DRAFT AIR POLLUTION CONTROL CONSTRUCTION PERMIT

EI FACILITY NO: 111081520 CONSTRUCTION PERMIT NO.: 09-DCF-242

TYPE: Construction Permit for Process(es): Entire facility will be incorporated within the permit.

In compliance with the provisions of Chapter 285, Wis. Stats., and Chapters NR 400 to NR 499, Wis. Adm. Code,

Name of Source: Didion Milling, Inc.

Street Address: 501 South Williams Street,
Cambria, Columbia County, Wisconsin

Responsible Official, & Title: Mr. John Didion, CEO

is authorized to modify / revise the corn milling sources described in the plans and specifications dated November 24, 2009; December 24, 2009; January 18, 2010; February 9, 2010; February 26, 2010; March 3, 2010; March 18, 2010; March 29, 2010; March 30, 2010; April 5, 2010; April 28, 2010 in conformity with the conditions herein. The authority to construct, modify, replace and/or reconstruct any process covered in this Construction Permit expires eighteen (18) months from the date of issuance. This approved period to construct, modify, replace and/or reconstruct may be extended for up to 18 months upon request for cause, prior to expiration, unless otherwise specified by this construction permit. The conditions of this construction permit are permanent and may only be revised through a revision of the construction permit or through the issuance of a new construction permit. [s. 285.60(1), Wis. Stats.]

Conditions of the construction permit and the operation permit marked with an "*" have been created outside of the Wisconsin's federally approved State Implementation Plan (SIP) and are not federally enforceable.

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 _____

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
For the Secretary

By _____
John H. Melby, Jr.
Bureau Director

PART I
APPLICABLE LIMITATIONS AND REQUIREMENTS

A. Processes P32, P33, P34, P35, P88; Control Device(s) C30, Stack(s) S30 —Fermentation Tanks #1 - #3 (P32 - P34; 560,200 gallon each), Beerwell (P35; 729,400 gal. tank), Yeast Propagation Tank (P88, 20,394 gal.). Fermentation Wet Scrubber (C30) [Conditions from 06-DCF-166 and 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Volatile organic compound (VOC) Emissions	(1) Latest Available Control Techniques and operating practices (LACT). LACT is operation of a fermentation wet scrubber, as a part of the processes, achieving at least 98% control of VOC emissions, and subsequent operation of a carbon dioxide plant if there is sufficient market for liquefied carbon dioxide. [s. NR 424.03(2)(c), Wis. Adm. Code] (2) 3.1 pounds per hour[1]. [s.285.65(7), Wis. Stats.; s. NR 406.10 and s. NR 424.03(2)(c), Wis. Adm. Code]	(1) Whenever the processes are in operation, and/or fermentation is occurring, the permittee shall direct the fermentation process exhausts to an operating, properly sized wet scrubber (C30). [s. NR 406.10, Wis. Adm. Code and s. 285.65(7), Wis. Stats.] (2) The pressure drop across the wet scrubber shall be maintained between 1 to 10 inches of water column gauge pressure, or with written approval from the Department, an alternative range which has been demonstrated to achieve compliance. [s. NR 407.09(1)(c), Wis. Adm. Code] (3) The fermentation wet scrubber shall have a water flow / water addition rate of at least 60.0 gpm and not less than the amount needed to achieve compliance with the limitations as demonstrated in subsequent compliance testing. The water used shall predominantly reverse osmosis (RO) concentrate obtained from the well water treatment system supplemented with fresh (well) water. Ammonium bisulfite shall be applied to the fermentation scrubber feed water at a rate of not less than 1.3 gallons per hour (at 68% concentration) or the equivalent ammonium bisulfite mass addition rate (10.2 dry pounds per hour or more) and not less than the rate used during subsequent compliance stack testing demonstrating compliance (except under (4) below). [s. NR 424.03, Wis. Adm. Code; 09-DCF-242] (4) The facility shall conduct compliance emissions	(1) Reference Test Method for Volatile Organic Compound Emissions: Whenever compliance emission testing is required, the appropriate U.S. EPA Method; 18 or 25/25A shall be used to demonstrate compliance. Use of Method 25/25A results shall be appropriately adjusted to reflect emissions as VOCs. When approved in writing an equivalent test method may be substituted for the required test method. [s. NR 439.06(3)(a) and (8), Wis. Adm. Code] (2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the scrubber. [s. NR 439.04(1)(d), Wis. Adm. Code] (3) The facility shall monitor and record the flow rate of water to the scrubber and the pressure drop across the scrubber / demister at least once every 8 hours or once per day, whichever yields the greatest number of measurements. [s. NR 439.055(2)(b), Wis. Adm. Code] (4) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the scrubber, 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 drops and flow rates in the scrubber shall be installed and operated properly. [s. NR 439.055(1), Wis. Adm. Code] (6) Refer to the Malfunction Prevention and Abatement requirements of I.ZZZ.3.

[1] The VOC emission limit of 3.1 pounds per hour is based on an estimated control efficiency of 98+% from the process wet scrubber. LACT applies as it has been determined that obtaining 85% control of the emissions from (exiting) the scrubber is not feasible under the standards applied under ch. NR 424, Wis. Adm. Code.

