

Part I

A. Process B02, Stack(s) S22 – Up to 505 MMBtu per Hour Natural Gas-Fired Boiler.

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
<p>1. Particulate Matter Emissions</p>	<p>(1)(a) The particulate matter emissions from this process may not exceed 3.80 pounds per hour; (b) The PM₁₀ emissions from this process may not exceed 3.0 pounds per hour; and (c) The PM_{2.5} emissions from this process may not exceed 2.0 pounds per hour. [s. 285.65(3) & (7), Wis. Stats.; ss. NR 404.04(8)&(9) and NR 405.02(27)(a), Wis. Adm. Code; 13-JJW-073-R1]¹</p> <p>(2) The particulate emissions from this process may not exceed 0.10 pounds of particulate matter per million Btu heat input. [ss. NR 415.06(2)(c), Wis. Adm. Code; 13-JJW-073-R1]</p>	<p>(1) The permittee may only burn natural gas in this boiler. [s. 285.65(3), Wis. Stats.; 13-JJW-073-R1]</p> <p>(2) To demonstrate compliance with the emission limits in I.A.1.a.(1) & (2), the permittee shall perform compliance testing for PM, PM₁₀ and PM_{2.5} at least once every 5 years from the date of the initial compliance test required under I.ZZZ.4. The permittee may use the results of Methods 5 and 202 to demonstrate compliance with the applicable PM₁₀ and PM_{2.5} emission limits if the results are less than the applicable PM₁₀ and PM_{2.5} emission limits. Otherwise, the facility is required to perform Method 201A and 202 for PM₁₀ and PM_{2.5} within 90 days of the PM test, unless this method is determined by the Department, in writing, to be technically infeasible for a given exhaust point. All compliance testing shall be performed within 90 days of the anniversary date of the most recent compliance test for PM. [s. 285.65(10), Wis. Stats.; 13-JJW-073-R1]</p> <p>(3) 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; 13-JJW-073-R1]</p> <p>(4) The permittee shall comply with the tune-up requirements under 40 CFR 63, Subpart DDDDD - National Emission Standards for Hazardous Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters listed in I.A.7. [s. 285.65(3), Wis. Stats.; 13-JJW-073-R1]</p>	<p>(1) Reference Test Method for Particulate Matter Emissions: Whenever emission testing is required, US EPA Method 5 (including condensible particulate by US EPA Method 202) shall be used. [s. NR 439.06(1), Wis. Adm. Code; 13-JJW-073-R1]</p> <p>(2) Reference Test Method for PM₁₀ and PM_{2.5} Emissions: Whenever emission testing is required, the permittee shall use USEPA Method 201 or 201A (including condensible particulate by US EPA Method 202). [s. NR 439.06(1)&(1m), Wis. Adm. Code; 13-JJW-073-R1]</p> <p>(3) The permittee shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor for natural gas for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. [s. NR 440.205(10)(d) and 40 CFR 60.49b(d)(1); 13-JJW-073-R1]</p> <p>(4) The permittee shall maintain the following records for a minimum of five years: (a) All compliance testing related to particulate matter emissions; and (b) Documentation of compliance with the tune-up requirements under 40 CFR 63, Subpart DDDDD - National Emission Standards for Hazardous Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters listed in I.A.7. [s. NR 439.04(1)(d), Wis. Adm. Code; 13-JJW-073-R1]</p> <p>(5) 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; 13-JJW-073-R1]</p>

¹ These limitations also ensure the project is a minor modification under ch. NR 405, Wis. Adm. Code.

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Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements						
		<p>(5) Stack Parameters:² The following stacks may not be equipped with a rainhat or other device which impedes the upward flow of the exhaust gases; and each stack shall have the following minimum stack height above ground level and maximum equivalent stack inside diameter:</p> <table border="1" data-bbox="716 467 1146 526"> <thead> <tr> <th>Stack</th> <th>Height (ft)</th> <th>Diameter (ft)</th> </tr> </thead> <tbody> <tr> <td>S22</td> <td>190</td> <td>7.0</td> </tr> </tbody> </table> <p>[s. 285.65(3), Wis. Stats.; 13-JJW-073-R1]</p>	Stack	Height (ft)	Diameter (ft)	S22	190	7.0	
Stack	Height (ft)	Diameter (ft)							
S22	190	7.0							
<p>2. Visible Emissions</p>	<p>(1) Opacity may not exceed 20% or number 1 of the Ringlemann chart with the following exceptions: (a) When combustion equipment is being cleaned or a new fire started, emissions may exceed number 1 of the Ringlemann chart or 20% opacity but may not exceed number 4 of the Ringlemann chart or 80% opacity for 6 minutes in any one hour. Combustion equipment may not be cleaned nor a fire started more than 3 times per day. (b) Emissions may exceed number 1 of the Ringlemann chart or 20% opacity for stated periods of time, as permitted by the department, for such purpose as an operating test, use of emergency equipment, or other good cause, provided no hazard or unsafe condition arises. [s. NR 431.05, Wis. Adm. Code; 13-JJW-073-R1]</p>	<p>(1) The compliance demonstration methods for particulate matter in I.A.1.b.(1) – (4) shall serve as the compliance demonstration methods for visible emissions.³ [s. 285.65(3), Wis. Stats.; 13-JJW-073-R1]</p>	<p>(1) Reference Test Method for Visible Emissions: Whenever visible emission testing is required by the Department, the permittee shall use U.S. EPA Method 9. [s. NR 439.06(9)(a)1., Wis. Adm. Code; 13-JJW-073-R1]</p> <p>(2) The compliance monitoring and recordkeeping in I.A.1.c.(3) & (4) shall be considered compliance monitoring and recordkeeping for the visible emission limits. [s. 285.65(3), Wis. Stats.; 13-JJW-073-R1]</p> <p>(3) The permittee shall maintain the records of all compliance testing related to visible emissions for a minimum of five years. [s. NR 439.04(1)(d), Wis. Adm. Code; 13-JJW-073-R1]</p>						
<p>3. Nitrogen Oxides (NOx)</p>	<p>(1)(a) The NOx emissions (expressed as NO₂) from Boiler B02 may not exceed 0.10 pounds per million BTU</p>	<p>(1) Compliance with the emission limit in I.A.3.a.(1)(a) shall be determined through performance testing: The permittee shall determine</p>	<p>(1) Reference Test Method for Nitrogen Oxide Emissions: Whenever emission testing of nitrogen oxide emissions is required, the permittee shall use U.S. EPA Method 7, 7A, 7B,</p>						

² These requirements are included because the source was reviewed with these stack parameters and it was determined that the project would be less than the SIL with these parameters.

³ As natural gas is a clean burning fuel, no exceedance of the visible emission limitation is expected while combusting this fuel. In addition, the facility will use an oxygen trim system and perform a boiler tune-up in accordance with 40 CFR 63, Subpart DDDDD, which will ensure compliance with the visible emission limitations.

