maintain emissions in compliance with emission limits. [s. 285.65(3), Wis. Stats.]</p> <p>(8) Whenever fugitive dust emissions are observed form the process, the permittee shall take corrective actions to prevent fugitive dust from becoming airborne. [s. 285.65(3), Wis. Stats.]</p>	<p>(1) <u>Reference Test Method for Particulate Matter Emissions:</u> Whenever compliance emission testing is required, US EPA Method 5, including backhalf (Method 202) or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(1), Wis. Adm. Code]</p> <p>(2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(3) The permittee shall record the pressure drop across the fabric filter baghouse system once for every eight hours of operation hours whenever the dust collection system is in operation. [s. NR 439.055(2)(b)1., Wis. Adm. Code]</p> <p>(4) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the fabric filter baghouse system, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(5) Instrumentation to monitor the pressure drop across the fabric filter baghouse system shall be installed and operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code]</p>

22 If the compliance emission tests cannot be conducted within 180 days after the start of initial operation, the permit holder may request and the Department may approve, in writing, an extension of time to conduct the test(s).

<b>J. S44, P44 – System 1 – Line Storage Silo Bin Vent #22</b>	
<b>Pollutant:</b> 2. Visible Emissions	
<b>a. Limitations:</b> 10% opacity. [s. NR 431.05, Wis. Adm. Code; s. NR 405.09, Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats.]	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
<p>(1) The fabric filter baghouse system shall be in line and shall be operated at all times that the process is in operation. [s. NR 406.10, Wis. Adm. Code, s. NR 407.09(4)(a)1., Wis. Adm. Code]</p> <p>(2) The pressure drop across the fabric filter baghouse system shall be maintained within the range identified by condition I.J. 1.b.(5). [s. NR 407.09(4)(a)1., Wis. Adm. Code]</p> <p>(3) The process shall be monitored in accordance with a Fugitive Dust Control Plan. The Department may request the permittee to review and amend the plan if necessary to maintain emissions in compliance with emission limits. [s. 285.65(3), Wis. Stats.]</p> <p>(4) Whenever fugitive dust emissions are observed from the process, the permittee shall take corrective actions to prevent fugitive dust from becoming airborne. [s. 285.65(3), Wis. Stats.]</p>	<p>(1) <u>Reference Test Method for Visible Emissions:</u> Whenever compliance emission testing is required, US EPA Method 9 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(9)(a)1., Wis. Adm. Code]</p> <p>(2) The permittee shall record the pressure drop across the fabric filter baghouse system once for every eight hours of operation hours whenever the dust collection system is in operation. [s. NR 439.055(2)(b)1., Wis. Adm. Code]</p> <p>(3) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the fabric filter baghouse system, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(4) Instrumentation to monitor the pressure drop across the fabric filter baghouse system shall be installed and operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code]</p>

**K. S45, P45 – System 2 – Lime Bin Vent, #27**

**Pollutant:** 1. Particulate Matter Emissions (PM/PM10)

**a. Limitations:** 0.01 grains per dry standard cubic foot of exhaust gas and 0.26 pound per hour. (BACT) [s. NR 415.06(2)(c), Wis. Adm. Code; s. NR 405.08, Wis. Adm. Code; s. 285.65(3), Wis. Stats.]

**b. Compliance Demonstration:**

(1) Initial compliance emission tests shall be conducted within 180 days after the start of operation of the process to show compliance with the emission limitation.<sup>23</sup> [s. NR 439.07, Wis. Adm. Code]

(2) **Stack Parameters:** These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed.

(a) The height of the stack S45 shall be at least 45 feet Above ground level. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]

(b) The inside diameter at the outlet of the stack S45 may not exceed 1.17 feet. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]

(3) Particulate matter emissions shall be controlled using a fabric filter baghouse system to meet the BACT limits. [s. NR 405.08(2), Wis. Adm. Code]

(4) The fabric filter baghouse system shall be in line and shall be operated at all times that the process is in operation. [s. NR 406.10, Wis. Adm. Code; s. NR 407.09(4)(a)1., Wis. Adm. Code]

(5) The operating pressure drop range across the fabric filter baghouse system shall be determined during the initial testing period. [s. 285.65(3), Wis. Stats.]

(6) The pressure drop across the fabric filter baghouse system shall be maintained within the range identified by condition I.K.1.b.(5). [s. NR 407.09(4)(a)1., Wis. Adm. Code]

(7) The process shall be monitored in accordance with a Fugitive Dust Control Plan. The Department may request the permittee to review and amend the plan if necessary to maintain emissions in compliance with emission limits. [s. 285.65(3), Wis. Stats.]

(8) Whenever fugitive dust emissions are observed from the process, the permittee shall take corrective actions to prevent fugitive dust from becoming airborne. [s. 285.65(3), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

(1) Reference Test Method for Particulate Matter Emissions: Whenever compliance emission testing is required, US EPA Method 5, including backhalf (Method 202) or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(1), Wis. Adm. Code]

(2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code]

(3) The permittee shall record the pressure drop across the fabric filter baghouse system once for every eight hours of operation hours whenever the dust collection system is in operation. [s. NR 439.055(2)(b)1., Wis. Adm. Code]

(4) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the fabric filter baghouse system, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code]

(5) Instrumentation to monitor the pressure drop across the fabric filter baghouse system shall be installed and operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code]

<sup>23</sup> If the compliance emission tests cannot be conducted within 180 days after the start of initial operation, the permit holder may request and the Department may approve, in writing, an extension of time to conduct the test(s).

**K. S45, P45 – System 2 – Lime Bin Vent, #27**

**Pollutant:** 2. Visible Emissions

**a. Limitations:** 10% opacity. [s. NR 431.05, Wis. Adm. Code; s. NR 405.09, Wis. Adm. Code; s. 285.65(3), Wis. Stats., s. 285.65(7), Wis. Stats.]

**b. Compliance Demonstration:**

(1) The fabric filter baghouse system shall be in line and shall be operated at all times that the process is in operation. [s. NR 406.10, Wis. Adm. Code; s. NR 407.09(4)(a)1., Wis. Adm. Code]

(2) The pressure drop across the fabric filter baghouse system shall be maintained within the range identified by condition I.K.1.b.(5). [s. NR 407.09(4)(a)1., Wis. Adm. Code]

(3) The process shall be monitored in accordance with a Fugitive Dust Control Plan. The Department may request the permittee to review and amend the plan if necessary to maintain emissions in compliance with emission limits. [s. 285.65(3), Wis. Stats.]

(4) Whenever fugitive dust emissions are observed from the process, the permittee shall take corrective actions to prevent fugitive dust from becoming airborne. [s. 285.65(3), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

(1) Reference Test Method for Visible Emissions: Whenever compliance emission testing is required, US EPA Method 9 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(9)(a)1., Wis. Adm. Code]

(2) The permittee shall record the pressure drop across the fabric filter baghouse system once for every eight hours of operation hours whenever the dust collection system is in operation. [s. NR 439.055(2)(b)1., Wis. Adm. Code]

(3) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the fabric filter baghouse system, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code]

(4) Instrumentation to monitor the pressure drop across the fabric filter baghouse system shall be installed and operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code]

**L. S46, P46 – System 1 – FGD Product Mechanical Exhauster #23**

**Pollutant:** 1. Particulate Matter Emissions (PM/PM10)

**a. Limitations:** 0.02 grains per dry standard cubic foot of exhaust gas and 0.65 pound per hour. (BACT) [s. NR 415.06(2)(c), Wis. Adm. Code; s. NR 405.08, Wis. Adm. Code; s. 285.65(3), Wis. Stats.]

**b. Compliance Demonstration:**

(1) Initial compliance emission tests shall be conducted within 180 days after the start of operation of the process to show compliance with the emission limitation.<sup>24</sup> [s. NR 439.07, Wis. Adm. Code]

(2) Stack Parameters These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed.

(a) The height of the stack S46 shall be at least 25 feet above ground level. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]

(b) The inside diameter at the outlet of the stack S46 may not exceed 1.33 feet. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]

(3) Particulate matter emissions shall be controlled using a fabric filter baghouse system to meet the BACT limits. [s. NR 405.08(2), Wis. Adm. Code]

(4) The fabric filter baghouse system shall be in line and shall be operated at all times that the process is in operation. [s. NR 406.10, Wis. Adm. Code; s. NR 407.09(4)(a)1., Wis. Adm. Code]

(5) The operating pressure drop range across the fabric filter baghouse system shall be determined during the initial testing period. [s. 285.65(3), Wis. Stats.]

(6) The pressure drop across the fabric filter baghouse system shall be maintained within the range identified by condition I.L.1.b.(5). [s. NR 407.09(4)(a)1., Wis. Adm. Code]

(7) The process shall be monitored in accordance with a Fugitive Dust Control Plan. The Department may request the permittee to review and amend the plan if necessary to maintain emissions in compliance with emission limits. [s. 285.65(3), Wis. Stats.]

(8) Whenever fugitive dust emissions are observed from the process, the permittee shall take corrective actions to prevent fugitive dust from becoming airborne. [s. 285.65(3), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

(1) Reference Test Method for Particulate Matter Emissions: Whenever compliance emission testing is required, US EPA Method 5, including backhalf (Method 202) or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(1), Wis. Adm. Code]

(2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code]

(3) The permittee shall record the pressure drop across the fabric filter baghouse system once for every eight hours of operation hours whenever the dust collection system is in operation. [s. NR 439.055(2)(b)1., Wis. Adm. Code]

(4) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the fabric filter baghouse system, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code]

(5) Instrumentation to monitor the pressure drop across the fabric filter baghouse system shall be installed and operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code]

<sup>24</sup> If the compliance emission tests cannot be conducted within 180 days after the start of initial operation, the permit holder may request and the Department may approve, in writing, an extension of time to conduct the test(s).

**L. S46, P46 – System 1 – FGD Product Mechanical Exhauster #23**

**Pollutant:** 2. Visible Emissions

**a. Limitations:** 10% opacity. [s. NR 431.05, Wis. Adm. Code; s. NR 405.09, Wis. Adm. Code; s. 285.65(3), Wis. Stats., s. 285.65(7), Wis. Stats.]

**b. Compliance Demonstration:**

(1) The fabric filter baghouse system shall be in line and shall be operated at all times that the process is in operation. [s. NR 406.10, Wis. Adm. Code; s. NR 407.09(4)(a)1., Wis. Adm. Code]

(2) The pressure drop across the fabric filter baghouse system shall be maintained within the range identified by condition I.L.1.b.(5). [s. NR 407.09(4)(a)1., Wis. Adm. Code]

(3) The process shall be monitored in accordance with a Fugitive Dust Control Plan. The Department may request the permittee to review and amend the plan if necessary to maintain emissions in compliance with emission limits. [s. 285.65(3), Wis. Stats.]

(4) Whenever fugitive dust emissions are observed from the process, the permittee shall take corrective actions to prevent fugitive dust from becoming airborne. [s. 285.65(3), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

(1) Reference Test Method for Visible Emissions: Whenever compliance emission testing is required, US EPA Method 9 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(9)(a)1., Wis. Adm. Code]

(2) The permittee shall record the pressure drop across the fabric filter baghouse system once for every eight hours of operation hours whenever the dust collection system is in operation. [s. NR 439.055(2)(b)1., Wis. Adm. Code]

(3) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the fabric filter baghouse system, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code]

(4) Instrumentation to monitor the pressure drop across the fabric filter baghouse system shall be installed and operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code]

**M. S47, P47 – System 2 – FGD Product Mechanical Exhauster #23**

**Pollutant:** 1. Particulate Matter Emissions (PM/PM10)

**a. Limitations:** 0.02 grains per dry standard cubic foot of exhaust gas and 0.65 pound per hour. (BACT) [s. NR 415.06(2)(c), Wis. Adm. Code; s. NR 405.08, Wis. Adm. Code; s. 285.65(3), Wis. Stats.]

**b. Compliance Demonstration:**

(1) Initial compliance emission tests shall be conducted within 180 days after the start of operation of the process to show compliance with the emission limitation.<sup>25</sup> [s. NR 439.07, Wis. Adm. Code]

(2) Stack Parameters These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed.

(a) The height of the stack S47 shall be at least 25 feet above ground level. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]

(b) The inside diameter at the outlet of the stack S47 may not exceed 1.33 feet. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]

(3) Particulate matter emissions shall be controlled using a fabric filter baghouse system to meet the BACT limits. [s. NR 405.08(2), Wis. Adm. Code]

(4) The fabric filter baghouse system shall be in line and shall be operated at all times that the process is in operation. [s. NR 406.10, Wis. Adm. Code; s. NR 407.09(4)(a)1., Wis. Adm. Code]

(5) The operating pressure drop range across the fabric filter baghouse system shall be determine during the initial testing period. [s. 285.65(3), Wis. Stats.]