A. Processes P32, P33, P34, P35, P88; Control Device(s) C30, Stack(s) S30 —Fermentation Tanks #1 - #3 (P32 – P34; 560,200 gallon each), Beerwell (P35; 729,400 gal. tank), Yeast Propagation Tank (P88, 20,394 gal.). Fermentation Wet Scrubber (C30) [Conditions from 06-DCF-166 and 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
		tests of the fermentation wet scrubber to determine its control efficiency, inlet concentration, exit concentration, VOC and acetaldehyde emission rate using exclusively fresh (well) water if the scrubber system returns to using exclusively fresh (well) water. This test shall be conducted within 90 days of resuming exclusive use of fresh (well) water. See additional stack testing conditions under I.ZZZ.4. [s. NR 439.03, Wis. Adm. Code] (5) The facility shall conduct biennial compliance emissions tests of the fermentation wet scrubber to determine its control efficiency, inlet concentration, exit concentration, VOC and acetaldehyde emission rate. Compliance emissions tests shall also be conducted if requested by the Department. The biennial test shall be conducted within 60 days of the 2 year anniversary of the prior test. See additional stack testing conditions under I.ZZZ.4. [s. NR 439.03, Wis. Adm. Code]	(7) The permittee shall retain on site current plans and specifications of these processes and of the Carbon Dioxide (CO_2) collection process if subsequently installed. The facility shall also maintain records of operation of the Carbon Dioxide (CO_2) collection process if installed. [s. NR 439.04(1)(d), Wis. Adm. Code] (8)(a) The facility shall maintain records of the rate of ammonium bisulfite application applied to the fermentation scrubber feed water (in gallons per hour of 68% (or higher) solution, or pounds of ammonium bisulfite, dry mass basis, pounds per hour). The pump shall be checked (to confirm it is functioning correctly), and its setting shall be noted and recorded at least once every 8 hours or once per day, whichever yields the greatest number of measurements. The concentration of ammonium bisulfite used shall be documented on a daily basis for the material being applied to the scrubber water and for each shipment received. The dosing rate shall be equivalent to the 1.3 gallons per hour of 68% solution or at least 10.2 pounds per hour (dry mass basis). The facility shall note and record any failures of the dosing pump. (b) The ammonium bisulfite dosing pump feeding the fermentation water stream shall be calibrated on a monthly basis or at the frequency recommended by the pump manufacturer (whichever is more frequent). The facility shall maintain records of the calibrations. [s. NR 439.04(1)(d), Wis. Adm. Code]
2. Visible Emissions	**(1)** 20% Opacity [s. NR 431.05(1), Wis. Adm. Code]	**(1)** The requirements in 1.A.1.b. [s. 285.65(3), Stats.]	**(1)** Whenever visible emissions compliance testing is required, USEPA Method 9 in 40 CFR part 60, Appendix A, incorporated by reference in s. NR 484.04, Wis. Adm. Code shall be used. [s. NR 439.06(9)(a)1., Wis. Adm. Code] (2) The recordkeeping requirements in I.A.1.c. [s. NR 439.04, Wis. Adm. Code]

A. Processes P32, P33, P34, P35, P88; Control Device(s) C30, Stack(s) S30 —Fermentation Tanks #1 - #3 (P32 – P34; 560,200 gallon each), Beerwell (P35; 729,400 gal. tank), Yeast Propagation Tank (P88, 20,394 gal.). Fermentation Wet Scrubber (C30) [Conditions from 06-DCF-166 and 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
3. Acetaldehyde, Emissions	(1)) Emissions may not exceed 0.75 pounds per hour. [s. NR 406.10, and s. NR 445.07, Wis. Adm. Code; s. 285.65(3), Wis. Stats.] (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 stack height shall be at least 58.0 feet above ground level. [(s. 285.65(3), Stats.; s. NR 445.07 and s. NR 406.10, Wis. Adm. Code] (b) The stack inside (equivalent) diameter at the outlet may not exceed 2.0 feet. [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code] (c) The stack may not be equipped with a rainhat or other device which impedes the upward flow of the exhaust gases. [s. 285.65(3), Stats.; s. NR 445.07 and s. NR 406.10, Wis. Adm. Code]	(1) Whenever any of the processes are in operation, and/or fermentation is occurring, the permittee shall direct the fermentation process exhausts to an operating, properly sized wet scrubber. [s. NR 406.10, Wis. Adm. Code and s. 285.65(7), Wis. Stats.] (2) The pressure drop across the wet scrubber shall be maintained between 1 to 10 inches of water column gauge pressure, or with written approval from the Department, an alternative range determined to demonstrate compliance. [s. NR 407.09(1)(c), Wis. Adm. Code] (3) The fermentation wet scrubber shall have a water flow / water addition rate of at least 60.0 gpm and not less than the amount needed to achieve compliance with the limitations as demonstrated in subsequent compliance testing. The water used shall predominantly reverse osmosis (RO) concentrate obtained from the well water treatment system supplemented with fresh (well) water. Ammonium bisulfite shall be applied to the fermentation scrubber feed water at a rate of not less than 1.3 gallons per hour (at 68% concentration) or the equivalent ammonium bisulfite mass addition rate (10.2 dry pounds per hour or more) and not less than the rate used during subsequent compliance stack tests demonstrating compliance (except under I.A.1.b.(4)). [s. NR 424.03, Wis. Adm. Code; 09-DCF-242] (4) The permittee shall maintain the records in I.A.3.c.(6) for stack parameters. [s. NR 407.09(4)(a)1., Wis. Adm. Code] (5) See I.A.1.a.(1) [s. NR 407.09(4)(a)1., Wis. Adm. Code]	(1) Whenever Formaldehyde or other aldehyde (e.g. Acetaldehyde) compliance testing is required, USEPA Method 0011, shall be used. When approved in writing, an equivalent test method may be substituted for the required test method. [s. NR 439.06(8), Wis. Adm. Code] (2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the scrubber. [s. NR 439.04(1)(d), Wis. Adm. Code] (3) The facility shall monitor and record the flow rate of water to the scrubber and the pressure drop across the scrubber / demister at least once every 8 hours or once per day, whichever yields the greatest number of measurements. [s. NR 439.055(2)(b), Wis. Adm. Code] (4) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the scrubber, 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 drops and flow rates in the scrubber shall be installed and operated properly. [s. NR 439.055(1), Wis. Adm. Code] (6) 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] (7) Refer to the Malfunction Prevention and Abatement requirements of I.ZZZ.3. (8)(a) The facility shall maintain records of the rate of ammonium bisulfite application applied to the fermentation scrubber feed water (in gallons per hour of 68% (or higher) solution, or pounds of ammonium bisulfite, dry mass basis, pounds per hour). The pump shall be checked (to confirm it is functioning correctly), and its setting shall be noted and