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	<p>heat input on a 30-day rolling average basis.</p> <p>(b) On and after the date on which the initial performance test is completed, the NOx emission limit applies at all times including periods of startup, shutdown or malfunction. [s. NR 440.205(5)(a), (h) & (i), Wis. Adm. Code, 40 CFR 60.44b(h) (i), and (l); 13-JJW-073-R1]</p> <p>(2) NOx emissions may not exceed 79.6 tons in any consecutive 12 month period. [s. 285.65(3) & (7), Wis. Stats.; 13-JJW-073-R1]</p>	<p>compliance with the NOx standards under I.A.3.a.(1)(a) on a continuous basis through the use of a 30-day rolling average emission rate. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly NOx emission data for the preceding 30 steam generating unit operating days. [s. NR 440.205(7)(c) & (e), Wis. Adm. Code, and 40 CFR 60.46b(c) and (e); 13-JJW-073-R1]</p> <p>(2) Within 15 days after the end of each month, the permittee shall calculate the monthly and the total consecutive 12-month period nitrogen oxide emissions from Boiler B02 using emissions data from the nitrogen oxide CEMS.</p> <p>(a) The monthly NOx emission rate shall be calculated by summing the hourly average NOx emission rates for each day during the month;</p> <p>(b) The total consecutive 12-month period NOx emission rate shall be calculated by summing the monthly NOx emissions from the most recent 12 consecutive months. [s. 285.65(3), Wis. Stats.; 13-JJW-073-R1]</p>	<p>7C, 7D or 7E. [s. NR 439.06(6)(a), Wis. Adm. Code; 13-JJW-073-R1]</p> <p>(2) Emission monitoring for nitrogen oxides.</p> <p>(a) Install, calibrate, maintain, and operate a CEMS for measuring NOx and O₂ (or CO₂) emissions discharged to the atmosphere, and record the output of the system.</p> <p>(b) The CEMS required under paragraph (a) of this section shall be operated and data recorded during all periods of operation of the affected facility except for CEMS breakdowns and repairs. Data shall be recorded during calibration checks, and zero and span adjustments.</p> <p>(c) The 1-hour average NOx emission rates measured by the continuous NOx monitor required by paragraph (a) of this section and required under 40 CFR 60.13(h) shall be expressed in lb/MMBtu heat input and shall be used to calculate the average emission rates under 40 CFR 60.44b. The 1-hour averages shall be calculated using the data points required under 40 CFR 60.13(h)(2).</p> <p>(d) The procedures under s. NR 440.13, Wis. Adm. Code shall be followed for installation, evaluation and operation of the continuous monitoring systems. For natural gas, the span value for NOx is 500 ppm.</p> <p>(e) When NOx emission data are not obtained because of CEMS breakdowns, repairs, calibration checks and zero and span adjustments, emission data will be obtained by using standby monitoring systems, US EPA Method 7, US EPA Method 7A, or other approved reference methods to provide emission data for a minimum of 75% of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days. [s. NR 440.205(9)(b)-(f), Wis. Adm. Code, 40 CFR 60.48b(b)-(f); 13-JJW-073-R1]</p> <p>(3) Reporting and Recordkeeping Requirements.</p> <p>(a) The permittee shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor for natural gas for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.</p> <p>(b) The permittee of an affected facility subject to the NOx</p>

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			<p>standards under I.A.3.a.(1)(a) shall maintain records of the following information for each steam generating unit operating day:</p> <ol style="list-style-type: none"> 1. Calendar date. 2. The average hourly NOx emission rates (expressed as NO₂) (lb/MMBtu heat input) measured; 3. The 30-day average NOx emission rates (lb/MMBtu heat input) calculated at the end of each steam generating unit operating day from the measured hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days. 4. Identification of the steam generating unit operating days when the calculated 30-day average nitrogen oxides emission rates are in excess of the NOx emission standards under I.A.3.a.(1)(a), with the reasons for such excess emissions as well as a description of corrective actions taken; 5. Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken; 6. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data; 7. Identification of “F” factor used for calculations, method of determination, and type of fuel combusted. 8. Identification of the times when the pollutant concentration exceeded full span of the CEMS; 9. Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3 of Appendix B, 40 CFR Part 60; and 10. Results of daily CEMS drift tests and quarterly accuracy assessments as required under 40 CFR Part 60, Appendix F, Procedure 1. <p>(c) The permittee is required to submit excess emission reports for any excess emissions that occurred during the reporting period. For the purposes of 40 CFR 60.48b(g)(1), excess emissions are defined as any calculated 30-day rolling average NOx emission rate, as determined under 40 CFR 60.46b(e), that exceeds the applicable emission limits in I.A.3.a.(1)(a).</p> <p>(d) The permittee of any affected facility subject to the continuous monitoring requirements for NOx under 40 CFR 60.48(b) shall submit reports containing the information</p>

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			<p>recorded under paragraph (d) of this section.</p> <p>(e) The reporting period for the reports required under this section is each quarterly period. All reports shall be submitted to the Department and shall be postmarked by the 30th day following the end of the reporting period.</p> <p>(f) All records required under this section shall be maintained by the permittee for a period of 5 years following the date of such record.</p> <p>[s. 285.65(7), Wis. Stats. and s. NR 440.205(10)(a), (b), (d), (g)-(i), (o) & (t), Wis. Adm. Code, 40 CFR 60.49b(a), (b), (d), (g)-(i) & (o); 13-JJW-073-R1]</p> <p>(4) The permittee shall maintain records of the monthly and 12-month rolling sum of NO_x emissions as calculated in I.A.3.b.(2) for a minimum of five years. [ss. NR 439.04(1)(d), NR 439.04(2), and NR 440.205(10)(o), Wis. Adm. Code; 40 CFR 60.49b(o); 13-JJW-073-R1]</p>
<p>4. Carbon Monoxide (CO)</p>	<p>(1) CO emissions may not exceed 88.48 tons in any consecutive 12 month period. [s. 285.65(3) & (7), Wis. Stats.; 13-JJW-073-R1]</p>	<p>(1) The permittee shall install, calibrate, maintain and operate a continuous emission monitor (CEM) that meets the applicable performance specifications in 40 CFR part 60, Appendix B. The owner or operator of the source shall submit and follow the quality control and quality assurance plan for the monitor which has been approved by the Department. [s. NR 439.06(4)(b), Wis. Adm. Code; 13-JJW-073-R1]</p> <p>(2) Compliance with the emission limitation I.A.4.a.(1) shall be determined using the following methodology:</p> <p>(a) Averaging the valid minute CO measurements in any hour to determine an hourly average CO emission rate; and</p> <p>(b) Calculating the calendar month emission rate by summing the hourly emission rates for each hour of operation in the previous calendar month. [s. 285.65(3), Wis. Stats.; 13-JJW-073-R1]</p> <p>(3) Within 15 days after the end of each month, the permittee shall calculate the monthly and the total consecutive 12-month period CO emissions from Boiler B02 using emissions data from the carbon</p>	<p>(1) Reference Test Method for Carbon Monoxide Oxide Emissions: Whenever emission testing of carbon monoxide emissions is required, the permittee shall use U.S. EPA Method 10, 10A, and 10B. [s. NR 439.06(6)(a), Wis. Adm. Code; 13-JJW-073-R1]</p> <p>(2) The permittee shall maintain the following records:</p> <p>(a) The hourly, monthly and 12-month rolling sum CO emission rates;</p> <p>(b) A copy of the QA/QC plan for the CEM;</p> <p>(c) Any records required under the QA/QC plan; and</p> <p>(d) A record of the CEM readings for each hour of boiler operation. [s. NR 439.04(1)(d), Wis. Adm. Code; 13-JJW-073-R1]</p> <p>(3) The owner or operator of a CEMS shall submit quarterly excess emission reports to the Department within 30 days following the end of each calendar quarter in accordance with subd. (a). The owner or operator shall submit either a full excess emission report under subd. (a) or a summary excess emission report under subd. (b), as specified in writing by the Department.</p> <p>(a) The full excess emission reports required under this subsection shall contain the following information:</p>