(6) The pressure drop across the fabric filter baghouse system shall be maintained within the range identified by condition I.M.1.b.(5). [s. NR 407.09(4)(a)1., Wis. Adm. Code]

(7) The process shall be monitored in accordance with a Fugitive Dust Control Plan. The Department may request the permittee to review and amend the plan if necessary to maintain emissions in compliance with emission limits. [s. 285.65(3), Wis. Stats.]

(8) Whenever fugitive dust emissions are observed form the process, the permittee shall take corrective actions to prevent fugitive dust from becoming airborne. [s. 285.65(3), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

(1) Reference Test Method for Particulate Matter Emissions: Whenever compliance emission testing is required, US EPA Method 5, including backhalf (Method 202) or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(1), Wis. Adm. Code]

(2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code]

(3) The permittee shall record the pressure drop across the fabric filter baghouse system once for every eight hours of operation hours whenever the dust collection system is in operation. [s. NR 439.055(2)(b)1., Wis. Adm. Code]

(4) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the fabric filter baghouse system, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code]

(5) Instrumentation to monitor the pressure drop across the fabric filter baghouse system shall be installed and operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code]

<sup>25</sup> If the compliance emission tests cannot be conducted within 180 days after the start of initial operation, the permit holder may request and the Department may approve, in writing, an extension of time to conduct the test(s).

**M. S47, P47 – System 2 – FGD Product Mechanical Exhauster #23**

**Pollutant:** 2. Visible Emissions

**a. Limitations:** 10% opacity. [s. NR 431.05, Wis. Adm. Code; s. NR 405.09, Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats.]

**b. Compliance Demonstration:**

(1) The fabric filter baghouse system shall be in line and shall be operated at all times that the process is in operation. [s. NR 406.10, Wis. Adm. Code; s. NR 407.09(4)(a)1., Wis. Adm. Code]

(2) The pressure drop across the fabric filter baghouse system shall be maintained within the range identified by condition I.M.1.b.(5). [s. NR 407.09(4)(a)1., Wis. Adm. Code]

**c. Test Methods, Recordkeeping, and Monitoring:**

(1) Reference Test Method for Visible Emissions: Whenever compliance emission testing is required, US EPA Method 9 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(9)(a)1., Wis. Adm. Code]

(2) The permittee shall record the pressure drop across the fabric filter baghouse system once for every eight hours of operation hours whenever the dust collection system is in operation. [s. NR 439.055(2)(b)1., Wis. Adm. Code]

(3) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the fabric filter baghouse system, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code]

(4) Instrumentation to monitor the pressure drop across the fabric filter baghouse system shall be installed and operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code]

**N. S48, P48 – System 3, FGD Product Mechanical Exhauster, #23**

**Pollutant:** 1. Particulate Matter Emissions (PM/PM10)

**a. Limitations:** 0.02grains per dry standard cubic foot of exhaust gas and 0.65 pound per hour. (BACT) [s. NR 415.06(2)(c), Wis. Adm. Code; s. NR 405.08, Wis. Adm. Code; s. 285.65(3), Wis. Stats.]

**b. Compliance Demonstration:**

(1) Initial compliance emission tests shall be conducted within 180 days after the start of operation of the process to show compliance with the emission limitation.<sup>26</sup> [s. NR 439.07, Wis. Adm. Code]

(2) Stack Parameters These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed.

(a) The height of the stack S48 shall be at least 25 feet above ground level. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]

(b) The inside diameter at the outlet of the stack S48 may not exceed 1.33 feet. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]

(3) Particulate matter emissions shall be controlled using a fabric filter baghouse system to meet the BACT limits. [s. NR 405.08(2), Wis. Adm. Code]

(4) The fabric filter baghouse system shall be in line and shall be operated at all times that the process is in operation. [s. NR 406.10, Wis. Adm. Code; s. NR 407.09(4)(a)1., Wis. Adm. Code]

(5) The operating pressure drop range across the fabric filter baghouse system shall be determined during the initial testing period. [s. 285.65(3), Wis. Stats.]

(6) The pressure drop across the fabric filter baghouse system shall be maintained within the range identified by condition I.N.1.b.(5). [s. NR 407.09(4)(a)1., Wis. Adm. Code]

(7) The process shall be monitored in accordance with a Fugitive Dust Control Plan. The Department may request the permittee to review and amend the plan if necessary to maintain emissions in compliance with emission limits. [s. 285.65(3), Wis. Stats.]

(8) Whenever fugitive dust emissions are observed from the process, the permittee shall take corrective actions to prevent fugitive dust from becoming airborne. [s. 285.65(3), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

(1) Reference Test Method for Particulate Matter Emissions: Whenever compliance emission testing is required, US EPA Method 5, including backhalf (Method 202) or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(1), Wis. Adm. Code]

(2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code]

(3) The permittee shall record the pressure drop across the fabric filter baghouse system once for every eight hours of operation hours whenever the dust collection system is in operation. [s. NR 439.055(2)(b)1., Wis. Adm. Code]

(4) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the fabric filter baghouse system, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code]

(5) Instrumentation to monitor the pressure drop across the fabric filter baghouse system shall be installed and operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code]

<sup>26</sup> If the compliance emission tests cannot be conducted within 180 days after the start of initial operation, the permit holder may request and the Department may approve, in writing, an extension of time to conduct the test(s).

**N. S48, P48 – System 3, FGD Product Mechanical Exhauster, #23**

**Pollutant:** 2. Visible Emissions

**a. Limitations:** 10% opacity. [s. NR 431.05, Wis. Adm. Code; s. NR 405.09, Wis. Adm. Code; s. 285.65(3), Wis. Stats., s. 285.65(7), Wis. Stats.]

**b. Compliance Demonstration:**

(1) The fabric filter baghouse system shall be in line and shall be operated at all times that the process is in operation. [s. NR 406.10, Wis. Adm. Code; s. NR 407.09(4)(a)1., Wis. Adm. Code]

(2) The pressure drop across the fabric filter baghouse system shall be maintained within the range identified by condition I.N.1.b.(5). [s. NR 407.09(4)(a)1., Wis. Adm. Code]

(3) The process shall be monitored in accordance with a Fugitive Dust Control Plan. The Department may request the permittee to review and amend the plan if necessary to maintain emissions in compliance with emission limits. [s. 285.65(3), Wis. Stats.]

(4) Whenever fugitive dust emissions are observed from the process, the permittee shall take corrective actions to prevent fugitive dust from becoming airborne. [s. 285.65(3), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

(1) Reference Test Method for Visible Emissions: Whenever compliance emission testing is required, US EPA Method 9 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(9)(a)1., Wis. Adm. Code]

(2) The permittee shall record the pressure drop across the fabric filter baghouse system once for every eight hours of operation hours whenever the dust collection system is in operation. [s. NR 439.055(2)(b)1., Wis. Adm. Code]

(3) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the fabric filter baghouse system, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code]

(4) Instrumentation to monitor the pressure drop across the fabric filter baghouse system shall be installed and operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code]

**O. S49, P49 – System 4 – FGD Byproduct Recycle Bin Vent, #24**

**Pollutant:** 1. Particulate Matter Emissions (PM/PM10)

**a. Limitations:** 0.02 grains per dry standard cubic foot of exhaust gas and 0.83 pound per hour. (BACT) [s. NR 415.06(2)(c), Wis. Adm. Code; s. NR 405.08, Wis. Adm. Code; s. 285.65(3), Wis. Stats.]

**b. Compliance Demonstration:**

(1) Initial compliance emission tests shall be conducted within 180 days after the start of operation of the process to show compliance with the emission limitation.<sup>27</sup> [s. NR 439.07, Wis. Adm. Code]

(2) Stack Parameters These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed.

(a) The height of the stack S49 shall be at least 100 feet above ground level. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]

(b) The inside diameter at the outlet of the stack S49 may not exceed 1.50 feet. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]

(3) Particulate matter emissions shall be controlled using a fabric filter baghouse system to meet the BACT limits. [s. NR 405.08(2), Wis. Adm. Code]

(4) The fabric filter baghouse system shall be in line and shall be operated at all times that the process is in operation. [s. NR 406.10, Wis. Adm. Code; s. NR 407.09(4)(a)1., Wis. Adm. Code]

(5) The operating pressure drop range across the fabric filter baghouse system shall be determined during the initial testing period. [s. 285.65(3), Wis. Stats.]

(6) The pressure drop across the fabric filter baghouse system shall be maintained within the range identified by condition I.O.1.b.(5). [s. NR 407.09(4)(a)1., Wis. Adm. Code]

(7) The process shall be monitored in accordance with a Fugitive Dust Control Plan. The Department may request the permittee to review and amend the plan if necessary to maintain emissions in compliance with emission limits. [s. 285.65(3), Wis. Stats.]

(8) Whenever fugitive dust emissions are observed from the process, the permittee shall take corrective actions to prevent fugitive dust from becoming airborne. [s. 285.65(3), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

(1) Reference Test Method for Particulate Matter Emissions: Whenever compliance emission testing is required, US EPA Method 5, including backhalf (Method 202) or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(1), Wis. Adm. Code]

(2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code]

(3) The permittee shall record the pressure drop across the fabric filter baghouse system once for every eight hours of operation hours whenever the dust collection system is in operation. [s. NR 439.055(2)(b)1., Wis. Adm. Code]

(4) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the fabric filter baghouse system, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code]

(5) Instrumentation to monitor the pressure drop across the fabric filter baghouse system shall be installed and operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code]

<sup>27</sup> If the compliance emission tests cannot be conducted within 180 days after the start of initial operation, the permit holder may request and the Department may approve, in writing, an extension of time to conduct the test(s).

**O. S49, P49 – System 4 – FGD Byproduct Recycle Bin Vent, #24**

**Pollutant:** 2. Visible Emissions

**a. Limitations:** 10% opacity. [s. NR 431.05, Wis. Adm. Code; s. NR 405.09, Wis. Adm. Code; s. 285.65(3), Wis. Stats., s. 285.65(7), Wis. Stats.]

**b. Compliance Demonstration:**

(1) The fabric filter baghouse system shall be in line and shall be operated at all times that the process is in operation. [s. NR 406.10, Wis. Adm. Code; s. NR 407.09(4)(a)1., Wis. Adm. Code]

(2) The pressure drop across the fabric filter baghouse system shall be maintained within the range identified by condition I.O.1.b.(5). [s. NR 407.09(4)(a)1., Wis. Adm. Code]

(3) The process shall be monitored in accordance with a Fugitive Dust Control Plan. The Department may request the permittee to review and amend the plan if necessary to maintain emissions in compliance with emission limits. [s. 285.65(3), Wis. Stats.]

(4) Whenever fugitive dust emissions are observed from the process, the permittee shall take corrective actions to prevent fugitive dust from becoming airborne. [s. 285.65(3), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

(1) Reference Test Method for Visible Emissions: Whenever compliance emission testing is required, US EPA Method 9 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(9)(a)1., Wis. Adm. Code]

(2) The permittee shall record the pressure drop across the fabric filter baghouse system once for every eight hours of operation hours whenever the dust collection system is in operation. [s. NR 439.055(2)(b)1., Wis. Adm. Code]

(3) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the fabric filter baghouse system, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code]

(4) Instrumentation to monitor the pressure drop across the fabric filter baghouse system shall be installed and operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code]

**P. S50, P50 – System 5 – FGD Waste Silo Bin Vent #20**

**Pollutant:** 1. Particulate Matter Emissions (PM/PM10)

**a. Limitations:** 0.02 grains per dry standard cubic foot of exhaust gas and 1.12 pounds per hour. (BACT) [s. NR 415.06(2)(c), Wis. Adm. Code; s. NR 405.08, Wis. Adm. Code; s. 285.65(3), Wis. Stats.]

**b. Compliance Demonstration:**

(1) Initial compliance emission tests shall be conducted within 180 days after the start of operation of the process to show compliance with the emission limitation.<sup>28</sup> [s. NR 439.07, Wis. Adm. Code]

(2) Stack Parameters These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed.

(a) The height of the stack S50 shall be at least 110 feet above ground level. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]

(b) The inside diameter at the outlet of the stack S50 may not exceed 1.83 feet. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]

(3) Particulate matter emissions shall be controlled using a fabric filter baghouse system to meet the BACT limits. [s. NR 405.08(2), Wis. Adm. Code]

(4) The fabric filter baghouse system shall be in line and shall be operated at all times that the process is in operation. [s. NR 406.10, Wis. Adm. Code; s. NR 407.09(4)(a)1., Wis. Adm. Code]

(5) The operating pressure drop range across the fabric filter baghouse system shall be determined during the initial testing period. [s. 285.65(3), Wis. Stats.]