A. Processes P32, P33, P34, P35, P88; Control Device(s) C30, Stack(s) S30 —Fermentation Tanks #1 - #3 (P32 – P34; 560,200 gallon each), Beerwell (P35; 729,400 gal. tank), Yeast Propagation Tank (P88, 20,394 gal.). Fermentation Wet Scrubber (C30) [Conditions from 06-DCF-166 and 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
			recorded at least once every 8 hours or once per day, whichever yields the greatest number of measurements. The concentration of ammonium bisulfite used shall be documented on a daily basis for the material being applied to the scrubber water and for each shipment received. The dosing rate shall be equivalent to the 1.3 gallons per hour of 68% solution or at least 10.2 pounds per hour (dry mass basis). The facility shall note and record any failures of the dosing pump. (b) The ammonium bisulfite dosing pump feeding the fermentation water stream shall be calibrated on a monthly basis or at the frequency recommended by the pump manufacturer (whichever is more frequent). The facility shall maintain records of the calibrations. [s. NR 439.04(1)(d), Wis. Adm. Code]
4. Particulate Matter Emissions	(1) 0.55 pounds per hour. [s. 285.65(3), Wis. Stats.; s. NR 406.10, s. NR 415.05, and s. NR 404.04(8), Wis. Adm. Code][2]	(1) Whenever the processes are in operation, and/or fermentation is occurring, the permittee shall direct the fermentation process exhausts to an operating, properly sized wet scrubber (C30). The fermentation scrubber shall be equipped with a demister. [s. NR 406.10, Wis. Adm. Code and s. 285.65(7), Wis. Stats.] (2) The pressure drop across the wet scrubber shall be maintained between 1 to 10 inches of water column gauge pressure, or with written approval from the Department, an alternative range determined to demonstrate compliance. [s. NR 407.09(1)(c), Wis. Adm. Code] (3) The fermentation wet scrubber shall have a water flow / water addition rate of at least 60.0 gpm	(1) Reference Test Method for Particulate Matter Emissions: Whenever particulate matter emission testing is required, the permittee shall use the appropriate U.S. EPA Method 5, 5A, 5B, 5D, 5E, 5F, 5G, 5H or 17 including condensable backhalf emissions (U.S. EPA Method 202). [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 scrubber. [s. NR 439.04(1)(d), Wis. Adm. Code] (3) The facility shall monitor and record the flow rate of water to the scrubber and the pressure drop across the scrubber / demister at least once every 8 hours or once per day, whichever yields the greatest number of measurements. [s. NR 439.055(2)(b), Wis. Adm. Code]

[2] This emission limit is needed to avoid any exceedance of an ambient air standard or increment. The emission limit is more restrictive than the limitation which would result under s. NR 415.05, Wis. Adm. Code.

A. Processes P32, P33, P34, P35, P88; Control Device(s) C30, Stack(s) S30 —Fermentation Tanks #1 - #3 (P32 – P34; 560,200 gallon each), Beerwell (P35; 729,400 gal. tank), Yeast Propagation Tank (P88, 20,394 gal.). Fermentation Wet Scrubber (C30) [Conditions from 06-DCF-166 and 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
		and not less than the amount needed to achieve compliance with the limitations as demonstrated in subsequent compliance testing. The water used shall predominantly reverse osmosis (RO) concentrate obtained from the well water treatment system supplemented with fresh (well) water. Ammonium bisulfite shall be applied to the fermentation scrubber feed water at a rate of not less than 1.3 gallons per hour (at 68% concentration) or the equivalent ammonium bisulfite mass addition rate (10.2 dry pounds per hour or more) and not less than the rate used during subsequent compliance stack testing demonstrating compliance (except under I.A.1.b.(4)). [s. NR 424.03, Wis. Adm. Code; 09-DCF-242] (4) The facility shall conduct compliance emissions tests of the wet scrubber to determine its particulate matter emission rate exclusively using RO concentrate, using the quantities of ammonium bisulfite applied during VOC testing. This test shall be conducted within 90 days of permit issuance and upon request by the Department. Appropriate tests complying with applicable ch. NR 439, Wis. Adm. Code test requirements conducted prior to permit issuance may also be used to demonstrate compliance. See additional stack testing conditions under I.ZZZ.4. [s. NR 439.03, Wis. Adm. Code]	(4) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the scrubber, 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 drops and flow rates in the scrubber shall be installed and operated properly. [s. NR 439.055(1), Wis. Adm. Code] (6) Refer to the Malfunction Prevention and Abatement requirements of I.ZZZ.3. (7)(a) The facility shall maintain records of the rate of ammonium bisulfite application applied to the fermentation scrubber feed water (in gallons per hour of 68% (or higher) solution, or pounds of ammonium bisulfite, dry mass basis, pounds per hour). The pump shall be checked (to confirm it is functioning correctly), and its setting shall be noted and recorded at least once every 8 hours or once per day, whichever yields the greatest number of measurements. The concentration of ammonium bisulfite used shall be documented on a daily basis for the material being applied to the scrubber water and for each shipment received. The dosing rate shall be equivalent to the 1.3 gallons per hour of 68% solution or at least 10.2 pounds per hour (dry mass basis). The facility shall note and record any failures of the dosing pump. (b) The ammonium bisulfite dosing pump feeding the fermentation water stream shall be calibrated on a monthly basis or at the frequency recommended by the pump manufacturer (whichever is more frequent). The facility shall maintain records of the calibrations. [s. NR 439.04(1)(d), Wis. Adm. Code]

B. Process(es) P30, P31, P36, P37, P38, P39, P40, P41, P42, P43, P44, P45, P46, P47, P48, P66, P67; Control Device(s) C31, C32; Stack(s) S32– Slurry Tank (P30; 11,000 gal), Liquefaction Tank (P31; 58,200 gal), Yeast Mix Tank (P36; 815 gal.), Distillation 5,707 gal/hr beer (Beer Column – P37, Stripper – P38, Rectifier – P39), Molecular Sieve (P40; 5707 gal/hr beer), Evaporator (P41; 16,030 DDGS solids/hr), Whole Stillage Tank (P42.; 138,200 gallons), Thin Stillage Tank (P43; 102,000 gallons), Syrup Tank (P44; 149,800 gallons), Centrifuges #1 - #4 (P45 – P48); 200-proof condenser (P67), Process Condensate Tank (P68). Vent Gas Wet Scrubber (C31); RTO (C32). [Conditions from 06-DCF-166 modified under 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Volatile organic compound (VOC) Emissions	(1) VOC emissions from the process are subject to the requirement to provide 85% control of process emissions. [s. NR 424.03(2)(a), Wis. Adm. Code] (2) The Regenerative Thermal Oxidizer (RTO). shall provide 95% overall control of VOC emissions. [s. 285.65(3) and (7), Wis. Stats.; s. NR 406.10, Wis. Adm. Code] (3) The processes may not emit more than 6.05 pounds of VOC per hour (aggregate) from stack S32 (from DDGS drying / cooling, and vent gas scrubbing). [s. NR 406.10, and s. NR 424.03(2), Wis. Adm. Code; s. 285.65(7), Wis. Stats.]	(1) Whenever any of the processes are in operation, the permittee shall direct the exhausts to an operating, properly sized wet scrubber (C31). [s. NR 406.10, Wis. Adm. Code and s. 285.65(7), Wis. Stats.] (2) The exhaust from the wet scrubber shall be directed to the RTO (C32/S32). [s. NR 406.10, Wis. Adm. Code and s. 285.65(7), Wis. Stats.] (3) Refer to I.C.3.b.	(1) Reference Test Method for Volatile Organic Compound Emissions: Whenever compliance emission testing is required, the appropriate U.S. EPA Method; 18 or 25/25A shall be used to demonstrate compliance. Use of Method 25/25A results shall be appropriately adjusted to reflect emissions as VOCs. When approved in writing an equivalent test method may be substituted for the required test method. [s. NR 439.06(3)(a) and (8), Wis. Adm. Code] (2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the scrubber. [s. NR 439.04(1)(d), Wis. Adm. Code] (3) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the scrubber, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code] (4) Refer to the Malfunction Prevention and Abatement requirements of I.ZZZ.3.
2. Visible Emissions	**(1)** 20% Opacity [s. NR 431.05(1), Wis. Adm. Code]	**(1)** The requirements in 1.B.1.b. [s. 285.65(3), Stats.]	**(1)** Whenever visible emissions compliance testing is required, USEPA Method 9 in 40 CFR part 60, Appendix A, incorporated by reference in s. NR 484.04, Wis. Adm. Code shall be used. [s. NR 439.06(9)(a)1., Wis. Adm. Code] (2) The recordkeeping requirements in I.B.1.c. [s. NR 439.04, Wis. Adm. Code]