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		<p>monoxide CEMS.</p> <p>(a) The monthly CO emission rate shall be calculated by summing the hourly average CO emission rates for each day during the month;</p> <p>(b) The total consecutive 12-month period CO emission rate shall be calculated by summing the monthly CO emissions from the most recent 12 consecutive months.</p> <p>[s. 285.65(3), Wis. Stats.; 13-JJW-073-R1]</p>	<p>i. The date and starting and ending times or duration of each period of excess emissions and the magnitude of the emissions.</p> <p>ii. The periods of excess emissions that occur during startups, shutdowns, process malfunction, fuel problems, other known causes or for unknown causes. The report shall identify the cause of any malfunction and the measures taken to reduce excess emissions.</p> <p>iii. The date and starting and ending time of any period during which the monitoring system was inoperative for any reason or causes, including monitor malfunction or calibration, except for zero and span checks (ie: an invalid hour). The report shall identify the repairs or adjustments made to the system.</p> <p>iv. The date and starting and ending time of any period during which the process being monitored was inoperative (ie: process off-line hour).</p> <p>v. When no period of excess emissions occurred during the quarter and the monitoring system had no period of downtime, an excess emissions report shall be filed stating such information.</p> <p>(b) The summary excess emission report shall be submitted on a form provided by the Department or in a format approved by the Department, in writing</p> <p>(c) An excess emission of carbon monoxide is defined as any 12-month consecutive period in which the carbon monoxide emission rate for the boiler exceeds the emission limit in I.A.4.a.(1).</p> <p>[s. 285.65(3), Wis. Stats. and s. NR 439.09(10), Wis. Adm. Code; 13-JJW-073-R1]</p>

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5. National Emission Standards for Hazardous Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters. (40 CFR 63, Subpart DDDDD and ch. NR 462, Wis. Adm. Code)

(1) When do I have to comply with this subpart?

(a) If you have a new or reconstructed boiler or process heater, you must comply with this subpart by April 1, 2013, or upon startup of your boiler or process heater, whichever is later.

[s. 285.65(13), Wis. Stats. and 40 CFR 63.7495; 13-JJW-073-R1]

(2) What emission limitations, work practice standards, and operating limits must I meet?

(a) You must meet the requirements in paragraphs (i) through (ii) of this section, except as provided in paragraphs (b) of this section.

(i) You must meet each work practice standard in Table 3 to this subpart that applies to your boiler or process heater, for each boiler or process heater at your source, except as provided under § 63.7522.

(ii) At all times, you must operate and maintain any affected source (as defined in 40 CFR 63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(b) Boilers and process heaters in the units designed to burn gas 1 fuels subcategory are not subject to the emission limits in Tables 1 and 2 or 11 through 13 of 40 CFR 63, Subpart DDDDD, or the operating limits in Table 4 of 40 CFR 63, Subpart DDDDD.

[s. 285.65(13), Wis. Stats. and 40 CFR 63.7500(a)&(e); 13-JJW-073-R1]

(3) What are my initial compliance requirements and by what date must I conduct them? For new or reconstructed affected sources (as defined in § 63.7490), you must demonstrate initial compliance with the applicable work practice standards in Table 3 to this subpart within the applicable 5-year schedule as specified in section (4) following the initial compliance date specified in section (1)(a). Thereafter, you are required to complete the applicable 5-year tune-up as specified in section (4). [s. 285.65(13), Wis. Stats. and 40 CFR 63.7510(g); 13-JJW-073-R1]

(4) When must I conduct subsequent performance tests, fuel analyses, or tune-ups? If you are required to meet an applicable tune-up work practice standard, you must conduct an 5-year performance tune-up according to section (5)(a). Each 5-year tune-up specified in section (5)(a) must be conducted no more than 61 months after the previous tune-up. For a new or reconstructed affected source (as defined in § 63.7490), the first 5-year tune-up must be no later than 61 months, respectively, after the initial startup of the new or reconstructed affected source. [s. 285.65(13), Wis. Stats. and 40 CFR 63.7515(d); 13-JJW-073-R1]

(5) How do I demonstrate continuous compliance with the work practice standards? You must demonstrate continuous compliance with each work practice standards in Table 3 to this subpart that applies to you according to the methods in paragraphs (a) through (b) of this section.

(a) If your boiler or process heater has a continuous oxygen trim system that maintains an optimum air to fuel ratio you must conduct a tune-up of the boiler or process heater every 5 years as specified in paragraphs (i) through (vi) of this section to demonstrate continuous compliance. You may delay the burner inspection specified in paragraph (i) of this section until the next scheduled or unscheduled unit shutdown, but you must inspect each burner at least once every 72 months. If an oxygen trim system is utilized on a unit without emission standards to reduce the tune-up frequency to once every 5 years, set the oxygen level no lower than the oxygen concentration measured during the most recent tune-up.

(i) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may perform the burner inspection any time prior to tune-up or delay the burner inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment;

(ii) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;

(iii) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the

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- next scheduled unit shutdown). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection;
- (iv) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the unit is subject;
- (v) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and
- (vi) Maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs 1. through 3. of this section,
1. The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;
 2. A description of any corrective actions taken as a part of the tune-up; and
 3. The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.
- (b) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.
[s. 285.65(13), Wis. Stats. and 40 CFR 63.7540(a)(10), (12) & (13); 13-JJW-073-R1]
- (6) What notifications must I submit and when?
- (a) You must submit to the Administrator all of the notifications in §§ 63.7(b) and (c), 63.8(e), (f)(4) and (6), and 63.9(b) through (h) that apply to you by the dates specified.
- (b) As specified in § 63.9(b)(4) and (5), if you startup your new or reconstructed affected source on or after January 31, 2013, you must submit an Initial Notification not later than 15 days after the actual date of startup of the affected source.
- (c) If you are required to conduct an initial compliance demonstration as specified in § 63.7530(a), you must submit a Notification of Compliance Status according to § 63.9(h)(2)(ii). For the initial compliance demonstration for each affected source, you must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of all performance test and/or other initial compliance demonstrations for the affected source according to § 63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in paragraphs (i) through (viii), **as applicable**.
- (i) A description of the affected unit(s) including identification of which subcategory the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit, description of the fuel(s) burned, including whether the fuel(s) were determined by you or EPA through a petition process to be a non-waste under § 241.3, whether the fuel(s) were processed from discarded non-hazardous secondary materials within the meaning of § 241.3, and justification for the selection of fuel(s) burned during the compliance demonstration.
 - (ii) Summary of the results of all performance tests and fuel analyses, and calculations conducted to demonstrate initial compliance including all established operating limits.
 - (iii) A summary of the maximum carbon monoxide emission levels recorded during the performance test to show that you have met any applicable emission standard in Table 1, 2, or 12 to this subpart.
 - (iv) Identification of whether you plan to demonstrate compliance with each applicable emission limit through performance testing or fuel analysis.
 - (v) Identification of whether you plan to demonstrate compliance by emissions averaging and identification of whether you plan to demonstrate compliance by using emission credits through energy conservation:
 1. If you plan to demonstrate compliance by emission averaging, report the emission level that was being achieved or the control technology employed on May 20, 2011.
 - (vi) A signed certification that you have met all applicable emission limits and work practice standards.
 - (vii) If you had a deviation from any emission limit, work practice standard, or operating limit, you must also submit a description of the deviation, the duration of the deviation, and the corrective action taken in the Notification of Compliance Status report.
 - (viii) In addition to the information required in § 63.9(h)(2), your notification of compliance status must include the following certification(s) of compliance, as applicable, and signed by a responsible official:
 1. "This facility completed the required initial tune-up for all of the boilers and process heaters covered by 40 CFR 63 Subpart DDDDD at this site according to the procedures in § 63.7540(a)(10)(i) through (vi)."
- [s. 285.65(13), Wis. Stats. and 40 CFR 63.7545(a), (c) & (e); 13-JJW-073-R1]
- (7) What reports must I submit and when:

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- (a) You must submit each report in Table 9 to this subpart that applies to you.
- (b) Unless the EPA Administrator has approved a different schedule for submission of reports under § 63.10(a), you must submit each report, according to paragraph (d) of this section, by the date in Table 9 to this subpart and according to the requirements in paragraphs (b)(i) through (iv) of this section. For units that are subject only to a requirement to conduct a 5-year tune-up according to section (5)(a) and not subject to emission limits or Table 4 operating limits, you may submit only a 5-year compliance report, as applicable, as specified in paragraphs (b)(i) through (iv) of this section, instead of a semi-annual compliance report.
- (i) The first compliance report must cover the period beginning on the compliance date that is specified for each boiler or process heater in section (1) and ending on June 30 or December 31, whichever date is the first date that occurs at least 5 years after the compliance date that is specified for your source in section (1).
- (ii) The first compliance report must be postmarked or submitted no later than July 31 or January 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for each boiler or process heater in section (1). The first 5-year compliance report must be postmarked or submitted no later than January 31.
- (iii) 5-year compliance reports must cover the applicable 5-year periods from January 1 to December 31.
- (iv) 5-year compliance reports must be postmarked or submitted no later than January 31.
- (c) A compliance report must contain the following information depending on how the facility chooses to comply with the limits set in this rule. If the facility is subject to the requirements of a tune up you must submit a compliance report with the information in paragraphs (i) through (v) of this section.
- (i) Company and facility name and address.
- (ii) Process unit information, emissions limitations, and operating parameter limitations.
- (iii) Date of report and beginning and ending dates of the reporting period.
- (iv) The total operating time during the reporting period.
- (v) Include the date of the most recent tune-up for each unit subject to only the requirement to conduct a 5-year tune-up according to section (5)(a). Include the date of the most recent burner inspection if it was not done on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown.
- (d) You must submit the reports according to the procedures specified in paragraph (i) of this section.
- (i) You must submit all reports required by Table 9 of this subpart electronically to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) You must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, you may submit an alternate electronic file consistent with the XML schema listed on the CEDRI website (<http://www.epa.gov/ttn/chief/cedri/index.html>), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate address listed in § 63.13. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI.

[s. 285.65(13), Wis. Stats. and 40 CFR 63.7550 (a), (b), (c), and (h); 13-JJW-073-R1]

(8) What records must I keep:

- (a) You must keep records according to paragraphs (a)(1) and (2) of this section.
- (1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that you submitted, according to the requirements in § 63.10(b)(2)(xiv).
- (2) Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in § 63.10(b)(2)(viii).

[s. 285.65(13), Wis. Stats. and 40 CFR 63.7555(a); 13-JJW-073-R1]

(9) In what form and how long must I keep my records:

- (a) Your records must be in a form suitable and readily available for expeditious review, according to § 63.10(b)(1).
- (b) As specified in § 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- (c) You must keep each record on site, or they must be accessible from on-site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to § 63.10(b)(1). You can keep the records off site for the remaining 3 years.

[s. 285.65(13), Wis. Stats. and 40 CFR 63.7560; 13-JJW-073-R1]

A. Process B02, Stack(s) S22 – Up to 505 MMBtu per Hour Natural Gas-Fired Boiler.

TABLE 3 TO SUBPART DDDDD OF PART 63—WORK PRACTICE STANDARDS

If your unit is . . .	You must meet the following . . .
1. A new or existing boiler or process heater with a continuous oxygen trim system that maintains an optimum air to fuel ratio.	Conduct a tune-up of the boiler or process heater every 5 years as specified in § 63.7540.

TABLE 9 TO SUBPART DDDDD OF PART 63—REPORTING REQUIREMENTS

You must submit a(n)	The report must contain . . .	You must submit the report . . .
1. Compliance Report	a. Information required in I.A.(7)7.(c)(i) through (v); and	Every 5 years according to the requirements in I.A.(7)7.(b) of this section.
	b. If there are no deviations from the requirements for work practice standards for periods of startup and shutdown in Table 3 to this subpart that apply to you, a statement that there were no deviations from the emission limitations and work practice standards during the reporting period.	

D. Stack S11, Control Devices C11 and C29, Boiler B29: 486 million BTU per hour fines circulating fluidized bed boiler burning coal, natural gas, distillate fuel oil and petroleum coke, constructed or last modified in 1992. Except as noted, the requirements and emission limitations outlined in this section apply to the boiler regardless of the fuel being fired. All emission limitations in this table apply to emissions from Stack S11, except for the limits in Sections D.1a. and D.3.			
POLLUTANT	a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING REQUIREMENTS
14. *Nickel Emissions from burning Petroleum Coke	(1) *Best Available Control Technology (BACT). BACT for nickel emissions from petroleum coke combustion is the use of a baghouse to control emissions. [s. NR *445.07(1)(c), Wis. Adm. Code]	(1) *See Conditions D.1.b.(2), (3) and (4) for particulate matter emissions. ⁴ [ss. NR 407.09(4)(a)1., and 439.055(1)(a), Wis. Adm. Code]	(1) *Whenever nickel emission testing is required, the permittee shall use methods approved in advance by the Department. [s. NR 439.06(8), Wis. Adm. Code] (2) *See Conditions D.1.c.(4) and (5) for particulate matter emissions. [ss. NR 439.04(1)(d) and 439.055(2)(b), Wis. Adm. Code]

⁴ For units other than Boiler B02, conditions cited in this Revision 13-JJW-073-R1 and not included in this revision can be found in the attached Title V permit 405032870-P15.