(6) The pressure drop across the fabric filter baghouse system shall be maintained within the range identified by condition I.P.1.b.(5). [s. NR 407.09(4)(a)1., Wis. Adm. Code]

(7) The process shall be monitored in accordance with a Fugitive Dust Control Plan. The Department may request the permittee to review and amend the plan if necessary to maintain emissions in compliance with emission limits. [s. 285.65(3), Wis. Stats.]

(8) Whenever fugitive dust emissions are observed from the process, the permittee shall take corrective actions to prevent fugitive dust from becoming airborne. [s. 285.65(3), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

(1) Reference Test Method for Particulate Matter Emissions: Whenever compliance emission testing is required, US EPA Method 5, including backhalf (Method 202) or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(1), Wis. Adm. Code]

(2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code]

(3) The permittee shall record the pressure drop across the fabric filter baghouse system once for every eight hours of operation hours whenever the dust collection system is in operation. [s. NR 439.055(2)(b)1., Wis. Adm. Code]

(4) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the fabric filter baghouse system, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code]

(5) Instrumentation to monitor the pressure drop across the fabric filter baghouse system shall be installed and operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code]

<sup>28</sup> If the compliance emission tests cannot be conducted within 180 days after the start of initial operation, the permit holder may request and the Department may approve, in writing, an extension of time to conduct the test(s).

**P. S50, P50 – System 5 – FGD Byproduct Recycle Bin Vent, #24**

**Pollutant:** 2. Visible Emissions

**a. Limitations:** 10% opacity. [s. NR 431.05, Wis. Adm. Code; s. NR 405.09, Wis. Adm. Code; s. 285.65(3), Wis. Stats., s. 285.65(7), Wis. Stats.]

**b. Compliance Demonstration:**

- (1) The fabric filter bathhouse system shall be in line and shall be operated at all times that the process is in operation. [s. NR 406.10, Wis. Adm. Code; s. NR 407.09(4)(a)1., Wis. Adm. Code]
- (2) The pressure drop across the fabric filter bathhouse system shall be maintained within the range identified by condition I.P.1.b.(5). [s. NR 407.09(4)(a)1., Wis. Adm. Code]
- (3) The process shall be monitored in accordance with a Fugitive Dust Control Plan. The Department may request the permittee to review and amend the plan if necessary to maintain emissions in compliance with emission limits. [s. 285.65(3), Wis. Stats.]
- (4) Whenever fugitive dust emissions are observed from the process, the permittee shall take corrective actions to prevent fugitive dust from becoming airborne. [s. 285.65(3), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

- (1) Reference Test Method for Visible Emissions: Whenever compliance emission testing is required, US EPA Method 9 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(9)(a)1., Wis. Adm. Code]
- (2) The permittee shall record the pressure drop across the fabric filter bathhouse system once for every eight hours of operation hours whenever the dust collection system is in operation. [s. NR 439.055(2)(b)1., Wis. Adm. Code]
- (3) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the fabric filter bathhouse system, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code]
- (4) Instrumentation to monitor the pressure drop across the fabric filter bathhouse system shall be installed and operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code]

<b>Q. P61, S61 – Machining Shop Welding Shop</b>	
<b>Pollutant:</b> 1 Particulate Matter (PM/PM10)	
a. Limitations: (1) The emissions may not exceed 0.065 pound PM per hour and 0.065 pound PM10 per hour. (BACT); (2) The total amount of electrodes used may not exceed 35,148 pounds in any 12 consecutive months. The total amount of electrodes may not exceed 96 pounds per day on a monthly average. [s. NR 405.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats., s. 285.65(7), Wis. Stats.]	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
<p>(1) The permittee shall determine the hourly emissions using electrodes consumption records and emissions factor approved by the Department in writing. [s. 285.65(3), Wis. Stats.]</p> <p>(2) <u>Stack Parameters</u> These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed.</p> <p>(a) The height of the stack S61 shall be at least 37.0 feet above ground level. [s. 285.65(3), Wis. Stats., s. NR 406.10, Wis. Adm. Code]</p> <p>(b) The inside diameter at the outlet of the stack S61 may not exceed 2.0 feet. [s. 285.65(3), Wis. Stats., s. NR 406.10, Wis. Adm. Code]</p> <p>(3) The permittee shall keep monthly records in pounds of the amount of electrodes used. The records in total in any 12 consecutive months shall be kept to show compliance with I.Q.1.a.</p> <p>(2). Monthly welding records generated from the inventory system will be used to determine the average daily weld emissions to demonstrate compliance with the particulate emission limit [s. 285.65(3), Wis. Stats.]</p>	<p>(1) <u>Reference Test Method for Particulate Matter Emissions:</u> Whenever compliance emission testing is required, test procedures in 40 CFR 60 and US EPA Method 5, including backhalf (Method 202) or an alternate method approved in writing by the Department, shall be used to demonstrate compliance [s. NR 439.06(1), Wis. Adm. Code]</p> <p>(2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(3) The permittee shall keep records on the amount of electrodes used in pounds as required in condition I.Q.1.b.(3). [s. 285.65(10), Wis. Stats., s. 285.65(3), Wis. Stats.]</p>

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<b>Q. P61, S61 – Machining Shop Welding Shop</b>	
<b>Pollutant:</b> 2. Volatile Organic Compounds (VOC)	
<b>a. Limitations:</b> (1) The emissions may not exceed 0.23 pound per hour. (BACT); (2). The total amount of electrodes used may not exceed 35,148 pounds in any 12 consecutive months. The total amount of electrodes may not exceed 96 pounds per day on a monthly average [s. NR 405.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats., s. 285.65(7), Wis. Stats.]	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
(1) The permittee shall determine the hourly emissions using electrodes consumption records and emissions factor approved by the Department in writing. [s. 285.65(3), Wis. Stats.]  (2) The permittee shall keep monthly records in pounds of the amount of electrodes used. The records in total in any 12 consecutive months shall be kept to show compliance with I.Q.2.a. (2). Monthly welding records generated from the inventory system will be used to determine the average daily weld emissions to demonstrate compliance with the particulate emission limit [s. 285.65(3), Wis. Stats.]	(1) Reference test Method for Volatile Organic Compound Emissions: Whenever compliance emission testing is required, the appropriate US EPA Method 25 or 18 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(3), Wis. Adm. Code]  (2) The permittee shall keep records on the amount of electrodes used in pounds as required in condition I.Q.2.b.(2). [s. 285.65(10), Wis. Stats., s. 285.65(3), Wis. Stats.]

<b>Q. P61, S61 – Machining Shop Welding Shop</b>	
<b>Pollutant:</b> 3. Visible Emissions	
<b>a. Limitations:</b> 20% opacity. [s. NR 431.05, Wis. Adm. Code; s. NR 405.09, Wis. Adm. Code; s. 285.65(3), Wis. Stats., s. 285.65(7), Wis. Stats.]	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
(1) Complying with conditions I.Q.1.b.(1) and (3) will also serve as compliance with the visible emission limits. [s. 285.65(3), Wis. Stats.]	(1) <u>Reference Test Method for Visible Emissions:</u> Whenever compliance emission testing is required, US EPA Method 9 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(9)(a)1., Wis. Adm. Code]  (2) Compliance with conditions I.Q.1.c. (2) and (3), will serve as demonstrating compliance with the recordkeeping and monitoring requirements for visible emissions. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]

<b>R. P62, S62 – Railcar Facility Welding Shop</b>	
<b>Pollutant:</b> 1 Particulate Matter (PM/PM10)	
a. Limitations: (1) The emissions may not exceed 0.065 pound PM per hour and 0.065 pound PM10 per hour. (BACT); (2) The total amount of electrodes used may not exceed 35,148 pounds in any 12 consecutive months. The total amount of electrodes may not exceed 96 pounds per day on a monthly average. [s. NR 405.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats., s. 285.65(7), Wis. Stats.]	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
<p>(1) The permittee shall determine the hourly emissions using electrodes consumption records and emissions factor approved by the Department in writing. [s. 285.65(3), Wis. Stats.]</p> <p>(2) <u>Stack Parameters</u> These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed.</p> <p>(a) The height of the stack S62 shall be at least 37.0 feet above ground level. [s. 285.65(3), Wis. Stats., s. NR 406.10, Wis. Adm. Code]</p> <p>(b) The inside diameter at the outlet of the stack S62 may not exceed 2.0 feet. [s. 285.65(3), Wis. Stats., s. NR 406.10, Wis. Adm. Code]</p> <p>(3) The permittee shall keep monthly records in pounds of the amount of electrodes used. The records in total in any 12 consecutive months shall be kept to show compliance with I.R.1.a.</p> <p>(2). Monthly welding records generated from the inventory system will be used to determine the average daily weld emissions to demonstrate compliance with the particulate emission limit. [s. 285.65(3), Wis. Stats.]</p>	<p>(1) <u>Reference Test Method for Particulate Matter Emissions:</u> Whenever compliance emission testing is required, test procedures in 40 CFR 60 and US EPA Method 5, including backhalf (Method 202) or an alternate method approved in writing by the Department, shall be used to demonstrate compliance [s. NR 439.06(1), Wis. Adm. Code]</p> <p>(2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(3) The permittee shall keep records on the amount of electrodes used in pounds in condition I.R.1.b.(3). [s. 285.65(10), Wis. Stats., s. 285.65(3), Wis. Stats.]</p>

<b>R. P62, S62 – Railcar Facility Welding Shop</b>	
<b>Pollutant:</b> 2. Volatile Organic Compounds (VOC)	
<b>a. Limitations:</b> (1) The emissions may not exceed 0.23 pound per hour. (BACT); (2) The total amount of electrodes used may not exceed 35,148 pounds in any 12 consecutive months. The total amount of electrodes may not exceed 96 pounds per day on a monthly average. [s. NR 405.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats., s. 285.65(7), Wis. Stats.]	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
(1) The permittee shall determine the hourly emissions using consumption records and emissions factor approved by the Department in writing. [s. 285.65(3), Wis. Stats.]  (2) The permittee shall keep monthly records in pounds of the amount of electrodes used. The records in total in any 12 consecutive months shall be kept to show compliance with I.R.2.a. (2). Monthly welding records generated from the inventory system will be used to determine the average daily weld emissions to demonstrate compliance with the particulate emission limit. [s. 285.65(3), Wis. Stats.]	(1) Reference test Method for Volatile Organic Compound Emissions: Whenever compliance emission testing is required, the appropriate US EPA Method 25 or 18 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(3)., Wis. Adm. Code]  (2) The permittee shall keep records on the amount of electrodes used in pounds in condition I.R.2.b.(2). [s. 285.65(10), Wis. Stats., s. 285.65(3), Wis. Stats.]