C. Stack, S32; Processes P49, P50; Controls, C32, C39, C40 - DDGS Dryer (P49; 95.0 MMBTU/hr / 23 tons per hour DDGS), DDGS Fluid Bed Cooling (P50, 23 tons per hour DDGS), w/ cyclone / baghouse (C39, C40) and RTO (C32; 16 MMBTU/hr) (2008) [Conditions from 07-DCF-003 modified under 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter Emissions	(1) 3.0 pounds per hour. [s. 285.65(3), Wis. Stats.; s. NR 406.10, s. NR 415.05, and s. NR 404.04(8), Wis. Adm. Code][3] (2) See I.C.7.	(1) The DDGS cooling collection system and control device shall be in line and shall be operated at all times when the dryer process is in operation. [s. NR 406.10 and s. NR 407.09(4)(a)1., Wis. Adm. Code] (2) The Regenerative Thermal Oxidizer, (RTO) shall be in line and shall be operated at all times when the drying process / cooling cyclone are in operation. [s. NR 406.10 and s. NR 407.09(4)(a)1., Wis. Adm. Code] (3) The RTO control (setpoint) temperature shall be maintained within the range of least 1500° F, not more than 1650° F and not less than the temperature maintained during the most recent compliance demonstration test that demonstrates compliance. [s NR 407.09(4)(a)1., Wis. Adm. Code] (4) The pressure drop across the DDGS cooling system baghouse shall normally be maintained between 1.5 and 10 inches water column or with approval from the Department, an alternative range which has been demonstrated to achieve compliance. The pressure drop may be as low as 0.5 inches of water column following bag replacement and confirmation that the new bags are properly seated. [s NR 407.09(4)(a)1., Wis. Adm. Code]	(1) Reference Test Method for Particulate Matter Emissions: Whenever particulate matter emission testing is required, the permittee shall use the appropriate U.S. EPA Method 5, 5A, 5B, 5D, 5E, 5F, 5G, 5H or 17 including condensable backhalf emissions (U.S. EPA Method 202). [s. NR 439.06(1), Wis. Adm. Code] (2) The permittee shall monitor and record the pressure drop across the multicyclone at least once every 8 hours of source operation or once per day, whichever yields the greater number of measurements. [s. NR 439.055., Wis. Adm. Code] (3) The facility shall monitor and record the pressure drop across the baghouse at least once every 8 hours of source operation or once per day of operation, whichever yields the greater number of measurements. Any alternative monitoring technology monitoring / records shall be at the frequency required for that technology (but not less than the above frequency). (a) If a pressure drop across the baghouse is observed as less than 1.5 inches during normal operation (or other specific low end value approved by the Department), or following bag replacement, the pressure drop shall be noted and recorded at least once every 2 hours. The facility shall note and record if the pressure drop is only falling below 1.5 inches w.c. (water column, or other specific low end value approved by the Department) immediately following a cleaning cycle or if the observed pressure drops are indicative of other problems, and shall note and record the actions taken to address the low pressure drops. More frequent monitoring may be discontinued following identification and correction of a specific problem

[3] This emission limit is needed to avoid any exceedance of an ambient air standard or increment. The emission limit is more restrictive than the limitation which would result under s. NR 415.05, Wis. Adm. Code. The stack parameters were previously noted as 90 ft. height, 5.0 ft. exit diameter, see I.C.7.

C. Stack, S32; Processes P49, P50; Controls, C32, C39, C40 - DDGS Dryer (P49; 95.0 MMBTU/hr / 23 tons per hour DDGS), DDGS Fluid Bed Cooling (P50, 23 tons per hour DDGS), w/ cyclone / baghouse (C39, C40) and RTO (C32; 16 MMBTU/hr) (2008) [Conditions from 07-DCF-003 modified under 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
			(including bag conditioning), once the pressure drops are consistently within the normal range for this baghouse. Additional (every 2 hour) pressure drop monitoring / recording is not required for baghouses equipped with bag break detectors / recorders and alarms, or where the baghouse pressure drop reading is readily accessible to the process operator, equipped with an alarm, and recorded at 15 minute intervals. [s. NR 439.055(2), Wis. Adm. Code] (4) The permittee shall monitor and record the operating temperature of the RTO, dryers (at least once every 15 minutes), and other operating parameters as needed, to assure proper operation of the dryers and RTO.. [s. NR 439.055, Wis. Adm. Code] (5) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the multicyclone and RTO, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code] (6) The permittee shall record the actual amounts of natural gas burned in the dryer, per month. [s. NR 439.04(1)(d), Wis. Adm. Code.]