D. Stack S11, Control Devices C11 and C29, Boiler B29: 486 million BTU per hour fines circulating fluidized bed boiler burning coal, natural gas, distillate fuel oil and petroleum coke, constructed or last modified in 1992. Except as noted, the requirements and emission limitations outlined in this section apply to the boiler regardless of the fuel being fired. All emission limitations in this table apply to emissions from Stack S11, except for the limits in Sections D.1a. and D.3.			
POLLUTANT	a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING REQUIREMENTS
18. 40 CFR Part 63, Subpart DDDDD: National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial and Institutional Boilers and Process Heaters ⁵	<p>(1)(a) The permittee shall comply with the applicable emission limitations, operating limits and work practice standards in 40 CFR Part 63, Subpart DDDDD no later than January 31, 2017.⁶ This is a one year extension of the compliance date in Subpart DDDDD.</p> <p>[40 CFR ss. 63.6(i)(4)(i)(A) and 63.7495(b); s. 285.65(13), Wis. Stats.; s. NR 460.05(7)(c)1.a., Wis. Adm. Code; 13-JJW-073-R1]</p> <p>(2) Beginning with calendar year 2017, the annual capacity factor for Boiler B29 may not exceed 10 percent. Annual capacity factor means the ratio between the actual heat input to a boiler or process heater from the fuels burned during a calendar year and the potential heat input to the boiler or process heater had it been operated for 8,760 hours during a year at the maximum steady state design heat input capacity [ss. 285.65(7) and (13), Wis. Stats.; 40 CFR s. 63.7575; 13-JJW-073-R1]</p> <p>(3) Boiler B29 is a limited-use boiler. B29 must complete a tune-up every 5</p>	<p>(1)(a) At the end of each month, the permittee shall calculate the calendar year to date contribution to the annual capacity factor for Boiler B29 based on the fuels burned since the beginning of the calendar year.</p> <p>(b) The calendar year to date contribution to the annual capacity factor shall be calculated as follows:</p> $CACF = \frac{\sum_{i=1}^n Q_i \times HC_i}{4.25 \times 10^6} \times 100$ <p>Where:</p> <p>CACF = the calendar year to date contribution to the annual capacity factor of all fuels burned in B29. Annual capacity factor is defined in 40 CFR s. 63.7575.</p> <p>n = the number of different fuels used in B29, calendar year to date.</p> <p>Q_i = the quantity of fuel i used in B29, calendar year to date, in tons for solid fuels, gallons for liquid fuels, and cubic feet for gaseous fuels.</p> <p>HC_i = the heat content of fuel i used in B29, calendar year to date, in million Btu (mmBtu) per ton for solid fuels, mmBtu per gallon for liquid fuels, and mmBtu per cubic foot for gaseous fuels.</p> <p>4.25 x 10⁶ = 486 mmBtu per hour x 8760 hours per year.</p> <p>(c) The equation in Condition D.18.b.(1)(b), when used for a full calendar year, gives the value of the annual capacity factor for that calendar year. [ss. 285.65(3) and (13), Wis. Stats.; 40 CFR s. 63.7575; 13-JJW-073-R1]</p> <p>(2) You⁷ must conduct a tune-up of Boiler B29 every 5 years as specified in 40 CFR ss. 63.7540(a)(10)(i) through (vi) to demonstrate continuous compliance. You may delay the burner inspection specified in paragraph 40 CFR s.</p>	<p>(1)(a) You must keep a copy of the federally enforceable permit that limits the annual capacity factor for B29 to less than or equal to 10 percent.</p> <p>(b) You must keep fuel use records for the days Boiler B29 was operating. [s. 285.65(13), Wis. Stats.; 40 CFR ss. 63.7525(k) and 63.7555(a)(3); 13-JJW-073-R1]</p> <p>(2) The permittee shall keep the following records for each month:</p> <p>(a) The quantity of each fuel used in B29 from January 1 of the current calendar year to the end of the current month. Fuel quantities shall be recorded in tons for solid fuels, gallons for liquid fuels, and cubic feet for gaseous fuels.</p> <p>(b) The heat content of each fuel used in B29 during the calendar year to date. Fuel heat contents shall be recorded in mmBtu per ton for solid fuels, mmBtu per gallon for liquid fuels, and mmBtu per cubic foot for gaseous fuels.</p> <p>(c) The calendar year to date contribution to the annual capacity factor at the end of the month,</p>

⁵ On July 29, 2016, the United States Court of Appeals for the District of Columbia Circuit remanded portions of 40 CFR Part 63 subpart DDDDD to US EPA. United States Sugar Corp. v. EPA, No. 11-1108, at 156. The standards in Subpart DDDDD applicable to this source may be changed by EPA in order to comply with that decision.

⁶ See approval letter from WDNR dated July 17, 2015.

⁷ “You” refers to the permittee, Georgia-Pacific Consumer Products LP.

D. Stack S11, Control Devices C11 and C29, Boiler B29: 486 million BTU per hour fines circulating fluidized bed boiler burning coal, natural gas, distillate fuel oil and petroleum coke, constructed or last modified in 1992. Except as noted, the requirements and emission limitations outlined in this section apply to the boiler regardless of the fuel being fired. All emission limitations in this table apply to emissions from Stack S11, except for the limits in Sections D.1a. and D.3.			
POLLUTANT	a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING REQUIREMENTS
	<p>years as specified in 40 CFR ss. 63.7540(a)(10), (12) and (13). B29 is not subject to the emission limits in Tables 1 and 2 or 11 through 13 to Subpart DDDDD, the annual tune-up, or the energy assessment requirements in Table 3 to Subpart DDDDD, or the operating limits in Table 4 to Subpart DDDDD. [ss. 285.65(7) and (13), Wis. Stats.; 40 CFR ss. 63.7500(c) and 63.7540(10), (12) and (13); 13-JJW-073-R1]</p>	<p>63.7540(a)(10)(i) until the next scheduled or unscheduled unit shutdown, but you must inspect each burner at least once every 72 months. The requirements of 40 CFR ss. 63.7540(a)(10)(i) through (vi) are as follows:</p> <p>(i) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment;</p> <p>(ii) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;</p> <p>(iii) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection;</p> <p>(iv) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the unit is subject;</p> <p>(v) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and</p> <p>(vi) Maintain on-site and submit, if requested by the Department, a report containing the information in 40 CFR ss. 63.7540(a)(10)(vi)(A) through (C),</p> <p>(A) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating</p>	<p>calculated using the formula in Condition D.18.b.(1)(b). [s. 285.65(3), Wis. Stats.; s. NR 439.04(1)(d), Wis. Adm. Code; 13-JJW-073-R1]</p> <p>(3) The permittee shall keep records of the annual capacity factor for each calendar year. [s. 285.65(3), Wis. Stats.; s. NR 439.04(1)(d), Wis. Adm. Code; 13-JJW-073-R1]</p> <p>(4)(a) You must submit a compliance report with the information in 40 CFR ss. 63.7550(c)(5)(i) through (iv), (xiv) and (xvii). (b) The first and subsequent compliance reports must be submitted in accordance with the requirements of 40 CFR s. 63.7550(b) for units subject to a requirement to conduct a 5-year tune-up. [s. 285.65(13), Wis. Stats.; 40 CFR ss. 63.7550(b) and (c)(1); 13-JJW-073-R1]</p>

D. Stack S11, Control Devices C11 and C29, Boiler B29: 486 million BTU per hour fines circulating fluidized bed boiler burning coal, natural gas, distillate fuel oil and petroleum coke, constructed or last modified in 1992. Except as noted, the requirements and emission limitations outlined in this section apply to the boiler regardless of the fuel being fired. All emission limitations in this table apply to emissions from Stack S11, except for the limits in Sections D.1a. and D.3.			
POLLUTANT	a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING REQUIREMENTS
		load, before and after the tune-up of the boiler or process heater; (B) A description of any corrective actions taken as a part of the tune-up; and (C) The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit. [s. 285.65(13), Wis. Stats.; 40 CFR ss. 63.7540(a)(10)(i) through (vi) and (12); 13-JJW-073-R1] (3) Each 5-year tune-up specified in 40 CFR s. 63.7540(a)(12) must be conducted no more than 61 months after the previous tune-up. [s. 285.65(13), Wis. Stats.; 40 CFR s. 63.7515(d); 13-JJW-073-R1] (4) If Boiler B29 is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. [s. 285.65(13), Wis. Stats.; 40 CFR s. 63.7540(a)(13); 13-JJW-073-R1] (5) The permittee shall comply with the requirements of Table AAA of this permit that apply to limited-use boilers. [s. 285.65(13), Wis. Stats.; 40 CFR Part 60, Subpart DDDDD; 13-JJW-073-R1]	