<b>R. P62, S62 – Railcar Facility Welding Shop</b>	
<b>Pollutant:</b> 3. Visible Emissions	
<b>a. Limitations:</b> 20% opacity. [s. NR 431.05, Wis. Adm. Code; s. NR 405.09, Wis. Adm. Code; s. 285.65(3), Wis. Stats., s. 285.65(7), Wis. Stats.]	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
(1) Complying with conditions I.R.1.b.(1) and (3) will also serve as complying with the visible emission limits. [s. 285.65(3), Wis. Stats.]	(1) <u>Reference Test Method for Visible Emissions:</u> Whenever compliance emission testing is required, US EPA Method 9 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(9)(a)1., Wis. Adm. Code]  (2) Compliance with conditions I.R.1.c. (2) and (3), will also serve as complying with the recordkeeping and monitoring requirements for visible emissions. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]

**S. Process B63, S63, - Natural Gas Heater Station 1**

**Pollutant:** 1. Particulate Matter Emissions (PM/PM10)

**a. Limitations:** (1) The emissions may not exceed 0.01 pound PM per hour and 0.006 pound PM10 per hour. (BACT) [s. NR 405.08, Wis. Adm. Code; s. 285.65(3), Wis. Stats.] (2) The permittee shall apply Best Available Control Technology (BACT). BACT shall be met by: (a) The use of natural gas, and (b) Complying with the emission limitation in I.S.1.a.(1). [s. NR 405.08, Wis. Adm. Code]

**b. Compliance Demonstration:**

- (1) The facility shall fire natural gas in this process. This condition is established to meet BACT emission limit. [ss. 285.65(3) and 285.65(10), Wis. Stats.; s. NR 405.08, Wis. Adm. Code]
- (2) The permittee shall use the design rate for fuel use and vendor provided emission factors or alternate data approved in writing by the Department to determine the hourly emissions. [s. 285.65(3) and s. 285.65(10), Wis. Stats.]
- (3) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit: (a) A copy of the manufacturer's OEM that outlines the procedures that should be followed to maintain the natural gas heater. (b) A list of items that will be checked and maintained and their frequency to ensure that the natural gas heater is operating properly. This information will be used to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]
- (4) Stack Parameters These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed.
- (a) The height for stack S63 shall be at least 14.50 feet above ground level. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]
- (b) The inside diameter for stack S63 at the outlet may not exceed 0.83 feet. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]

**c. Test Methods, Recordkeeping, and Monitoring:**

- (1) Reference Test Method for Particulate Matter Emissions: Whenever compliance emission testing is required, test procedures in 40 CFR 60 and US EPA Method 5, including backhalf (Method 202) or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(1), Wis. Adm. Code]
- (2) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]
- (3) The permittee shall record information on the maintenance required in condition I.S.1.b.(3). [s. NR 439.04(1)(a)6, Wis. Adm. Code]
- (4) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code]

**S. Process B63, S63, - Natural Gas Heater Station 1**

**Pollutant:** 2. Particulate Matter Emissions less than 10 microns (PM<sub>10</sub>)

**a. Limitations:** (1) The emissions may not exceed 0.01 pound PM per hour and 0.006 pound PM<sub>10</sub> per hour. (BACT) [s. NR 405.08, Wis. Adm. Code; s. 285.65(3), Wis. Stats.] (2) The permittee shall apply Best Available Control Technology (BACT). BACT shall be met by: (a) The use of natural gas, and (b) Complying with the emission limitation in I.S.2.a.(1). [s. NR 405.08, Wis. Adm. Code]

**b. Compliance Demonstration:**

(1) The facility shall fire natural gas in this process. This condition is established to meet BACT emission limit. [ss. 285.65(3) and 285.65(10), Wis. Stats.; s. NR 405.08, Wis. Adm. Code]

(2) The permittee shall use the design rate for fuel use and vendor provided emission factors or alternate data approved in writing by the Department to determine the hourly emissions. [s. 285.65(3) and s. 285.65(10), Wis. Stats.]

(3) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit: (a) A copy of the manufacturer's OEM that outlines the procedures that should be followed to maintain the natural gas heater. (b) A list of items that will be checked and maintained and their frequency to ensure that the natural gas heater is operating properly. This information will be used to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]

(4) Stack Parameters These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed.

(a) The height for stack S63 shall be at least 14.50 feet above ground level. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]

(b) The inside diameter for stack S63 at the outlet may not exceed 0.83 feet. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]

**c. Test Methods, Recordkeeping, and Monitoring:**

(1) Reference Test Method for Particulate Matter Emissions: Whenever compliance emission testing is required, US EPA Method 5, including backhalf (Method 202) or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(1), Wis. Adm. Code]

(2) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]

(3) The permittee shall record information on the maintenance required in condition I.S.2.b.(3). [s. NR 439.04(1)(a)6, Wis. Adm. Code]

(4) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code]

<b>S. Process B63, S63, - Natural Gas Heater Station 1</b>	
<b>Pollutant:</b> 3. Sulfur Dioxide (SO <sub>2</sub> )	
<p><b>a. Limitations:</b> (1) The emissions may not exceed 0.0004 pound per hour. (BACT) [s. NR 405.08, Wis. Adm. Code; s. 285.65(3), Wis. Stats.]  (2) The permittee shall apply Best Available Control Technology (BACT) .BACT shall be met by: (a) The use of natural gas, (b) Complying with the emission limitation in I.S.3.a.(1). [s. NR 405.08, Wis. Adm. Code.]</p>	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
<p>(1) The facility shall fire natural gas in the process. This condition is established to meet BACT emission limit. [ss. 285.65(3) and 285.65(10), Wis. Stats.; s. NR 405.08, Wis. Adm. Code]</p> <p>(2) The permittee shall use the design rate for fuel use and vendor provided emission factors or alternate data approved in writing by the Department to determine the hourly emissions. [s. 285.65(3) and s. 285.65(10), Wis. Stats.]</p>	<p>(1) <u>Reference Test Method for Sulfur Dioxide Emissions:</u> Whenever compliance emission testing is required, US EPA Method 6, 6A or 6C or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(2), Wis. Adm. Code]</p> <p>(2) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]</p>

<b>S. Process B63, S63, - Natural Gas Heater Station 1</b>	
<b>Pollutant:</b> 4. Oxides of Nitrogen (NOx)	
<p><b>a. Limitations:</b> (1) The emissions may not exceed 0.073 pound per hour. (BACT) [s. NR 405.08, Wis. Adm. Code; s. 285.65(3), Wis. Stats.]  (2) The permittee shall apply Best Available Control Technology (BACT). BACT shall be met by: (a) The use of natural gas, and (b) Complying with the emission limitation in I.S.4.a.(1). [s. NR 405.08, Wis. Adm. Code]</p>	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
<p>(1) The facility shall fire natural gas in this process. This condition is established to meet BACT emission limit. [ss. 285.65(3) and 285.65(10), Wis. Stats.; s. NR 405.08, Wis. Adm. Code]</p> <p>(2) The permittee shall use the design rate for fuel use and vendor provided emission factors or alternate data approved in writing by the Department to determine the hourly emissions. [s. 285.65(3) and s. 285.65(10), Wis. Stats.]</p> <p>(3) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit: (a) A copy of the manufacturer's OEM that outlines the procedures that should be followed to maintain the natural gas heater. (b) A list of items that will be checked and maintained and their frequency to ensure that the natural gas heater is operating properly. This information will be used to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]</p>	<p>(1) <u>Reference Test Method for Nitrogen Oxide Emissions:</u> Whenever compliance emission testing is required, test procedures in 40 CFR 60, US EPA Method 7 or an alternate method approved in writing by the Department shall be used to demonstrate compliance. [s. NR 439.06(6), Wis. Adm. Code]</p> <p>(2) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(3) The permittee shall record information on the maintenance required in condition I.S.4.b.(3). [s. NR 439.04(1)(a)6, Wis. Adm. Code]</p>

<b>S. Process B63, S63, - Natural Gas Heater Station 1</b>	
<b>Pollutant:</b> 5. Carbon Monoxide (CO)	
<p><b>a. Limitations:</b> (1) The emissions may not exceed 0.06 pound per hour. (BACT) [s. NR 405.08, Wis. Adm. Code; s. 285.65(3), Wis. Stats.]  (2) The permittee shall apply Best Available Control Technology (BACT). BACT shall be met by: (a) The use of natural gas, and (b) Complying with the emission limitation in I.S.5.a.(1). [s. NR 405.08, Wis. Adm. Code]</p>	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
<p>(1) The facility shall fire natural gas in the process. This condition is established to meet the BACT emission limit. [ss. 285.65(3) and 285.65(10), Wis. Stats.; s. NR 405.08, Wis. Adm. Code]</p> <p>(2) The permittee shall use the design fuel rate use and vendor provided emission factors or alternate data approved in writing by the Department to determine the hourly emissions. [s. 285.65(3) and s. 285.65(10), Wis. Stats.]</p> <p>(3) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit: (a) A copy of the manufacturer's OEM that outlines the procedures that should be followed to maintain the natural gas heater. (b) A list of items that will be checked and maintained and their frequency to ensure that the natural gas heater is operating properly. This information will be used to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]</p>	<p>(1) <u>Reference Test Method for Carbon Monoxide Emissions:</u> Whenever compliance emission testing is required, US EPA Method 10, or an alternate method approved in writing by the Department shall be used to demonstrate compliance. [s. NR 439.06(4), Wis. Adm. Code]</p> <p>(2) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(3) The permittee shall record information on the maintenance required in condition I.S.5.b.(3). [s. NR 439.04(1)(a)6, Wis. Adm. Code]</p>

<b>S. Process B63, S63, - Natural Gas Heater Station 1</b>	
<b>Pollutant:</b> 6. Volatile Organic Compounds (VOC)	
<b>Limitations:</b> (1) The emissions may not exceed 0.004 pound per hour. (BACT) [s. NR 405.08, Wis. Adm. Code; s. 285.65(3), Wis. Stats.] (2) The permittee shall apply Best Available Control Technology (BACT). BACT shall be met by: (a) The use of natural gas and, (b) Complying with the emission limitation in I.S.6.a.(1) [s. NR 405.08, Wis. Adm. Code]	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
<p>(1) The facility shall fire natural gas in the process. This condition is established to meet the BACT emission limit. [ss. 285.65(3) and 285.65(10), Wis. Stats.; s. NR 405.08, Wis. Adm. Code]</p> <p>(2) The permittee shall use the design rate for fuel use and vendor provided emission factors or alternate data approved in writing by the Department to determine the hourly emissions. [s. 285.65(3) and s. 285.65(10), Wis. Stats.]</p> <p>(3) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit: (a) A copy of the manufacturer's OEM that outlines the procedures that should be followed to maintain the natural gas heater. (b) A list of items that will be checked and maintained and their frequency to ensure that the natural gas heater is operating properly. This information will be used to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]</p>	<p>(1) <u>Reference Test Method for VOC Emissions:</u> Whenever compliance emission testing is required, test procedures in 40 CFR Part 60, Appendix A, US EPA Method 25 or 18, or an alternate method approved in writing by the Department shall be used to demonstrate compliance. [s. NR 439.06(3), Wis. Adm. Code]</p> <p>(2) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(3) The permittee shall record information On the maintenance required in condition I.S.6.b.(3). [s. NR 439.04(1)(a)6, Wis. Adm. Code]</p>

<b>S. Process B63, S63, - Natural Gas Heater Station 1</b>	
<b>Pollutant:</b> 7. Lead Emissions	
<p><b>a. Limitations:</b> (1) The emissions may not exceed 2.8E-10 pound per hour. (BACT) [s. NR 405.08, Wis. Adm. Code; s. 285.65(3), Wis. Stats.] (2) The permittee shall apply Best Available Control Technology (BACT). BACT shall be met by: (a) The use of natural gas and, (b) Complying with the emission limitation in I.S.7.a.(1) [s. NR 405.08, Wis. Adm. Code]</p>	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
<p>(1) The facility shall fire natural gas in this process. This condition is established to meet BACT emission limit. [ss. 285.65(3) and 285.65(10), Wis. Stats.; s. NR 405.08, Wis. Adm. Code]</p> <p>(2) The permittee shall use the design rate for fuel use and vendor provided emission factors or alternate data approved in writing by the Department to determine the hourly emissions. [s. 285.65(3) and s. 285.65(10), Wis. Stats.]</p> <p>(3) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit: (a) A copy of the manufacturer's OEM that outlines the procedures that should be followed to maintain the natural gas heater. (b) A list of items that will be checked and maintained and their frequency to ensure that the natural gas heater is operating properly. This information will be used to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]</p>	<p>(1) <u>Reference Test Method for Lead Emissions:</u> Whenever compliance emission testing is required, US EPA Method 12 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(5), Wis. Adm. Code]</p> <p>(2) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(3) The permittee shall record information on the maintenance required in condition I.S.7.b.(3). [s. NR 439.04(1)(a)6, Wis. Adm. Code]</p>

<b>S. Process B63, S63, - Natural Gas Heater Station 1</b>	
<b>Pollutant:</b> 8. Mercury Emissions	
<b>a. Limitations:</b> (1) The emissions may not exceed 1.91E-7 pound per hour. (BACT) [s. NR 405.08, Wis. Adm. Code; s. 285.65(3), Wis. Stats.] (2) The permittee shall apply Best Available Control technology (BACT). BACT shall be met by: (a) The use of natural gas and, (b) Complying with the emission limitation in I.S.8.a.(1) [s. NR 405.08, Wis. Adm. Code]	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
<p>(1) The facility shall fire natural gas in this process. This condition is established to meet BACT emission limit. [ss. 285.65(3) and 285.65(10), Wis. Stats.; s. NR 405.08, Wis. Adm. Code]</p> <p>(2) The permittee shall use the design rate for fuel use and vendor provided emission factors or alternate data approved in writing by the Department to determine the hourly emissions. [s. 285.65(3) and s. 285.65(10), Wis. Stats.]</p> <p>(3) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit: (a) A copy of the manufacturer's OEM that outlines the procedures that should be followed to maintain the natural gas heater. (b) A list of items that will be checked and maintained and their frequency to ensure that the natural gas heater is operating properly. This information will be used to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]</p>	<p>(1) <u>Reference Test Method for Mercury Emissions:</u> Whenever compliance emission testing is required, US EPA Method 29 or an alternative method approved in writing by the department shall be used to demonstrate compliance. [s. NR 439.06(8), Wis. Adm. Code]</p> <p>(2) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(3) The permittee shall record information on the maintenance required in condition I.S.8.b.(3). [s. NR 439.04(1)(a)6, Wis. Adm. Code]</p>