C. Stack, S32; Processes P49, P50; Controls, C32, C39, C40 - DDGS Dryer (P49; 95.0 MMBTU/hr / 23 tons per hour DDGS), DDGS Fluid Bed Cooling (P50, 23 tons per hour DDGS), w/ cyclone / baghouse (C39, C40) and RTO (C32; 16 MMBTU/hr) (2008) [Conditions from 07-DCF-003 modified under 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter Emissions [Continued]		(5) The pressure drop across the multiclones shall be maintained between 5 and 15 inches water column or with approval from the Department, an alternative range which has been demonstrated to achieve compliance. [s NR 407.09(4)(a)1., Wis. Adm. Code] (6) Biennial compliance emission tests shall be conducted of the RTO and the associated processes. The biennial tests shall be conducted within 60 days of the 2 year anniversary of the prior test, or within 90 days of permit issuance (whichever is later). Compliance emissions testing shall also be conducted if requested by the Department. The biennial test may be waived if the results of the prior (2 year prior) stack test indicated an emission rate of not more than 50% of the emission limit, a waiver is requested by the facility and is approved by the Department in writing. While operating at 100% capacity, the test will determine the following: (a) PM emission rate. (b) VOC emission rate, including destruction eff., (inlet and outlet emissions from RTO). (c) Acetaldehyde emission rate. (d) See additional stack testing conditions under I.ZZZ.4. [s. NR 439.03, Wis. Adm. Code]	(6) The facility shall maintain prints, diagrams and other documentation of the process layout and of the multiclone design, specifications and emission guarantees. [s. NR 439.04, Wis. Adm. Code] (7) Refer to the Malfunction Prevention and Abatement requirements of I.ZZZ.3.
2. Visible Emissions	(1) 20% Opacity [s. NR 431.05(1), Wis. Adm. Code]	(1) See I.C.1.b	(1) Whenever visible emissions compliance testing is required, USEPA Method 9 in 40 CFR part 60, Appendix A, incorporated by reference in s. NR 484.04, Wis. Adm. Code shall be used. [s. NR 439.06(9)(a)1., Wis. Adm. Code] (2) See I.C.1.c.

C. Stack, S32; Processes P49, P50; Controls, C32, C39, C40 - DDGS Dryer (P49; 95.0 MMBTU/hr / 23 tons per hour DDGS), DDGS Fluid Bed Cooling (P50, 23 tons per hour DDGS), w/ cyclone / baghouse (C39, C40) and RTO (C32; 16 MMBTU/hr) (2008) [Conditions from 07-DCF-003 modified under 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
3. Volatile Organic Compounds (VOC) Emissions)	(1) VOC emissions from the process are subject to the requirement to provide 85% control of process emissions. [s. NR 424.03(2)(a), Wis. Adm. Code] (2) The Regenerative Thermal Oxidizer (RTO). shall provide 95% overall control of VOC emissions. [s. 285.65(3) and (7), Wis. Stats.; s. NR 406.10, Wis. Adm. Code] (3) The processes may not emit more than 6.05 pounds of VOC per hour (aggregate) from stack S32 (from DDGS drying / cooling, and vent gas scrubbing). [s. NR 406.10, and s. NR 424.03(2), Wis. Adm. Code; s. 285.65(7), Wis. Stats.]	(1) The Thermal Oxidizer (Regenerative Thermal Oxidizer, RTO) shall be in line and shall be operated at all times when the process is in operation and when emissions are being directed to the RTO (e.g. grain drying). [s. NR 406.10 and s. NR 407.09(4)(a)1., Wis. Adm. Code] (2) See I.C.1.b.(5) for testing requirements. (3) The RTO control (setpoint) temperature shall be maintained within the range of least 1500° F, not more than 1650° F and not less than the temperature maintained during the most recent compliance demonstration test that demonstrates compliance. [s NR 407.09(4)(a)1., Wis. Adm. Code]	(1) Reference Test Method for Volatile Organic Compound Emissions: Whenever compliance emission testing is required, the appropriate U.S. EPA Method; 18 or 25A shall be used to demonstrate compliance. Use of Method 25/25A results shall be appropriately adjusted to reflect emissions as VOCs. When approved in writing an equivalent test method may be substituted for the required test method. [s. NR 439.06(3)(a) and (8), Wis. Adm. Code] (2) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the RTO, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code] (3) The permittee shall monitor and record the operating temperature of the RTO, dryers (at least once every 15 minutes), and other operating parameters as needed, to assure proper operation of the dryers and RTO.. [s. NR 439.055, Wis. Adm. Code] (4) Refer to the Malfunction Prevention and Abatement requirements of I.ZZZ.3.

C. Stack, S32; Processes P49, P50; Controls, C32, C39, C40 - DDGS Dryer (P49; 95.0 MMBTU/hr / 23 tons per hour DDGS), DDGS Fluid Bed Cooling (P50, 23 tons per hour DDGS), w/ cyclone / baghouse (C39, C40) and RTO (C32; 16 MMBTU/hr) (2008) [Conditions from 07-DCF-003 modified under 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
4. Nitrogen Oxides (NO_x) Emissions	(1) Emissions may not exceed 10.7 pounds per hour (from Stack S32). [s. NR 406.10, Wis. Adm. Code]	(1) Only natural gas may be used as fuel in the dryers and RTO (note that this does not prohibit the combustion of VOCs produced by the process). [s. 285.63, Wis. Stats; s. NR 406.10, Wis. Adm. Code] (2) Instrumentation to monitor the temperature within the RTO and dryers shall be installed and operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code] (3) See I.C.1.b.(5) for testing requirements. (4) See I.C.1.b.(3)	(1) Whenever nitrogen oxides compliance testing is required, USEPA Method 7, 7A, 7E, or another method approved by the Department in writing shall be used. When approved in writing, an equivalent test method may be substituted for the required test method. [s. NR 439.06(6), Wis. Adm. Code] (2) The permittee shall keep records of the fuel used in the dryers and oxidizer to show that only natural gas was used. [s. NR 439.04(1)(d), Wis. Adm. Code] (3) The permittee shall record the actual amounts of natural gas burned in the dryers / oxidizer, per month. [s. NR 439.04(1)(d)., Wis. Adm. Code.] (4) The permittee shall monitor and record the operating temperature of the RTO, dryers (at least once every 15 minutes), and other operating parameters as needed, to assure proper operation of the dryers and RTO.. [s. NR 439.055, Wis. Adm. Code] (5) Refer to the Malfunction Prevention and Abatement requirements of I.ZZZ.3.