CC. Limitations Applicable to the Entire Facility, or to multiple processes as noted.			
POLLUTANT	a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING REQUIREMENTS
7. *Arsenic and Cadmium emission limits for Boilers B10, B26 and B29	<p>(1) *The permittee shall comply with the requirements for limiting emissions of arsenic in one of the following ways: (a)*By limiting the emissions of arsenic from the combustion of non-exempt fuels in Boilers B10, B26 and B29 to less than 14.2 pounds per consecutive twelve (12) month period. Compliance shall be determined from a running total based on the sum of emissions data from the most recent 12 consecutive months. (b) *By demonstrating to the satisfaction of the Department that the non-exempt, potential to emit emissions of arsenic do not cause an ambient air concentration off the source property that results in an inhalation impact greater than 1×10^{-6}. [s. 285.65(7), Wis. Stats.; ss. NR *445.08(2)(a) and (c), Wis. Adm. Code]</p> <p>(2) *The permittee shall comply with the requirements for limiting emissions of cadmium in one of the following ways: (a)*By limiting the emissions of cadmium from the combustion of non-exempt fuels in Boilers B10, B26 and B29 to less than 34 pounds per consecutive twelve (12) month period. Compliance shall be determined from a running total based on the sum of emissions data from the most recent 12 consecutive months. (b) *By demonstrating to the satisfaction of the Department that the non-exempt, potential to emit emissions of cadmium do not cause an ambient air concentration off the source property that results in an inhalation impact greater than 1×10^{-6}. [s. 285.65(7), Wis. Stats.; ss. NR *445.08(2)(a) and (c), Wis. Adm. Code]</p> <p>(3) *On and after January 31, 2017, Conditions CC.7.a.(1), CC.7.a.(2), CC.7.b.(1), CC.7.b.(2), CC.7.c.(1), CC.7.c.(2) and CC.7.c.(3) do not apply to Boilers B10 and B26. [s. *NR 445.01(1)(b), Wis. Adm. Code]</p>	<p>(1) *When complying with the emissions limit in Condition CC.7.a.(1)(a) or CC.7.a.(2)(a), the permittee shall calculate annual emissions of arsenic and cadmium using the following formulas: (a) To calculate monthly emissions of an individual HAP, the permittee shall use Equation 1:</p> $E_M = \sum_{i=1}^n E_i \quad (\text{Equation 1})$ <p>Where: “E_M” is the monthly emissions of an individual HAP, in pounds. “E_i” is the monthly emissions of an individual HAP from a non-exempt fuel emitting that HAP, calculated using Equation 2 below. “n” is the total number of non-exempt fuels emitting the individual HAP. (b) *To calculate monthly emissions of an individual HAP from a given non-exempt fuel, the permittee shall use Equation 2:</p> $E_i = U_i \times C_i \quad (\text{Equation 2})$ <p>Where: “E_i” is the monthly emissions of an individual HAP from a non-exempt fuel, in pounds. “U_i” is the total usage of the given non-exempt fuel for the month, in tons. “C_i” is the emission factor for emissions of the individual HAP from the given non-exempt fuel, in pounds per ton, based on the most recent stack testing for emissions of the individual HAP from the given non-exempt fuel. [Continued on Next Page]</p>	<p>(1) *Whenever arsenic or cadmium emissions testing is required to show compliance with the emission limits in Conditions CC.7.a.(1)(a) or CC.7.a.(2)(a), the permittee shall use U.S. EPA Method 0012 or 29, or an alternative method proposed by the permittee and approved by the Department. [s. NR 439.06(8), Wis. Adm. Code]</p> <p>(2) *When complying with the emissions limit in Condition CC.7.a.(1)(a) or CC.7.a.(2)(a), the permittee shall keep the following records: (a) The quantity of each non-exempt fuel used in each month of operation, in tons. (b) The emission factor for arsenic and cadmium emissions from each non-exempt fuel, in pounds per ton. (c) Records showing how the arsenic and cadmium emission factors were calculated. (d) The monthly non-exempt emissions of each individual HAP, in pounds. (e) The 12-month total emissions of each individual HAP, in pounds, for each consecutive 12-month period. (f) The emissions calculations required in Conditions CC.7.c.(2)(d) and (e) shall be performed within 14 calendar days following the end of each calendar month. [s. NR 439.04(1)(d), Wis. Adm. Code]</p>

CC. Limitations Applicable to the Entire Facility, or to multiple processes as noted.			
POLLUTANT	a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING REQUIREMENTS
7. *Arsenic and Cadmium emission limits for Boilers B10, B26 and B29, Continued		<p>(1)(c) *To calculate emissions of an individual HAP for a period of twelve consecutive months, the permittee shall use Equation 3:</p> $E_A = \sum_{i=1}^{12} E_{Mi} \quad (\text{Equation 3})$ <p>Where: “E_A” is the total emissions of the individual HAP during the previous 12 consecutive months, in pounds. “E_{M_i” is the monthly emissions of the individual HAP during each of the previous 12 consecutive months in pounds, as calculated using Equation 1. [s. 285.65(7), Wis. Stats., and s. NR 407.09(4)(a)1., Wis. Adm. Code]}</p> <p>(2) *To demonstrate compliance with s. NR 445.07(1)(c), Wis. Adm. Code as outlined in Conditions CC.7.a.(1)(b) and CC.7.a.(2)(b), the permittee shall submit modeling results and data to the Department sufficient to verify the inhalation impact. [s. NR *445.08(2)(c), Wis. Adm. Code]</p>	<p>(3) *When complying with Conditions CC.7.a.(1)(b) and CC.7.a.(2)(b), the permittee shall maintain records of the inhalation impact modeling for arsenic and cadmium. These records shall be kept as long as the permittee is choosing to comply with conditions CC.7.a.(1)(b) and CC.7.a.(2)(b). [ss. NR 439.04(1)(d) and NR 445.08(2)(c), Wis. Adm. Code]</p>