<b>S. Process B63, S63, - Natural Gas Heater Station 1</b>	
<b>Pollutant:</b> 9. Emissions of Fluorides	
<b>a. Limitations:</b> (1) The emissions may not exceed 2.04E-4 pound per hour. (BACT) [s. NR 405.08, Wis. Adm. Code; s. 285.65(3), Wis. Stats.] (2) The permittee shall apply Best Available Control Technology (BACT). BACT shall be met by: (a) The use of natural gas and, (b) Complying with the emission limitation in I.S.9.a.(1) [s. NR 405.08, Wis. Adm. Code]	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
(1) The facility shall fire natural gas in this process. This condition is established to meet BACT emission limit. [ss. 285.65(3) and 285.65(10), Wis. Stats.; s. NR 405.08, Wis. Adm. Code]	(1) <u>Reference Test Method for Emissions of Fluorides:</u> Whenever compliance emission testing is required, US EPA Method 13B or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(8), Wis. Adm. Code]
(2) The permittee shall use the design rate for fuel use and vendor provided emission factors or alternate data approved in writing by the Department to determine the hourly emissions. [s. 285.65(3) and s. 285.65(10), Wis. Stats.]	(2) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]
(3) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit: (a) A copy of the manufacturer's OEM that outlines the procedures that should be followed to maintain the natural gas heater. (b) A list of items that will be checked and maintained and their frequency to ensure that the natural gas heater is operating properly. This information will be used to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]	(3) The permittee shall record information On the maintenance required in condition I.S.9.b.(3). [s. NR 439.04(1)(a)6, Wis. Adm. Code]
<b>Pollutant:</b> 10. Visible Emissions	
<b>a. Limitations:</b> 20% opacity or number 1 on the Ringlemann chart. [s. NR 431.05, Wis. Adm. Code] See Note 1	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
(1) The permittee shall fire natural gas. This condition is established to meet BACT emission limit. [s. NR 405.08(2), Wis. Adm. Code]	(1) <u>Reference Test Method for Visible Emissions:</u> Whenever compliance emission testing is required, US EPA Method 9 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(9)(a)1., Wis. Adm. Code]
	(2) The permittee shall keep retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]

Note 1: No owner or operator may cause to be discharged into the atmosphere any gases which exhibit greater than 20% opacity (6-minute average), except when combustion equipment is being cleaned or a new fire started. At these times opacity may not exceed 80% for 6-minutes in any one hour per s. NR 431.05(1). Combustion equipment may not be cleaned nor a fire started more than 3 times per day.

<b>S. Process B63, S63, - Natural Gas Heater Station 1</b>	
<b>Pollutant:</b> 11. Sulfuric Acid Mist (H2SO4)	
<p><b>Limitations:</b> (1) The emissions may not exceed 0.0000675 pound per hour. (BACT) [s. NR 405.08, Wis. Adm. Code; s. 285.65(3), Wis. Stats.]  (2) The permittee shall apply Best Available Control Technology (BACT). BACT shall be met by: (a) The use of natural gas, and (b) Complying with the emission limitation in I.S.11.a.(1). [s. NR 405.08, Wis. Adm. Code.]</p>	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
<p>(1) The facility shall fire natural gas in the process. This condition is established to meet BACT emission limit. [ss. 285.65(3) and 285.65(10), Wis. Stats.; s. NR 405.08, Wis. Adm. Code]</p> <p>(2) The permittee shall use the design rate for fuel use and vendor provided emission factors or alternate data approved in writing by the Department to determine the hourly emissions. [s. 285.65(3) and s. 285.65(10), Wis. Stats.]</p>	<p>(1) <u>Reference Test Method for Sulfur Acid Mist Emissions:</u> Whenever compliance emission testing is required, US EPA Method 8 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(8), Wis. Adm. Code]</p> <p>(2) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]</p>

**T. Process B64, S64, - Natural Gas Heater Station 2**

**Pollutant:** 1. Particulate Matter Emissions (PM/PM10)

**a. Limitations:** (1) The emissions may not exceed 0.01 pound PM per hour and 0.006 pound PM10 per hour. (BACT) [s. NR 405.08, Wis. Adm. Code; s. 285.65(3), Wis. Stats.] (2) The permittee shall apply Best Available Control Technology (BACT). BACT shall be met by: (a) The use of natural gas, and (b) Complying with the emission limitation in I.T.1.a.(1). [s. NR 405.08, Wis. Adm. Code]

**b. Compliance Demonstration:**

- (1) The facility shall fire natural gas in this process. This condition is established to meet BACT emission limit. [ss. 285.65(3) and 285.65(10), Wis. Stats.; s. NR 405.08, Wis. Adm. Code]
- (2) The permittee shall use the design rate for fuel use and vendor provided emission factors or alternate data approved in writing by the Department to determine the hourly emissions. [s. 285.65(3) and s. 285.65(10), Wis. Stats.]
- (3) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit: (a) A copy of the manufacturer's OEM that outlines the procedures that should be followed to maintain the natural gas heater. (b) A list of items that will be checked and maintained and their frequency to ensure that the natural gas heater is operating properly. This information will be used to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]
- (4) Stack Parameters These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed.
  - (a) The height for stack S64 shall be at least 14.50 feet above ground level. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]
  - (b) The inside diameter for stack S64 at the outlet may not exceed 0.83 feet. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]

**c. Test Methods, Recordkeeping, and Monitoring:**

- (1) Reference Test Method for Particulate Matter Emissions: Whenever compliance emission testing is required, test procedures in 40 CFR 60 and US EPA Method 5, including backhalf (Method 202) or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(1), Wis. Adm. Code]
- (2) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]
- (3) The permittee shall record information on the maintenance required in condition I.T.1.b.(3). [s. NR 439.04(1)(a)6, Wis. Adm. Code]
- (4) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code]

**T. Process B64, S64, - Natural Gas Heater Station 2**

**Pollutant:** 2. Particulate Matter Emissions less than 10 microns (PM<sub>10</sub>)

**a. Limitations:** (1) The emissions may not exceed 0.006 pound PM<sub>10</sub> per hour. (BACT) [s. NR 405.08, Wis. Adm. Code; s. 285.65(3), Wis. Stats.] (2) The permittee shall apply Best Available Control Technology (BACT). BACT shall be met by: (a) The use of natural gas, and (b) Complying with the emission limitation in I.T.2.a.(1). [s. NR 405.08, Wis. Adm. Code]

**b. Compliance Demonstration:**

(1) The facility shall fire natural gas in this process. This condition is established to meet BACT emission limit. [ss. 285.65(3) and 285.65(10), Wis. Stats.; s. NR 405.08, Wis. Adm. Code]

(2) The permittee shall use the design rate for fuel use and vendor provided emission factors or alternate data approved in writing by the Department to determine the hourly emissions. [s. 285.65(3) and s. 285.65(10), Wis. Stats.]

(3) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit: (a) A copy of the manufacturer's OEM that outlines the procedures that should be followed to maintain the natural gas heater. (b) A list of items that will be checked and maintained and their frequency to ensure that the natural gas heater is operating properly. This information will be used to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]

(4) Stack Parameters These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed.

(a) The height for stack S64 shall be at least 14.50 feet above ground level. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]

(b) The inside diameter for stack S64 at the outlet may not exceed 0.83 feet. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]

**c. Test Methods, Recordkeeping, and Monitoring:**

(1) Reference Test Method for Particulate Matter Emissions: Whenever compliance emission testing is required, US EPA Method 5, including backhalf (Method 202) or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(1), Wis. Adm. Code]

(2) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]

(3) The permittee shall record information the maintenance required in condition I.T.2.b.(3). [s. NR 439.04(1)(a)6, Wis. Adm. Code]

(4) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code]

<b>T. Process B64, S64, - Natural Gas Heater Station 2</b>	
<b>Pollutant:</b> 3. Sulfur Dioxide (SO <sub>2</sub> )	
<p><b>a. Limitations:</b> (1) The emissions may not exceed 0.0004 pound per hour. (BACT) [s. NR 405.08, Wis. Adm. Code; s. 285.65(3), Wis. Stats.]  (2) The permittee shall apply Best Available Control Technology (BACT). BACT shall be met by: (a) The use of natural gas, (b) Complying with the emission limitation in I.T.3.a.(1). [s. NR 405.08, Wis. Adm. Code.]</p>	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
<p>(1) The facility shall fire natural gas in the process. This condition is established to meet BACT emission limit. [ss. 285.65(3) and 285.65(10), Wis. Stats.; s. NR 405.08, Wis. Adm. Code]</p> <p>(2) The permittee shall use the design rate for fuel use and vendor provided emission factors or alternate data approved in writing by the Department to determine the hourly emissions. [s. 285.65(3) and s. 285.65(10), Wis. Stats.]</p>	<p>(1) <u>Reference Test Method for Sulfur Dioxide Emissions:</u> Whenever compliance emission testing is required, US EPA Method 6, 6A or 6C or an alternate method approved in writing by the Department, shall be used. [s. NR 439.06(2), Wis. Adm. Code]</p> <p>(2) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]</p>

<b>T. Process B64, S64, - Natural Gas Heater Station 2</b>	
<b>Pollutant:</b> 4. Oxides of Nitrogen (NOx)	
<p><b>a. Limitations:</b> (1) The emissions may not exceed 0.073 pound per hour. (BACT) [s. NR 405.08, Wis. Adm. Code; s. 285.65(3), Wis. Stats.]  (2) The permittee shall apply Best Available Control Technology (BACT). BACT shall be met by: (a) The use of natural gas, and (b) Complying with the emission limitation in I.T.4.a.(1). [s. NR 405.08, Wis. Adm. Code]</p>	
<p><b>b. Compliance Demonstration:</b></p> <p>(1) The facility shall fire natural gas in this process. This condition is established to meet BACT emission limit. [ss. 285.65(3) and 285.65(10), Wis. Stats.; s. NR 405.08, Wis. Adm. Code]</p> <p>(2) The permittee shall use the design rate for fuel use and vendor provided emission factors or alternate data approved in writing by the Department to determine the hourly emissions. [s. 285.65(3) and s. 285.65(10), Wis. Stats.]</p> <p>(3) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit: (a) A copy of the manufacturer's OEM that outlines the procedures that should be followed to maintain the natural gas heater. (b) A list of items that will be checked and maintained and their frequency to ensure that the natural gas heater is operating properly. This information will be used to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]</p>	<p><b>c. Test Methods, Recordkeeping, and Monitoring:</b></p> <p>(1) <u>Reference Test Method for Nitrogen Oxide Emissions:</u> Whenever compliance emission testing is required, test procedures in 40 CFR 60, US EPA Method 7 or an alternate method approved in writing by the Department shall be used to demonstrate compliance. [s. NR 439.06(6), Wis. Adm. Code]</p> <p>(2) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(3) The permittee shall record information the maintenance required in condition I.T.4.b.(3). [s. NR 439.04(1)(a)6, Wis. Adm. Code]</p>

**T. Process B64, S64, - Natural Gas Heater Station 2**

**Pollutant:** 5. Carbon Monoxide (CO)

**a. Limitations:** (1) The emissions may not exceed 0.06 pound per hour. (BACT) [s. NR 405.08, Wis. Adm. Code; s. 285.65(3), Wis. Stats.]  
(2) The permittee shall apply Best Available Control Technology (BACT). BACT shall be met by: (a) The use of natural gas, and (b) Complying with the emission limitation in I.T.5.a.(1). [s. NR 405.08, Wis. Adm. Code]

**b. Compliance Demonstration:**

(1) The facility shall fire natural gas in the process. This condition is established to meet the BACT emission limit. [ss. 285.65(3) and 285.65(10), Wis. Stats.; s. NR 405.08, Wis. Adm. Code]

(2) The permittee shall use the design fuel rate use and vendor provided emission factors or alternate data approved in writing by the Department to determine the hourly emissions. [s. 285.65(3) and s. 285.65(10), Wis. Stats.]