C. Stack, S32; Processes P49, P50; Controls, C32, C39, C40 - DDGS Dryer (P49; 95.0 MMBTU/hr / 23 tons per hour DDGS), DDGS Fluid Bed Cooling (P50, 23 tons per hour DDGS), w/ cyclone / baghouse (C39, C40) and RTO (C32; 16 MMBTU/hr) (2008) [Conditions from 07-DCF-003 modified under 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
5. Carbon Monoxide (CO) Emissions	(1) Emissions may not exceed 12.5 pounds per hour (from Stack S32). [s. NR 406.10, Wis. Adm. Code] (2) The Regenerative Thermal Oxidizer (RTO). shall provide 90% overall control of CO emissions. [s. 285.65(3) and (7), Wis. Stats.]	(1) Only natural gas may be used as fuel in the dryers and RTO (note that this does not prohibit the combustion of VOCs produced by the process). [s. 285.63, Wis. Stats; s. NR 406.10, Wis. Adm. Code] (2) Whenever any of the listed processes are operating, the permittee shall vent the process exhausts to the RTO. [s. NR 406.10, Wis. Adm. Code] (3) Instrumentation to monitor the temperature within the RTO and dryers shall be installed and operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code] (4) See I.C.1.b.(3) (5) See I.C.1.b.(5) for testing requirements.	(1) Reference Test Method for Carbon Monoxide Emissions: Whenever compliance emission testing is required, the appropriate US EPA Method; 10, 10A or 10B shall be used. [s. NR 439.06(4)(a), Wis. Adm. Code] (2) The permittee shall keep records of the fuel used in the dryers and oxidizer to show that only natural gas was used. [s. NR 439.04(1)(d), Wis. Adm. Code] (3) The permittee shall record the actual amounts of natural gas burned in the dryers / oxidizer, per month. [s. NR 439.04(1)(d) and s. NR 440.205(9)(g)2., Wis. Adm. Code.] (4) The permittee shall monitor and record the operating temperature of the RTO, dryers (at least once every 15 minutes), and other operating parameters as needed, to assure proper operation of the dryers and RTO.. [s. NR 439.055, Wis. Adm. Code] (5) Refer to the Malfunction Prevention and Abatement requirements of I.ZZZ.3.

C. Stack, S32; Processes P49, P50; Controls, C32, C39, C40 - DDGS Dryer (P49; 95.0 MMBTU/hr / 23 tons per hour DDGS), DDGS Fluid Bed Cooling (P50, 23 tons per hour DDGS), w/ cyclone / baghouse (C39, C40) and RTO (C32; 16 MMBTU/hr) (2008) [Conditions from 07-DCF-003 modified under 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
6. Acetaldehyde Emissions	(1) Emissions may not exceed 0.53 pounds per hour. [s. NR 406.10, and s. NR 445.07, Wis. Adm. Code; s. 285.65(3), Wis. Stats.]	(1) The Thermal Oxidizer (Regenerative Thermal Oxidizer, RTO) shall be in line and shall be operated at all times when the process is in operation and when emissions are being directed to the RTO (i.e. loadout operations). [s. NR 406.10 and s. NR 407.09(4)(a)1., Wis. Adm. Code] (2) Instrumentation to monitor the temperature within the RTO and dryers shall be installed and operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code] (3) See I.C.3.a.(2) (4) I.C.1.b.(5) for testing requirements.	(1) Whenever Formaldehyde or other Aldehyde (e.g. Acetaldehyde) compliance testing is required, USEPA Method 0011, shall be used. When approved in writing, an equivalent test method may be substituted for the required test method. [s. NR 439.06(8), Wis. Adm. Code] (2) The permittee shall monitor and record the operating temperature of the RTO, dryers (at least once every 15 minutes) and other operating parameters, as needed, to assure proper operation of the dryers and RTO.. [s. NR 439.055, Wis. Adm. Code] (3) Refer to the Malfunction Prevention and Abatement requirements of I.ZZZ.3.
7. Physical Stack Parameters	(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 stack height shall be at least 120.0 feet above ground level. [(s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code] (b) The stack inside (equivalent) diameter at the outlet may not exceed 5.0 feet. [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code] (c) The stack may not be	(1) The permittee shall maintain the records in I.C.7.c.(1). [s. NR 407.09(4)(a)1., Wis. Adm. Code]	(1) 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]

C. Stack, S32; Processes P49, P50; Controls, C32, C39, C40 - DDGS Dryer (P49; 95.0 MMBTU/hr / 23 tons per hour DDGS), DDGS Fluid Bed Cooling (P50, 23 tons per hour DDGS), w/ cyclone / baghouse (C39, C40) and RTO (C32; 16 MMBTU/hr) (2008) [Conditions from 07-DCF-003 modified under 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
	equipped with a rainhat or other device which impedes the upward flow of the exhaust gases. [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code]		
8. Sulfur dioxide (SO_2) emissions	(1) 6.2 pounds per hour. [s. NR 406.10, Wis. Adm. Code]	(1) Only natural gas may be used as a fuel for the DDGS dryer and oxidizer. The emission limit is based on the emissions predicted from the drying of 23 tons per hour of corn based DDGS. [s. NR 406.10, Wis. Adm. Code] (2) A compliance stack test demonstrating compliance with the emission limitation shall be conducted if requested by the Department. See additional stack testing conditions under I.ZZZ.4. [s. NR 439.06, Wis. Adm. Code; 09-DCF-242]	(1) Reference Test Method for Sulfur Dioxide Emissions: Whenever compliance emission testing is required, the appropriate US EPA Method; 6, 6A, 6B, 6C or 8 shall be used to demonstrate compliance. [s. NR 439.06(2)(a), Wis. Adm. Code] (2) The permittee shall keep records of the fuel used in the dryers and oxidizer to show that only natural gas was used. [s. NR 439.04(1)(d), Wis. Adm. Code]

CC. Stack, S38; P52, P53; Controls, C34 Railcar ethanol loadout (P52; 800 gpm), Tanker truck ethanol loadout (P53; 500 gpm), Controlled using flare (2007) Maximum throughput of 60,000 gallons per hour (1000 gpm). [Conditions from 07-DCF-003 modified under 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter Emissions	(1) 0.5 pounds per hour. [s. 285.65(3), Wis. Stats.; s. NR 406.10, s. NR 415.05, and s. NR 404.04(8), Wis. Adm. Code][4] (2) See I.CC.6.	(1) The control device (flare) shall be in line and shall be operated at all times when the loadout process(es) are in operation. [s. NR 406.10 and s. NR 407.09(4)(a)1., Wis. Adm. Code] (2) The flare may only use natural gas as its supplemental fuel (in addition to the VOCs being directed to it from the loadout operations).	(1) Reference Test Method for Particulate Matter Emissions: Whenever particulate matter emission testing is required, the permittee shall use the appropriate U.S. EPA Method 5, including condensable backhalf emissions (U.S. EPA Method 202), or other method as approved by the Department in writing. [s. NR 439.06(1), Wis. Adm. Code] (2) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the flare, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code] (3) The permittee shall record the actual amounts of natural gas burned in the flare, per month. [s. NR 439.04(1)(d), Wis. Adm. Code.] (4) Refer to the Malfunction Prevention and Abatement requirements of I.ZZZ.3.
2. Visible Emissions	(1) 20% Opacity [s. NR 431.05(1), Wis. Adm. Code]	(1) See I.CC.3.b	(1) Whenever visible emissions compliance testing is required, USEPA Method 9 in 40 CFR part 60, Appendix A, incorporated by reference in s. NR 484.04, Wis. Adm. Code shall be used. [s. NR 439.06(9)(a)1., Wis. Adm. Code] (2) See I.CC.3.c.