CC. Limitations Applicable to the Entire Facility, or to multiple processes as noted.			
POLLUTANT	a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING REQUIREMENTS
9. *Non-Exempt Chromium, Manganese, Mercury, Selenium and Vanadium Pentoxide Emissions from Boilers B10, B26 and B29	<p>(1) *Total non-exempt emissions from Boilers B10, B26 and B29 may not exceed the following:</p> <p>(a) *Chromium emissions from the combustion of non-exempt fuels may not exceed 0.811 pound per hour, averaged over 24 hours.</p> <p>(b) *Manganese emissions from the combustion of non-exempt fuels may not exceed 0.324 pound per hour, averaged over 24 hours.</p> <p>(c) *Mercury emissions from the combustion of non-exempt fuels may not exceed 0.0405 pound per hour, averaged over 24 hours.</p> <p>(d) *Mercury emissions from the combustion of non-exempt fuels may not exceed 1838 pounds per year.</p> <p>(e) *Selenium emissions from the combustion of non-exempt fuels may not exceed 0.324 pound per hour, averaged over 24 hours.</p> <p>(e) *Vanadium pentoxide emissions from the combustion of non-exempt fuels may not exceed 0.18 pound per hour, averaged over 24 hours. [ss. NR *445.08(2)(a) and (b), Wis. Adm. Code]</p> <p>(2) *On and after January 31, 2017, Conditions CC.9.a.(1), CC.9.b.(1), CC.9.b.(2), CC.9.c.(1), CC.9.c.(2) and CC.9.c.(3) do not apply to Boilers B10 and B26.⁸ [s. *NR 445.01(1)(b), Wis. Adm. Code]</p>	<p>(1) *See Conditions A.1.b.(2), (3) and (4) in Permit 405032870-P15 or the current Title V operation permit for Boiler B26, D.1.b.(2), (3) and (4) for Boiler B29, and F.1.b.(1), (2) and (3) for Boiler B10. [s. NR 407.09(4)(a)1., Wis. Adm. Code]</p> <p>(2) *The permittee shall maintain the stack parameters for Stacks S08, S10 and S11 required in Conditions CC.8.a.(1) and (2). [s. NR 407.09(4)(a)1., Wis. Adm. Code]</p>	<p>(1) *Whenever chromium, manganese, mercury, selenium or vanadium pentoxide emissions testing is required, the permittee shall use methods approved by the Department. [s. NR 439.06(8), Wis. Adm. Code]</p> <p>(2) *See Conditions A.1.c.(4) and (5) in Permit 405032870-P15 or the current Title V operation permit for Boiler B26, D.1.c.(4) and (5) for Boiler B29, and F.2.c.(2) and (3) for Boiler B10. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(3) *The permittee shall keep on file records of stack tests and emissions calculations used to determine emissions of chromium, manganese, mercury, selenium and vanadium pentoxide. [s. NR 439.04(1)(d), Wis. Adm. Code]</p>

⁸ On and after January 31, 2017, hazardous air pollutant emissions from these boilers will be subject to 40 CFR Part 63, Subpart DDDDD. Therefore, these NR 445 requirements will no longer apply per s. NR 445.01(1)(b), Wis. Adm. Code.

CC. Limitations Applicable to the Entire Facility, or to multiple processes as noted.			
POLLUTANT	a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING REQUIREMENTS
10. *Non-exempt Hydrogen Chloride Emissions from Boilers B10, B26 and B29	<p>(1) *Facility-wide emissions of hydrogen chloride from the combustion of non-exempt fuels may not exceed 22 pounds per hour. [ss. NR *445.07(1)(a) and NR *445.08(2)(b), Wis. Adm. Code]</p> <p>(2) *On and after January 31, 2017, Conditions CC.10.a.(1), CC.10.b.(1), CC.10.b.(2), CC.10.c.(1) and CC.10.c.(2) do not apply to Boilers B10 and B26.⁹ [s. *NR 445.01(1)(b), Wis. Adm. Code]</p>	<p>(1) *The permittee shall keep the records required in Condition CC.10.c.(2). [s. NR 407.09(4)(a)1., Wis. Adm. Code]</p> <p>(2) *The permittee shall maintain Stacks S08, S10 and S11 with the parameters required in Conditions CC.8.a.(1) and (2). [s. NR 407.09(4)(a)1., Wis. Adm. Code]</p>	<p>(1) *Whenever hydrogen chloride emissions testing is required, the permittee shall use methods approved in advance by the Department. [s. NR 439.06(8), Wis. Adm. Code]</p> <p>(2) *The permittee shall keep on file the following information:</p> <p>(a) Emissions estimates or stack test data showing the potential to emit hydrogen chloride when burning non-exempt fuels in Boilers B10, B26 and B29.</p> <p>(b) Copies of the air quality modeling used to determine hydrogen chloride ambient impacts. [s. NR 439.04(1)(d), Wis. Adm. Code]</p>

⁹ On and after January 31, 2017, hazardous air pollutant emissions from these boilers will be subject to 40 CFR Part 63, Subpart DDDDD. Therefore, these NR 445 requirements will no longer apply per s. NR 445.01(1)(b), Wis. Adm. Code.

CC. Limitations Applicable to the Entire Facility, or to multiple processes as noted.			
POLLUTANT	a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING REQUIREMENTS
11. Facility-wide Sulfur Dioxide (SO ₂) Emission limits	<p>(1) Beginning on January 12, 2017 and thereafter, sulfur dioxide emissions from the entire facility may not exceed 1,981 tons in any consecutive 12-month period. [ss. 285.65(7) and (13), Wis. Stats.; 40 CFR s. 51.1203(e)(1); 13-JJW-073-R1]</p>	<p>(1) The permittee shall keep the records required in Condition CC.11.c.(1). [s. 285.65(3), Wis. Stats.; 13-JJW-073-R1]</p> <p>(2) Emissions from Stack S10, exhausting Boilers B26 and B28: (a) As required by Condition A.3.a.(3)(b)(ii) in Permit 405032870-P15, emissions from Stack S10 may not exceed 1,700 tons in any consecutive 12-month period. (b) Sulfur dioxide emissions from Stack S10 for each month and each consecutive 12-month period shall be determined using the methods and procedures in Conditions A.3.b.(1), A.3.b.(3) and A.3.b.(5) in Permit 405032870-P15. [ss. 285.65(3) and (7), Wis. Stats.; 13-JJW-073-R1]</p> <p>(3) Emissions from Stack S11, exhausting Boiler B29: (a) The permittee shall ensure that the sulfur dioxide emissions from Boiler B29 will not exceed 149 tons in any consecutive 12-month period. (b) Sulfur dioxide emissions from Stack S11 shall be determined using the methods and procedures in Condition D.4.b.(2). (c) Based on the sulfur dioxide emission rates recorded using the methods and procedures in Condition D.4.b.(2), the permittee shall calculate and record the monthly sulfur dioxide emissions from B29 at the end of the month. (d) Based on the emission calculations conducted each month as required in Condition CC.11.b.(3)(c), the permittee shall calculate and record the sulfur dioxide emissions from Boiler B29 in the most recent consecutive 12-month period at the end of each month. [ss. 285.65(3) and (7), Wis. Stats.; 13-JJW-073-R1]</p> <p>(4) Emissions from Stack S08, exhausting Boiler B10: (a) As required by Conditions F.1.a.(1) and (2), Boiler B10 may only burn wastewater sludge, natural gas and propane. (a) As required by Condition F.1.a.(3)(a), the sludge feed rate for Boiler B10 may not exceed 10.42 tons per hour on a dry basis. This sludge feed rate limit will result in a sulfur dioxide potential to emit of 39.4 tons in any consecutive 12-month period. [ss. 285.65(3) and (7), Wis. Stats.; 13-JJW-073-R1]</p> <p>(5) The permittee shall only use natural gas as fuel in Boiler B02 (505 mmBtu per hour capacity), and Processes P01 (22.2 mmBtu per hour capacity), P02 (33 mmBtu per hour capacity), P03 (18 mmBtu per hour capacity), P04 (19 mmBtu per hour capacity), P05 (36 mmBtu per hour capacity), P15 (40 mmBtu per hour capacity), and P33 (40 mmBtu per hour capacity). Compliance with this condition</p>	<p>(1) The permittee shall keep the following records: (a) Records of the sulfur dioxide CEMS emissions data for Stacks S10 and S11. (b) Monthly records of the sulfur dioxide emissions from Stacks S10 and S11, in tons. (c) Monthly records of the sulfur dioxide emissions from Stacks S10 and S11 in the previous 12 consecutive months, in tons. (d) For Boiler B10, the records required by Condition F.1.c.(2). [s. NR 439.04(1)(d), Wis. Adm. Code; 13-JJW-073-R1]</p> <p>(2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the design of the natural gas combustion equipment for B02, P01, P02, P03, P04, P05, P15 and P33, showing the fuel capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code; 13-JJW-073-R1]</p>

CC. Limitations Applicable to the Entire Facility, or to multiple processes as noted.			
POLLUTANT	a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING REQUIREMENTS
		will limit sulfur dioxide potential to emit from B02, P01, P02, P03, P04, P05, P15 and P33 to 1.89 tons in any consecutive 12-month period. [ss. 285.65(3) and (7), Wis. Stats.; 13-JJW-073-R1]	

ZZZ. Conditions Applicable to the Entire Facility.