(3) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit: (a) A copy of the manufacturer's OEM that outlines the procedures that should be followed to maintain the natural gas heater. (b) A list of items that will be checked and maintained and their frequency to ensure that the natural gas heater is operating properly. This information will be used to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

(1) Reference Test Method for Carbon Monoxide Emissions: Whenever compliance emission testing is required, US EPA Method 10, or an alternate method approved in writing by the Department shall be used to demonstrate compliance. [s. NR 439.06(4), Wis. Adm. Code]

(2) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]

(3) The permittee shall record information the maintenance required in condition I.T.5.b.(3). [s. NR 439.04(1)(a)6, Wis. Adm. Code]

<b>T. Process B64, S64, - Natural Gas Heater Station 2</b>	
<b>Pollutant:</b> 6. Volatile Organic Compounds (VOC)	
<b>Limitations:</b> (1) The emissions may not exceed 0.004 pound per hour. (BACT) [s. NR 405.08, Wis. Adm. Code; s. 285.65(3), Wis. Stats.] (2) The permittee shall apply Best Available Control Technology (BACT). BACT shall be met by: (a) The use of natural gas and, (b) Complying with the emission limitation in I.T.6.a.(1) [s. NR 405.08, Wis. Adm. Code]	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
<p>(1) The facility shall fire natural gas in the process. This condition is established to meet the BACT emission limit. [ss. 285.65(3) and 285.65(10), Wis. Stats.; s. NR 405.08, Wis. Adm. Code]</p> <p>(2) The permittee shall use the design rate for fuel use and vendor provided emission factors or alternate data approved in writing by the Department to determine the hourly emissions. [s. 285.65(3) and s. 285.65(10), Wis. Stats.]</p> <p>(3) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit: (a) A copy of the manufacturer's OEM that outlines the procedures that should be followed to maintain the natural gas heater. (b) A list of items that will be checked and maintained and their frequency to ensure that the natural gas heater is operating properly. This information will be used to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]</p>	<p>(1) <u>Reference Test Method for VOC Emissions:</u> Whenever compliance emission testing is required, test procedures in 40 CFR Part 60, Appendix A, US EPA Method 25 or 18, or an alternate method approved in writing by the Department shall be used to demonstrate compliance. [s. NR 439.06(3), Wis. Adm. Code]</p> <p>(2) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(3) The permittee shall record information the maintenance required in condition I.T.6.b.(3). [s. NR 439.04(1)(a)6, Wis. Adm. Code]</p>

<b>T. Process B64, S64, - Natural Gas Heater Station 2</b>	
<b>Pollutant:</b> 7. Lead Emissions	
<p><b>a. Limitations:</b> (1) The emissions may not exceed 2.8E-10 pound per hour. (BACT) [s. NR 405.08, Wis. Adm. Code; s. 285.65(3), Wis. Stats.](2) The permittee shall apply Best Available Control Technology (BACT). BACT shall be met by: (a) The use of natural gas and, (b) Complying with the emission limitation in I.T.7.a.(1) [s. NR 405.08, Wis. Adm. Code]</p>	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
<p>(1) The facility shall fire natural gas in this process. This condition is established to meet BACT emission limit. [ss. 285.65(3) and 285.65(10), Wis. Stats.; s. NR 405.08, Wis. Adm. Code]</p> <p>(2) The permittee shall use the design rate for fuel use and vendor provided emission factors or alternate data approved in writing by the Department to determine the hourly emissions. [s. 285.65(3) and s. 285.65(10), Wis. Stats.]</p> <p>(3) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit: (a) A copy of the manufacturer's OEM that outlines the procedures that should be followed to maintain the natural gas heater. (b) A list of items that will be checked and maintained and their frequency to ensure that the natural gas heater is operating properly. This information will be used to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]</p>	<p>(1) <u>Reference Test Method for Lead Emissions:</u> Whenever compliance emission testing is required, US EPA Method 12 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(5), Wis. Adm. Code]</p> <p>(2) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(3) The permittee shall record information on the maintenance required in condition I.T.7.b.(3). [s. NR 439.04(1)(a)6, Wis. Adm. Code]</p>

**T. Process B64, S64, - Natural Gas Heater Station 2**

**Pollutant:** 8. Mercury Emissions

**a. Limitations:** (1) The emissions may not exceed 1.91E-7 pound per hour. (BACT) [s. NR 405.08, Wis. Adm. Code; s. 285.65(3), Wis. Stats.] (2) The permittee shall apply Best Available Control Technology (BACT). BACT shall be met by: (a) The use of natural gas and, (b) Complying with the emission limitation in I.T.8.a.(1) [s. NR 405.08, Wis. Adm. Code]

**b. Compliance Demonstration:**

(1) The facility shall fire natural gas in this process. This condition is established to meet BACT emission limit. [ss. 285.65(3) and 285.65(10), Wis. Stats.; s. NR 405.08, Wis. Adm. Code]

(2) The permittee shall use the design rate for fuel use and vendor provided emission factors or alternate data approved in writing by the Department to determine the hourly emissions. [s. 285.65(3) and s. 285.65(10), Wis. Stats.]

(3) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit: (a) A copy of the manufacturer's OEM that outlines the procedures that should be followed to maintain the natural gas heater. (b) A list of items that will be checked and maintained and their frequency to ensure that the natural gas heater is operating properly. This information will be used to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

(1) Reference Test Method for Mercury Emissions: Whenever compliance emission testing is required, US EPA Method 29 or an alternative method approved in writing by the department shall be used to demonstrate compliance. [s. NR 439.06(8), Wis. Adm. Code]

(2) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]

(3) The permittee shall record information on the maintenance required in condition I.T.8.b.(3). [s. NR 439.04(1)(a)6, Wis. Adm. Code]

<b>T. Process B64, S64, - Natural Gas Heater Station 2</b>	
<b>Pollutant:</b> 9. Emissions of Fluorides	
<b>a. Limitations:</b> (1) The emissions may not exceed 2.04E-4 pound per hour. (BACT) [s. NR 405.08, Wis. Adm. Code; s. 285.65(3), Wis. Stats.] (2) The permittee shall apply Best Available Control Technology (BACT). BACT shall be met by: (a) The use of natural gas and, (b) Complying with the emission limitation in I.T.9.a.(1) [s. NR 405.08, Wis. Adm. Code]	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
(1) The facility shall fire natural gas in this process. This condition is established to meet BACT emission limit. [ss. 285.65(3) and 285.65(10), Wis. Stats.; s. NR 405.08, Wis. Adm. Code]	(1) <u>Reference Test Method for Emissions of Fluorides:</u> Whenever compliance emission testing is required, US EPA Method 13B or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(8), Wis. Adm. Code]
(2) The permittee shall use the design rate for fuel use and vendor provided emission factors or alternate data approved in writing by the Department to determine the hourly emissions. [s. 285.65(3) and s. 285.65(10), Wis. Stats.]	(2) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]
(3) The permittee shall provide the following information to the Department at least four months prior to the expiration of the construction permit: (a) A copy of the manufacturer's OEM that outlines the procedures that should be followed to maintain the natural gas heater. (b) A list of items that will be checked and maintained and their frequency to ensure that the natural gas heater is operating properly. This information will be used to establish appropriate permit conditions in the operation permit. [s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]	(3) The permittee shall record information on the maintenance required in condition I.T.9.b.(3). [s. NR 439.04(1)(a)6, Wis. Adm. Code]
<b>Pollutant:</b> 10. Visible Emissions	
<b>a. Limitations:</b> 20% opacity or number 1 on the Ringlemann chart. [s. NR 431.05, Wis. Adm. Code] See Note 1	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
(1) The permittee shall fire natural gas. This condition is established to meet BACT emission limit. [s. NR 405.08(2), Wis. Adm. Code]	(1) <u>Reference Test Method for Visible Emissions:</u> Whenever compliance emission testing is required, US EPA Method 9 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(9)(a)1., Wis. Adm. Code]
	(2) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]

Note 1: No owner or operator may cause to be discharged into the atmosphere any gases which exhibit greater than 20% opacity (6-minute average), except when combustion equipment is being cleaned or a new fire started. At these times opacity may not exceed 80% for 6-minutes in any one hour per s. NR 431.05(1). Combustion equipment may not be cleaned nor a fire started more than 3 times per day.

<b>T. Process B64, S64, - Natural Gas Heater Station 2</b>	
<b>Pollutant:</b> 12. Sulfuric Acid Mist (H2SO4)	
<p><b>Limitations:</b> (1) The emissions may not exceed 0.0000675 pound per hour. (BACT) [s. NR 405.08, Wis. Adm. Code; s. 285.65(3), Wis. Stats.]  (2) The permittee shall apply Best Available Control Technology (BACT). BACT shall be met by: (a) The use of natural gas, (b) Complying with the emission limitation in I.T.11.a.(1). [s. NR 405.08, Wis. Adm. Code.]</p>	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
<p>(1) The facility shall fire natural gas in the process. This condition is established to meet BACT emission limit. [ss. 285.65(3) and 285.65(10), Wis. Stats.; s. NR 405.08, Wis. Adm. Code]</p> <p>(2) The permittee shall use the design rate for fuel use and vendor provided emission factors or alternate data approved in writing by the Department to determine the hourly emissions. [s. 285.65(3) and s. 285.65(10), Wis. Stats.]</p>	<p>(1) <u>Reference Test Method for Sulfur Acid Mist Emissions:</u> Whenever compliance emission testing is required, US EPA Method 8 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(8), Wis. Adm. Code]</p> <p>(2) The permittee shall retain on site, plans and specifications that indicate the process's fuel design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]</p>

**U. S65, P65 – PAC Truck Unloading**

**Pollutant:** 1. Particulate Matter Emissions (PM/PM10)

**a. Limitations:** 0.02 grains per dry standard cubic foot of exhaust gas and 0.21 pound per hour. (BACT) [s. NR 415.06(2)(c), Wis. Adm. Code; s. NR 405.08, Wis. Adm. Code; s. 285.65(3), Wis. Stats.]

**b. Compliance Demonstration:**

(1) Stack Parameters These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed.

(a) The height of the stack S65 shall be at least 72.47 feet Above ground level. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]

(b) The inside diameter at the outlet of the stack S65 may not exceed 0.67 feet. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]

(2) Particulate matter emissions shall be controlled using a fabric filter baghouse filter system to meet the BACT limit. [s. NR 405.08(2), Wis. Adm. Code]

(3) The fabric filter baghouse system shall be in line and shall be operated at all times that the process is in operation. [s. NR 406.10, Wis. Adm. Code; s. NR 407.09(4)(a)1., Wis. Adm. Code]

(4) The operating pressure drop range across the fabric filter baghouse system shall be determined during the initial testing period. [s. 285.65(3), Wis. Stats.]

(5) The pressure drop across the fabric filter baghouse system shall be maintained within the range identified by condition I.U.1.b.(5). [s. NR 407.09(4)(a)1., Wis. Adm. Code]

(6) The process shall be monitored in accordance with a Fugitive Dust Control Plan. The Department may request the permittee to review and amend the plan if necessary to maintain emissions in compliance with emission limits. [s. 285.65(3), Wis. Stats.]