[4] This emission limit is needed to avoid any exceedance of an ambient air standard or increment. The emission limit is more restrictive than the limitation which would result under s. NR 415.05, Wis. Adm. Code. The PM emissions are based on an estimate of the proportional PM emissions using natural gas emission factors and the estimated CO emissions. ***The stack parameters were previously noted as 35 ft. height, 1.5 ft. exit diameter, see I.CC.6.***

CC. Stack, S38; P52, P53; Controls, C34 Railcar ethanol loadout (P52; 800 gpm), Tanker truck ethanol loadout (P53; 500 gpm), Controlled using flare (2007) Maximum throughput of 60,000 gallons per hour. [Conditions from 07-DCF-003 modified under 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
3. Volatile Organic Compound (VOC) emissions (from rail and truck loadout)	(1) No person may cause, allow or permit emissions of volatile organic compounds to the ambient air which substantially contribute to the exceeding of an air standard or cause pollution [s. NR 419.03(1), Wis. Adm. Code]. (2) No transfer of products from this facility may be made to a tanker truck / railcar unless any gasoline or other organic vapors carried by the tanker / rail car are collected, processed and disposed of through a vapor collection, processing and disposal system (flare). [s. NR 406.10, s. NR 419.03(2) and s. NR 445.04(3), Wis. Adm. Code]. (3) The flare control device shall be designed and operated to reduce the inlet VOC emissions by 98% or greater.[5] [s. NR 406.10, Wis. Adm. Code] (4) The processes may not emit more than 8.0 pounds of VOC per hour (aggregate) from stack S38 (from both ethanol loadouts combined). [s. NR	(1) To demonstrate compliance with gasoline/organic vapor collection system limitation, the permittee shall provide vapor collection/processing/disposal equipment at loading bays for all products distributed at this facility to ensure that any organic vapors are processed and disposed of through a vapor processing and disposal system. A vapor collection/control system shall be used at all times. [s. NR 406.10, s. NR 445.04(3), and s. NR 407.09(4)(a)(3)(b), Wis. Adm. Code] (a) The permittee may only load tank trucks and rail cars at the facility that are equipped with vapor collection equipment that is compatible with the facility's vapor collection system. [ss. NR 407.09(1)(a) and NR 439.055(5), Wis. Adm. Code] (b) Each vapor collection system shall be designed to prevent any organic compound vapors collected at one loading rack from passing to another loading rack. [s. NR 407.09(1)(a), Wis. Adm. Code, and s. 285.65(3), Wis. Stats.] (2) The flare shall be in line and shall be operated at all times when emissions are being directed to the flare (e.g. when loadout operations are being conducted). [s. NR 406.10 and s. NR 407.09(4)(a)1., Wis. Adm. Code] (3) The loading racks shall be equipped with interlocks that prevent loading in the event the flare is not in operation or a pilot is not present. The presence of a thermal oxidation system pilot flame shall be monitored using a heat-sensing device,	(1) Reference Test Method for Volatile Organic Compound Emissions: Whenever compliance emission testing is required, the appropriate U.S. EPA Method; 18 or 25A shall be used to demonstrate compliance. Use of Method 25/25A results shall be adjusted to reflect emissions as VOCs. When approved in writing an equivalent test method may be substituted for the required test method. [s. NR 439.06(3)(a) and (8), Wis. Adm. Code] (2) The permittee shall monitor and maintain daily records of the specific materials being transferred (loaded and unloaded), the throughput / quantity of material(s) and their true vapor pressure (in psia or KPa) and the trucks and railcars used. The facility shall maintain records of any occurrence where the tanker was not equipped to with compatible collection equipment and the actions taken. [s. NR 419.06, Wis. Adm. Code] (3) The permittee shall keep and maintain on site "as built" technical drawings, blueprints or equivalent records of the piping for the loading / unloading operations, and the vapor processing equipment. The permittee shall keep and maintain a log of the tankers / railcars authorized to load Ethanol at the facility [s. 285.65(3), Stats., and NR 439.04(1)(d), Wis. Adm. Code] (4) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the collection system and flare, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code]

[5] The facility has noted within the application that the flare will meet the 'general control device requirements' of s. NR 440.18, Wis. Adm. Code in order to assure that the flare provides the required 98% destruction.

CC. Stack, S38; P52, P53; Controls, C34 Railcar ethanol loadout (P52; 800 gpm), Tanker truck ethanol loadout (P53; 500 gpm), Controlled using flare (2007) Maximum throughput of 60,000 gallons per hour. [Conditions from 07-DCF-003 modified under 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
	406.10, and s. NR 424.03(2), Wis. Adm. Code; s. 285.65(7), Wis. Stats.] (4) Average emissions may not exceed 605 pounds per month (based on a 12 month rolling average). [s. NR 406.10, and s. NR 424.03(2), Wis. Adm. Code; s. 285.65(7), Wis. Stats.]	such as an ultraviolet beam sensor or a thermocouple or equivalent device, installed in proximity to the pilot light to indicate the presence of a flame. [[s. NR 406.10, s. NR 407.09(4)(a)1., and s. NR 439.055(1), Wis. Adm. Code; 08-DCF-155] (4) Develop (within 90 days of permit issuance) and submit to the Department a monitoring and inspection plan that describes the owner or operator's approach for meeting the requirements in I.CC.3.b.(4)(a) through (d). (a) The thermal oxidation system shall be equipped to automatically prevent loading operations from beginning at any time that the pilot flame is absent. (b) The owner or operator shall verify, during each day of operation of the loading rack (prior to start for the day), the proper operation of the assist-air blower, the fuel gas assist system, the vapor line valve, and the emergency shutdown system. Verification shall be through visual observation or through an automated alarm or shutdown system that monitors and records system operation. (c) The owner or operator shall perform semi-annual preventive maintenance inspections of the thermal oxidation system according to the recommendations of the manufacturer of the system. (d) The monitoring plan developed under I.CC.3.b.(4) of this section shall: (i) specify conditions that would be considered malfunctions of the thermal oxidation system during the inspections or automated monitoring performed under paragraphs I.CC.3.b.(4)(b) and (c) of this section, (ii) describe specific corrective actions that will be taken to correct any malfunction, (iii) define what the owner or operator would consider to be a	(5) The presence of a flare pilot flame shall be monitored with a thermocouple or any other equivalent device to detect the presence of a flame. [s. NR 439.04, Wis. Adm. Code] (6) The facility shall maintain records of the total amount denatured ethanol produced (gallons of denatured ethanol including associated organics) by this facility on a monthly basis and the calculated monthly average denatured ethanol production. The facility shall include any off specification production within the total, but this may be adjusted to the total mass of Ethanol and associated organics produced (not the water fraction). [s. NR 439.04, Wis. Adm. Code]