Condition Type	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
<p>1. State Hazardous Air Pollutants (State HAPs).</p>	<p>(1) No owner or operator of a source may cause, allow or permit emissions of a hazardous air contaminant listed in Table A of s. NR 445.07, Wis. Adm. Code, in such quantity or concentration or for such duration as to cause an ambient air concentration of the contaminant off the source property that exceeds the concentration in column (g) of Table A for the contaminant. [s. NR 445.07(1)(a), Wis. Adm. Code]*¹⁰</p>	<p>(1) When the permittee elects to significantly change the existing operation (e.g., raw material or product change or production capacity increase), the permittee shall determine, either analytically or through the use of technical calculations, the facility’s new or increased potential emissions of any state hazardous air pollutant (State HAP) emitted, assuming maximum operation conditions. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code]*</p> <p>(2) The permittee shall determine if the facility’s new or increased potential emission rate of any State HAP exceeds the applicable published de minimus value in Table A of s. NR 445.07, Wis. Adm. Code. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code]*</p> <p>(3) When the facility’s new or increased potential emission rate of any State HAP exceeds a published de minimus value, the permittee shall evaluate the impact of the pollutant’s emission and determine if any additional action needs to be taken to protect the ambient air quality standard. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code]*</p>	<p>(1) Whenever any hazardous air pollutant concentration or emission rate testing of any material is required for demonstrating compliance, the permittee shall use a test method and testing protocol approved by either the US EPA or the Department. [ss. NR 407.09(1)(c)1.a. & 4(a)1. and NR 439.06(8), Wis. Adm. Code]</p>
<p>2. Stack Testing Requirements.</p>	<p>(1) Unless otherwise stated in this permit, 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. [ss. NR 439.07(1) and NR 440.08(3), Wis. Adm. Code]</p> <p>(2) The Department shall be informed at least 30 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. The notification and test plan shall be submitted to the Wisconsin Department of</p>	<p>(1) Two copies of the report on any compliance emission tests shall be submitted to the Department for evaluation within 60 days following the completion of tests. [s. NR 439.07(9), Wis. Adm. Code]</p>	<p>None Applicable.</p>

¹⁰ Under s. NR 445.07(5)(a), Wis. Adm. Code, emissions from the combustion of group 1 virgin fossil fuels, such as natural gas, are exempt from the requirements under s. NR 445.07(1), Wis. Adm. Code.

ZZZ. Conditions Applicable to the Entire Facility.

Condition Type	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
	Natural Resources, Northeast Region Headquarters. [ss. NR 439.07(2) and NR 440.08(4), Wis. Adm. Code]		
<p>3. Compliance Reports/Records.</p>	<p>(1) The permittee shall submit periodic monitoring reports. [s. NR 407.09(1)(c)3., Wis. Adm. Code]</p> <p>(2) The permittee shall submit periodic certification of compliance. [s. NR 407.09(4)(a)3., Wis. Adm. Code]</p> <p>(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, s. NR 439.05, Wis. Adm. Code]</p>	<p>(1) The permittee shall submit a monitoring report which contains the results of monitoring or a summary of monitoring results required by this permit to the Department every six (6) months.</p> <p>(a) The time periods to be addressed by the submittal January 1 to June 30 and July 1 to December 31.</p> <p>(b) The report shall be submitted to the Wisconsin Department of Natural Resources, Northeast Region Headquarters within 90 days after the end of each reporting period.</p> <p>(c) All deviations from and violations of applicable requirements shall be clearly identified in the submittal.</p> <p>(d) Each submittal shall be certified by a responsible official as to the truth, accuracy and completeness of the report.</p> <p>(e) The content of the submittal is described in item D. of Part II of the operation permit. [ss. NR 407.09(1)(c)3. & NR 439.03(1)(b), Wis. Adm. Code]</p> <p>(2) The permittee shall submit an annual certification of compliance with the requirements of this permit to the Wisconsin Department of Natural Resources, Northeast Region Headquarters.</p> <p>(a) The time period to be addressed by the report is January 1 to December 31 of the preceding year.</p> <p>(b) The report shall be submitted to the Wisconsin Department of Natural Resources within 90 days after the end of each reporting period.</p> <p>(c) The information included in the report shall comply with the requirements of Part II, Section N of this permit.</p> <p>(d) Each report shall be certified by a responsible official as to the truth, accuracy and completeness of the report. [ss. NR 407.09(4)(a)3. & NR 439.03(1)(c), Wis. Adm. Code]</p>	<p>None Applicable</p>
<p>4. Construction Permit 13-JJW-073-R1 Transitional</p>	<p>(1) Construction Authorization Expiration. The Authorization to Construct, under construction permit 13-JJW-073-R1 expires 54 months after the date of issuance. Construction or modification and an initial</p>	<p>(1) Submittal of Compliance Testing Information and Other Updates. The permittee shall submit to the Department any updates of the permit application. Updates are required if any changes that occur which are not</p>	

ZZZ. Conditions Applicable to the Entire Facility.

Condition Type	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
Language	<p>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. If 54 months is an insufficient time period for construction or modification, equipment shakedown, testing and Department evaluation of operation, the permit holder may request and the Department may approve in writing an extension of this permit. The conditions of the construction permit are permanent, unless revised, superseded or revoked. [ss. 285.60(1)(a)2. and 285.66(1), Wis. Stats., and s. NR 406.12, Wis. Adm. Code; 13-JJW-073-R1]</p> <p>(2) New Emission Unit(s) B02. Once constructed and initially operating, Boiler B02 shall operate under the conditions in Section I.A. of the construction permit 13-JJW-073-R1. [s. NR 439.03(1), Wis. Adm. Code; 13-JJW-073-R1]</p> <p>(3) Completion of Operation Permit Application. The permittee shall update the permit application if any changes occur which are not specified or described in the plans and specifications approved under construction permit 13-JJW-073-R1. [s. NR 407.04(1)(b), Wis. Adm. Code; 13-JJW-073-R1]</p>	<p>specified or described in the plans and specifications dated May 7, 2013. The updates shall be made within 60 days of the date of the change. Other information to be submitted shall include the notification requirements, stack tests results and the minimum excess oxygen level for the boiler, as a percent. The continued operation of the modified and new emission units addressed in this construction permit are prohibited once the authorization to construct expires per I.ZZZ.4.a.(2), unless any required updates have been submitted. [s. NR 439.04(1)(d), Wis. Adm. Code; 13-JJW-073-R1]</p> <p>(2) All submittals described in this permit shall be made in writing and include the name of the facility, the facility's address, the construction permit number and a description of the affected emission unit(s). [s. NR 439.04(1)(d), Wis. Adm. Code; 13-JJW-073-R1]</p>	

ATTACHMENT 1

PERMIT 405032870-P15