(7) Whenever fugitive dust emissions are observed from the process, the permittee shall take corrective actions to prevent fugitive dust from becoming airborne. [s. 285.65(3), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

(1) Reference Test Method for Particulate Matter Emissions: Whenever compliance emission testing is required, US EPA Method 5, including backhalf (Method 202) or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(1), Wis. Adm. Code]

(2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code]

(3) The permittee shall record the pressure drop across the fabric filter baghouse system once for every eight hours of operation hours whenever the dust collection system is in operation. [s. NR 439.055(2)(b)1., Wis. Adm. Code]

(4) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the fabric filter baghouse system, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code]

(5) Instrumentation to monitor the pressure drop across the fabric filter baghouse system shall be installed and operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code]

<b>U. S65, P65 – PAC Truck Unloading</b>	
<b>Pollutant:</b> 2. Visible Emissions	
<b>a. Limitations:</b> 10% opacity [s. NR 431.05, Wis. Adm. Code; s. NR 405.09, Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats.]	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
<p>(1) The fabric filter baghouse system shall be in line and shall be operated at all times that the dust collection system is in operation. [s. NR 406.10, Wis. Adm. Code; s. NR 407.09(4)(a)1., Wis. Adm. Code]</p> <p>(2) The pressure drop across the fabric filter baghouse system shall be maintained within the ranges identified by condition I.U.1.b.(5). [s. NR 407.09(4)(a)1., Wis. Adm. Code; s. 285.65(3), Wis. Stats.]</p> <p>(3) The process shall be monitored in accordance with a Fugitive Dust Control Plan. The Department may request the permittee to review and amend the plan if necessary to maintain emissions in compliance with emission limits. [s. 285.65(3), Wis. Stats.]</p> <p>(4) Whenever fugitive dust emissions are observed from the process, the permittee shall take corrective actions to prevent fugitive dust from becoming airborne. [s. 285.65(3), Wis. Stats]</p>	<p>(1) Reference <u>Test Method for Visible Emissions</u>: Whenever compliance emission testing is required, US EPA Method 9 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(9)(a)1., Wis. Adm. Code]</p> <p>(2) The permittee shall record the pressure drop across the fabric filter baghouse system once for every eight hours of operation hours whenever the dust collection system is in operation. [s. NR 439.055(2)(b)1., Wis. Adm. Code]</p> <p>(3) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the fabric filter baghouse system, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(4) Instrumentation to monitor the pressure drop across the fabric filter baghouse system shall be installed and operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code]</p>

<b>V. S66, P66 – PAC Silo Loading</b>	
<b>Pollutant:</b> 1. Particulate Matter Emissions (PM/PM10)	
<b>a. Limitations:</b> 0.02 grains per dry standard cubic foot of exhaust gas and 0.21 pound per hour. (BACT) [s. NR 415.06(2)(c), Wis. Adm. Code; s. NR 405.08, Wis. Adm. Code; s. 285.65(3), Wis. Stats.]	
<b>b. Compliance Demonstration:</b>	<b>c. Test Methods, Recordkeeping, and Monitoring:</b>
<p>( 1) <u>Stack Parameters</u> These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed.</p> <p>(a) The height of the stack S66 shall be at least 72.47 feet above ground level. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]</p> <p>(b) The inside diameter at the outlet of the stack S66 may not exceed 0.67 feet. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]</p> <p>( 2) Particulate matter emissions shall be controlled using a fabric filter baghouse filter system to meet the BACT limit. [s. NR 405.08(2), Wis. Adm. Code]</p> <p>( 3) The fabric filter baghouse system shall be in line and shall be operated at all times that the process is in operation. [s. NR 406.10, Wis. Adm. Code; s. NR 407.09(4)(a)1., Wis. Adm. Code]</p> <p>(4) The operating pressure drop range across the fabric filter baghouse system shall be determined during the initial testing period. [s. 285.65(3), Wis. Stats.]</p> <p>( 5) The pressure drop across the fabric filter baghouse system shall be maintained within the range identified by condition I.V.1.b.(5). [s. NR 407.09(4)(a)1., Wis. Adm. Code]</p> <p>( 6) The process shall be monitored in accordance with a Fugitive Dust Control Plan. The Department may request the permittee to review and amend the plan if necessary to maintain emissions in compliance with emission limits. [s. 285.65(3), Wis. Stats.]</p> <p>( 7) Whenever fugitive dust emissions are observed from the process, the permittee shall take corrective actions to prevent fugitive dust from becoming airborne. [s. 285.65(3), Wis. Stats.]</p>	<p>(1) <u>Reference Test Method for Particulate Matter Emissions:</u> Whenever compliance emission testing is required, US EPA Method 5, including backhalf (Method 202) or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(1), Wis. Adm. Code]</p> <p>(2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(3) The permittee shall record the pressure drop across the fabric filter baghouse system once for every eight hours of operation hours whenever the dust collection system is in operation. [s. NR 439.055(2)(b)1., Wis. Adm. Code]</p> <p>(4) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the fabric filter baghouse system, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(5) Instrumentation to monitor the pressure drop across the fabric filter baghouse system shall be installed and operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code]</p>

**V. S66, P66 – PAC Silo Loading**

**Pollutant:** 2. Visible Emissions

**a. Limitations:** 10% opacity [s. NR 431.05, Wis. Adm. Code; s. NR 405.09, Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(7), Wis. Stats.]

**b. Compliance Demonstration:**

(1) The fabric filter baghouse system shall be in line and shall be operated at all times that the process in operation. [s. NR 406.10, Wis. Adm. Code; s. NR 407.09(4)(a)1., Wis. Adm. Code]

(2) The pressure drop across the fabric filter baghouse system shall be maintained within the ranges identified by condition I.V.1.b.(5). [s. NR 407.09(4)(a)1., Wis. Adm. Code; s. 285.65(3), Wis. Stats.]

(3) The process shall be monitored in accordance with a Fugitive Dust Control Plan. The Department may request the permittee to review and amend the plan if necessary to maintain emissions in compliance with emission limits. [s. 285.65(3), Wis. Stats.]

(4) Whenever fugitive dust emissions are observed from the process, the permittee shall take corrective actions to prevent fugitive dust from becoming airborne. [s. 285.65(3), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

(1) Reference Test Method for Visible Emissions: Whenever compliance emission testing is required, US EPA Method 9 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(9)(a)1., Wis. Adm. Code]

(2) The permittee shall record the pressure drop across the fabric filter baghouse system once for every eight hours of operation hours whenever the dust collection system is in operation. [s. NR 439.055(2)(b)1., Wis. Adm. Code]

(3) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the fabric filter baghouse system, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code]

(4) Instrumentation to monitor the pressure drop across the fabric filter baghouse system shall be installed and operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code]

**W. P40, S40 – Conveyor 11 Telescopic Chute #29**

**Pollutant:** 1. Particulate Matter Emissions (PM/PM10)

**a. Limitations:** 0.484 Pound PM per hour and 0.23 pound PM10 per hour. (BACT) [s. NR 405.08, Wis. Adm. Code, s. NR 415.06(2)(c), Wis. Adm. Code, s. 285.65(3), Wis. Stats.]

**b. Compliance Demonstration:**

(1) The permittee shall utilize a telescopic chute to meet the BACT limits. [s. NR 405.08, Wis. Adm. Code]

(2) The permittee shall develop and follow a fugitive dust control plan for the operation. Any provisions of the plan that are applicable to the site are only applicable to the site while the plant is operated at the site. The fugitive dust control plan shall identify the specific measures to be taken, when needed and frequency needed to maintain emissions in compliance with emission limits. The Department may request the permittee to review and amend the plan if necessary to maintain emissions in compliance with emission limits. [s. NR 415.04(1)(b), Wis. Adm. Code]

(3) The permittee shall identify at least one Trained Person designated to monitor compliance, in accordance with this permit, with the Fugitive Dust Control Plan. [s. 285.65(3), Wis. Stats.]

(4) The permittee shall ensure that the Trained Person designated:

- (a) Has training to evaluate compliance with Wisconsin air quality regulations, or
- (b) Has obtained certification as a Method 9 opacity observer in the last 2 years, or
- (c) Has attended appropriate training in other states or has other reasonable qualifications for being Trained Person and the permittee has received written approval from the Department that such a person qualifies as a Trained Person for the purpose of this permit. [s. 285.65(3), Wis. Stats.]

(5) The permittee shall determine the hourly emissions using the hourly throughput and AP-42 emission factors. [s. 285.65(3), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

(1) Reference Test Method for Particulate Matter Emissions: Whenever compliance emission testing is required, the appropriate US EPA Method 9 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(9)(a)1., Wis. Adm. Code]

(2) The permittee for each day of operation of the plant shall ensure that a person at the site keeps records of specific measures taken for that day in accordance with the Fugitive Dust Control Plan and signs and dates such records.. [s. 285.65(3), Wis. Stats.; s. NR 415.04(1)(b), Wis. Adm. Code]

(3) These records shall be kept for a period of 5 years and be made available to Department personnel upon request. [s. NR 415.04(1)(b), Wis. Adm. Code]

(4) The trained Person designated by condition I.W.1.b.(3) shall sign and date the record required in I.W.1.c.(2) of specific measures taken in accordance with a Fugitive Dust Control Plan for each day of operation of the plant. [s. 285.65(3), Wis. Stats.]

(5) The permittee shall ensure that records of the Trained Person designated by condition I.W.1.B.(4)'s training or Method 9 certification or other training or qualifications are available at the plant at all times of operation. [s. 285.65(3), Wis. Stats.]

**X. P56, S56, Weston 4 Coal Pile Active and Dead**

**Pollutant:** 1. Fugitive Dust (PM/PM10)

**a. Limitations:** No owner or operator may cause or allow emissions of density greater than 10% opacity from the process. [s. NR 405.09, Wis. Adm. Code; s. NR 431.05, Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(3), Wis. Stats.] See Note 1

**b. Compliance Demonstration:**

(1) (a) The coal storage pile shall be compacted in accordance with standard coal pile maintenance procedures. (b) Once compacted, the bulk of the pile will be left undisturbed (inactive). [s. NR 405.08, Wis. Adm. Code; s. NR 406.10, Wis. Adm. Code; s. NR 415.04(1)(b), Wis. Adm. Code; s. 285.65(3), Wis. Stats.]

(2) (a) A surfactant (wet suppression spray and/or surface stabilizing agent) or cover material(s), shall be applied to the pile. The surfactant (wet suppression spray and/or surface stabilizing agent) shall be applied to the active area of the pile at the beginning and end of each shift at stack out and reclaim activity. (b) In addition to the beginning and ending applications, surfactant (wet suppression spray and/or surface stabilizing agent) will also be applied to the active area during reclaim activities whenever any visible emissions are seen beyond the coal pile boundary or whenever, in the opinion of the trained person, additional surfactant (wet suppression spray and/or surface stabilizing agent) is needed. [s. NR 405.08, Wis. Adm. Code; s. NR 406.10, Wis. Adm. Code; s. NR 415.04(1)(b), Wis. Adm. Code; s. 285.65(3), Wis. Stats.]

(3) (a) The permittee shall conduct weekly inspections of the inactive coal storage pile. (b) Additional surfactant will be applied whenever any visible emissions are seen beyond the coal pile boundary or whenever, in the opinion of the trained person, additional surfactant is needed. (c) In addition to weekly inspections, daily inspections of the active coal pile area, to determine the continued effectiveness of the surfactant, will be conducted by a trained person whenever coal is reclaimed from the pile. [s. NR 405.08, Wis. Adm. Code; s. NR 406.10, Wis. Adm. Code; s. NR 415.04(1)(b), Wis. Adm. Code; s. 285.65(3), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

(1) Reference Test Method for Particulate Matter Emissions: Whenever compliance emission testing is required, the appropriate US EPA Method 9 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(9)(a)1., Wis. Adm. Code]

(2) The permittee, for each day of operation of the plant, shall ensure that a person at the site keeps records of specific measures taken for that day in accordance with the Fugitive Dust Control Plan and signs and dates such records. [s. NR 415.04(1)(b), Wis. Adm. Code]

(3) These records shall be kept for a period of 5 years and be made available to Department personnel upon request. [s. NR 415.04(1)(b), Wis. Adm. Code]

(4) The Trained Person designated by condition I.X.1.b.(5) shall sign and date the records required in I.X.1.c.(2) of specific measures taken in accordance with a Fugitive Dust Control Plan for each day of operation of the plant. [s. 285.65(3), Wis. Stats.]

(5) The permittee shall ensure that records of the Trained Person designated by condition I.X.1.b.(6) 's training or Method 9 certification or other training or qualifications are available at the plant at all times of operation. [s. 285.65(3), Wis. Stats.]

Note 1: When trained staff observe visible emissions at the process itself of 10% or more, or at the property fence line of 5% or more, the trained staff will initiate actions to control fugitive emissions. The actions could include increased watering, increased application of dust suppressants, or increased street sweeping depending upon the nature of the emissions.

**X. P56, S56, Weston 4 Coal Pile Active and Dead**

**Pollutant:** 1. Fugitive Dust (PM/PM10)

**b. Compliance Demonstration:**

(4) The permittee shall develop and follow a Fugitive Dust Control Plan for the subject site and operation. Any provisions of the plan that are applicable to the site are only applicable to the site while the plant is operated at the site. The Fugitive Dust Control Plan shall identify the specific measures to be taken, when needed and frequency needed to maintain emissions in compliance with emission limits. For example, specific dust control measures could include: watering all roads hourly and amount of water used, use of spray bars including amount and rate of water applied, or use of other approved dust suppressants. The department may request the permittee to review and amend the plan if necessary to maintain emissions in compliance with emission limits. [s. NR 415.04(1)(b), Wis. Adm. Code]

(5) The permittee shall identify at least one Trained Person designated to monitor compliance, in accordance with this permit, with the Fugitive Dust Control Plan. [s. 285.65(3), Wis. Stats.]

(6) The permittee shall ensure that the Trained Person designated:  
(a) Has training to evaluate compliance with Wisconsin air quality regulations, or  
(b) Has obtained certification as a Method 9 opacity observer in the last 2 years , or  
(c) Has attended appropriate training in other states or has other reasonable qualifications for being a Trained Person and the permittee has received written approval from the Department that such a person qualifies as a Trained Person for the purpose of this permit.  
[s. 285.65(3), Wis. Stats.]

**c. Test Methods, Recordkeeping, and Monitoring:**

<b>Y. F134 – Facility Haul Roads</b>	
<b>Pollutant:</b> 1. Fugitive Dust (PM/PM10)	
<p><b>a. Limitations:</b> The permittee shall apply Best Available Control Technology (BACT). BACT shall be met by: a) Paving the haul roads where possible. b) Watering the roadways and c) Sweeping the roads. [s. NR 405.08, Wis. Adm. Code; s. NR 431.05, Wis. Adm. Code; s. 285.65(3), Wis. Stats.; s. 285.65(3), Wis. Stats.]</p>	
<p><b>b. Compliance Demonstration:</b></p> <p>(1) All facility haul roads shall be paved where possible to meet the BACT limits. [s. NR 405.08, Wis. Adm. Code]</p> <p>(2) All facility haul roads shall be swept, at minimum, daily (except when weather conditions exist such that precipitation and/or ambient temperature would control fugitive emissions or prevent vacuum sweeping's effectiveness). If, in the opinion of the trained person additional roadways sweeping is necessary to prevent inappropriate fugitive dust emissions it will be conducted as soon as practical. [s. NR 405.08, Wis. Adm. Code]</p> <p>(3) Water the roadways to minimize fugitive emissions. [s. NR 405.08, Wis. Adm. Code]</p> <p>(4) The permittee shall identify at least one Trained Person designated to monitor compliance, in accordance with this permit, with the Fugitive Dust Control Plan. [s. 285.65(3), Wis. Stats.]</p> <p>(4) The hours of operation of the roadways be limited to the hours indicated below:</p> <p>R01, R04, R07, R09, R11, R12 – 6 am to 10 pm  R03, R05 – Winter and Spring only, 6 am to 10 pm  R07 – Autumn only, 6 am to 10 pm  R14 6 am to 10 pm  [ss. 285.65(3) and (7), Wis. Stats.]</p> <p>This condition is established to ensure that the air quality standards for TSP are protected.</p>	<p><b>c. Test Methods, Recordkeeping, and Monitoring:</b></p> <p>(1) Reference Test Method for Particulate Matter Emissions: Whenever compliance emission testing is required, the appropriate US EPA Method 9 or an alternate method approved in writing by the Department, shall be used to demonstrate compliance. [s. NR 439.06(9)(a)1., Wis. Adm. Code]</p> <p>(2) The permittee shall ensure that the trained Person at the site keep(s) daily records consisting of the date and time roadway sweeping occurred or water sprayed on roads or the date and reasons why it did not. [s. 285.65(3), Wis. Stats.; s. NR 415.04(1)(b), Wis. Adm. Code]</p> <p>(3) The permittee will keep appropriate records on the hours of the hours of operation for each of the roadways to demonstrate compliance with permit condition I.Y.1.b.(5). [s. 285.65(3), Wis. Stats.]</p>

## Z. OTHER CONDITIONS APPLICABLE TO THE ENTIRE FACILITY

**Condition Type:** 1. Construction Permit Requirements

### a. Conditions:

(1) Construction Notification: The permittee shall inform the Wisconsin Department of Natural Resources, West Central Region, Wausau Service Center, 5301 Rib Mountain Drive, Wausau, WI 54401, Phone (715) 359-4522, in writing of the following for the emissions unit covered in this permit:

- (a) Notice of commencing construction shall be submitted within 15 days of the start of construction.
- (b) Notice of intent to initially operate the source(s) covered by this permit, 30 days prior to the anticipated date of initial operation.
- (c) Notice of the actual date of initial startup shall be submitted within 15 days of the initial startup.  
[s. NR 439.03(1), Wis. Adm. Code]

(2) (a) Construction Permit Expiration: This construction permit expires 48 months after the date of issuance. Construction or modification and an initial operation period for equipment shakedown, testing and Department evaluation of operation to assure conformity with the permit conditions is authorized for each emissions unit covered in this permit. Please note that the sources covered by this permit are required to meet all emission limits and conditions contained in the permit at all times, including during the initial operation period. Initial operation is defined as [ss. 285.60(1)(a)2 and 285.66(1), Wis. Stats.; s. NR 406.12, Wis. Adm. Code]

### (3) Completion of Operation Permit Application :

- (a) Compliance information required to complete the operation permit application for the emission units included in this permit should be submitted to the DNR at least 4 months prior to the expiration of the Construction Permit.
- (b) Operation of the source(s) covered by this permit after this permit expires is prohibited unless a complete operating permit application for source(s) has been submitted to the Department.  
[s. 285.60(1)(b)1., Wis. Stats.; s. NR 407.04(1)(b), Wis. Adm. Code]

### (4) Recording information and Keeping Appropriate Records for Demonstrating Compliance with Permit Conditions.

- (a) The proposed permit requires the permittee to record information and to keep appropriate records for demonstrating compliance with permit conditions.
- (b) The permittee shall provide information to the Compliance Engineer for approval format and types of records the permittee will keep to demonstrate compliance with the permit conditions in the permit at least four months prior to the completion of the construction of the proposed project.
- (c) The Department will use the approved information to establish appropriate conditions in the operation permit.  
[s. 285.65(3), Wis. Stats.; s. 285.65(10), Wis. Stats.]

**Z. OTHER CONDITIONS APPLICABLE TO THE ENTIRE FACILITY**

**Condition Type: 2. Malfunction Prevention and Abatement Plans**

**a. Conditions:**

- (1) A malfunction prevention and abatement plan shall be prepared and followed for the plant. [s. NR 439.11, Wis. Adm. Code]
- (2) A written copy of the plan shall be kept at the plant and shall be updated once every five years. [s. NR 439.11(1), Wis. Adm. Code]
- (3) All air pollution control equipment shall be operated and maintained in conformance with good engineering practices (i.e. operated and maintained according to manufacturer's specifications and directions) to minimize the possibility for the exceedance of any emission limitations [s. NR 439.11(4), Wis. Adm. Code]

**b. Compliance Demonstration:**

- (1) The plan shall be developed to prevent, detect and correct malfunctions or equipment failures which may cause any applicable emissions limitation to be violated or which may cause air pollution. [s. NR 439.11(1), Wis. Adm. Code]
- (2) This plan shall include installation, maintenance and routine calibration procedures for the control equipment instrumentation. This plan shall require an instrumentation calibration at the frequency specified by the manufacturer but not less than once per year plus an inspection and/or calibration whenever instrumentation anomalies are noted. [ss. NR 407.09(1)(c)1.c.; NR 439.055(4) and s. NR 439.11, Wis. Adm. Code]
- (3) The plan shall require a copy of the operation and maintenance manual for the control equipment be maintained on site. The plan shall contain all of the elements in s. NR 439.11(1)(a) - (h), Wis. Adm. Code. [s. NR 439.11, Wis. Adm. Code]
- (4) The facility shall maintain an inventory of normal consumable items necessary to ensure operation of the control device(s) in conformance with the manufacturer's specifications and recommendations. [s. NR 439.11, Wis. Adm. Code]
- (5) The facility shall maintain records of the instrumentation calibrations. [s. NR 439.04, Wis. Adm. Code]

**Z. OTHER CONDITIONS APPLICABLE TO THE ENTIRE FACILITY**

**Condition Type: 3. Stack Testing Requirements**

**a. Conditions:**

- (1) All testing shall be performed with the emissions unit operating at capacity or as close to capacity as practicable and in accordance with approved procedures. If operation at capacity is not feasible, the source shall operate at a capacity level, which is approved by the Department in writing. [s. NR 439.07(1), Wis. Adm. Code]
- (2) If the testing for the sources is not completed in the time frame identified in this permit then the permittee shall request an extension up to 60 days to complete the testing. [s. 285.65(3), Wis. Stats.]
- (3) The Department shall be informed at least 20 working days prior to any stack testing so a Department representative can witness the testing. At the time of notification a compliance emission test plan shall also be submitted to the Department for approval. When approved in writing, an equivalent test method may be substituted for the reference test method. [s. NR 439.07(2), Wis. Adm. Code]
- (4) Two copies of the report on the tests shall be submitted to the Department for evaluation within 60 days following the tests. [s. NR 439.07(9), Wis. Adm. Code]

**Z. OTHER CONDITIONS APPLICABLE TO THE ENTIRE FACILITY**

**Condition Type:** 4. Acid Rain Requirements

**a. Conditions:**

- (1) The permittee shall obtain and secure allowances equal to the actual annual SO<sub>2</sub> emissions. (Allowances are available through the Chicago Board of Trade and other sources) [40 CFR Parts 72 and 75; s. NR 409.06(3), Wis. Adm. Code]
- (2) The permittee shall have a Designated Representative (DR) in accordance with 40 CFR Part 72. The DR shall be responsible for submitting required permits, compliance plans and emission monitoring reports, allowance plans and compliance certifications; and will be the responsible official with regards to all matters under the acid rain program. [40 CFR Part 72 and 75; s. NR 409.07, Wis. Adm. Code]
- (3) The permittee shall submit a Phase II acid rain permit to the Department at least 24 months before the date on which the unit commences operation. [s. 285.65(3), Wis. Stats.; s. NR 409.08(1), Wis. Adm. Code]
- (4) The owner or operator of a Phase I and phase II acid rain units shall install, calibrate, operate and maintain all monitoring equipment necessary for continuously monitoring sulfur dioxide, nitrogen oxides, carbon dioxide, stack flow rate and opacity. The type of monitoring equipment used and the manner and location of its installation are subject to prior department approval. [ s. NR 439.095(1), Wis. Adm. Code]
- (5) The owner or operator of monitoring equipment installed to comply with condition I.Z.4.a.(4) shall install, calibrate, maintain and operate the continuous emission monitor in accordance with the performance specifications in 40 CFR part 60, Appendix B or, for affected units, the performance specifications in 40 CFR part 75, Appendices A to I, incorporated by reference in s. NR 484.04(21) and (27), Wis. Adm. Code and the requirements in s. NR 439.09, Wis. Adm. Code. The owner or operator of the source shall submit a quality control and quality assurance plan for approval by the department. The monitor shall follow the plan, as approved by the Department. [s. NR 439.095(6), Wis. Adm. Code]

**Z. OTHER CONDITIONS APPLICABLE TO THE ENTIRE FACILITY**

**Condition Type: 5. Compliance Reports / Records**

**a. Conditions:**

- (1) Upon issuance of the operation permit, the permittee shall submit periodic monitoring reports. [s. NR 407.09(1)(c)3., Wis. Adm. Code]
- (2) Upon issuance of the operation permit, the permittee shall submit periodic certification of compliance. [s. NR 407.09(4)(a)3., Wis. Adm. Code]
- (3) The records required under this permit shall be retained for at least five(5) years and shall be made available to department personnel upon request during normal business hours. [s. NR 439.04, Wis. Adm. Code; s. NR 439.05, Wis. Adm. Code]

**b. Compliance Demonstration:**

- (1) Submit a monitoring report, which contains the results of monitoring or a summary of monitoring results required by this permit to the Department every 6 months.
  - (a) The time periods to be addressed by the submittal are January 1 to June 30 and July 1 to December 31.
  - (b) The report shall be submitted to the Wisconsin Department of Natural Resources, West Central Region, Wausau Service Center, 5301 Rib Mountain Drive, Wausau, WI 54401, Phone (715) 359-4522 within 30 days after the end of each reporting period.
  - (c) All deviations from and violations of applicable requirements shall be clearly identified in the submittal.
  - (d) Each submittal shall be certified by a responsible official as to the truth, accuracy and completeness of the report.
  - (e) The content of the submittal is described in item D. of Part II of the operation permit. [s. NR 439.03(1)(b), Wis. Adm. Code]
- (2) Submit an annual, certification of compliance with the requirements of this permit to the Wisconsin Department of Natural Resources, West Central Region, Wausau Service Center, 5301 Rib Mountain Drive, Wausau, WI 54401, Phone (715) 359-4522 and to Compliance Data – Wisconsin, Air and Radiation Division, U.S. EPA, 77 W. Jackson, Chicago, IL 60604].
  - (a) The time period to be addressed by the report is the January 1 to December 31 period which precedes the report.
  - (b) The report shall be submitted to the Wisconsin Department of Natural Resources, West Central Region, Wausau Service Center, 5301 Rib Mountain Drive, Wausau, WI 54401, Phone (715) 359-4522 and U.S. EPA within 30 days after the end of each reporting period.
  - (c) The information included in the report shall comply with the requirements of Part II Section N of this permit.
  - (d) Each report shall be certified by a responsible official as to the truth, accuracy and completeness of the report. [s. NR 439.03(1)(c), Wis. Adm. Code]