CC. Stack, S38; P52, P53; Controls, C34 Railcar ethanol loadout (P52; 800 gpm), Tanker truck ethanol loadout (P53; 500 gpm), Controlled using flare (2007) Maximum throughput of 60,000 gallons per hour. [Conditions from 07-DCF-003 modified under 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
		timely repair for each potential malfunction, (iiii) describe specific actions that will be taken to minimize emissions during a malfunction, and describe specific steps that will be taken to prevent recurrence of a malfunction event. [s. 285.65(3), Wis. Stats.; s. NR 439.055(1), Wis. Adm. Code; 08-DCF-155] (5) The owner or operator shall document any system malfunction, as defined in the monitoring and inspection (or malfunction prevention and abatement, MPA) plan, and any activation of the automated alarm or shutdown system with a written entry into a log book or other permanent form of record. Such record shall also include a description of the corrective action taken and whether such corrective actions were taken in a timely manner, as defined in the monitoring and inspection (or MPA) plan, as well as an estimate of the amount of ethanol loaded and emissions during the period of the malfunction. [s. 285.65(3), Wis. Stats.; s. NR 439.055(1), Wis. Adm. Code; 08-DCF-155] (6) The flare shall be an air-assisted flare: This shall be designed and operated with an actual exit velocity, as determined by I.CC.3.b.(9), less than the specified Vmax as determined by the method specified under I.CC.3.b.(10). This shall be confirmed as still valid if using a 1.25 ft. exit diameter. The facility shall adjust the amount of assist gas and other settings if needed to accommodate a higher exit velocity. [s. NR 440.18(3) and s. NR 406.10, Wis. Adm. Code; 08-DCF-155] (7) Total facility process throughput of denatured ethanol may not exceed 4.375 million gallons per month (based on a 12 month rolling average). [s. NR 406.10, Wis. Adm. Code]	

CC. Stack, S38; P52, P53; Controls, C34 Railcar ethanol loadout (P52; 800 gpm), Tanker truck ethanol loadout (P53; 500 gpm), Controlled using flare (2007) Maximum throughput of 60,000 gallons per hour. [Conditions from 07-DCF-003 modified under 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
		(8)(a) The facility shall demonstrate compliance with the 300 BTU/cf requirement and maximum exit velocity requirement of (7)(b) and (8) upon request of the Department. [s. NR 406.10 and s. NR 407.09(4)(a)1., Wis. Adm. Code; 08-DCF-155]	

CC. Stack, S38; P52, P53; Controls, C34 Railcar ethanol loadout (P52; 800 gpm), Tanker truck ethanol loadout (P53; 500 gpm), Controlled using flare (2007) Maximum throughput of 60,000 gallons per hour. [Conditions from 07-DCF-003 modified under 08-DCF-155]

Pollutant	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
3. Volatile organic compound (VOC) Emissions [Continued]	(8)(b) The flare shall be used with a net heating value of the gas being combusted (H_T) of 11.2 MJ/scm (300 BTU/scf) for an air assisted flare. The net heating value of the gas being combusted in a flare shall be calculated using the following equation: $H_T = K \sum_{i=1}^{n} C_i H_i$ where: H_T is the net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25°C and 700 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20°C; K is the conversion constant, 1.740×10^{-7} $\left[\frac{1}{\text{ppm}}\right]\left[\frac{\text{g-mole}}{\text{scm}}\right]\left[\frac{\text{MJ}}{\text{kcal}}\right]$ where the standard temperature for (g-mole)/scm is 20°C; C_i is the concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 in 40 CFR part 60, Appendix A, incorporated by reference in s. NR 440.17, and measured for hydrogen and carbon monoxide by ASTM D1946-77, incorporated by reference in s. NR 440.17; and H_i is the net heat of combustion of sample component i, kcal/(g-mole) at 25°C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76, incorporated by reference in s. NR 440.17, if published values are not available or cannot be calculated. [s. NR 440.18(3)(c) and s. NR 440.18(6)(c), Wis. Adm. Code] (9) The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined as appropriate by Reference Method 2, 2A, 2C, or 2D of Appendix A, 40 CFR part 60, incorporated by reference in s. NR 440.17, by the unobstructed (free) cross sectional area of the flare tip. [s. NR 440.18(6)(d), Wis. Adm. Code] (10) The maximum permitted velocity, Vmax, for air assisted flares shall be determined by the following equation: Vmax = 8.706 + 0.708 (H_T), where Vmax is the maximum permitted velocity, m/sec. H_T is the net heating value as determined in (8)(b). [s. NR 440.18(6)(e), Wis. Adm. Code; 08-DCF-155]	(7) After installing the collection system and flare and including the updated (correct) diameter, the owner or operator shall meet the following requirements: (a) A updated report containing the measurements required by s. NR 440.18(6) [b(5) – (7)] shall be furnished to the Department. This report shall be submitted within 90 days of permit issuance. [08-DCF-155] (b) Records shall be kept of all periods of operation during which the flare pilot flame is absent. Semiannual reports of these periods shall be furnished to the Department. [s. NR 439.04, Wis. Adm. Code] (8) The facility shall maintain daily records of the usage of the vapor collection / disposal equipment and any records needed to demonstrate compliance with the requirements of s. NR 440.18, Wis. Adm. Code. This shall include the settings / operation of the equipment which assures compliance with the condition 3.b.(5). [s. NR 439.04, Wis. Adm. Code] (9) Refer to the Malfunction Prevention and Abatement requirements of I.ZZZ.3.

CC. Stack, S38; P52, P53; Controls, C34 Railcar ethanol loadout (P52; 800 gpm), Tanker truck ethanol loadout (P53; 500 gpm), Controlled using flare (2007) Maximum throughput of 60,000 gallons per hour. [Conditions from 07-DCF-003 modified under 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
5. Nitrogen Oxides (NO_x) Emissions	(1) Emissions may not exceed 2.0 pounds per hour (from Stack S38). [s. NR 406.10, Wis. Adm. Code] (2) Emissions may not exceed 150 pounds per month (based on a 12 month rolling average). [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]	(1) Only natural gas may be used as a supplemental fuel in the flare (note that this does not prohibit the combustion of VOCs produced by the process). [s. 285.63(3), Wis. Stats; s. NR 406.10, Wis. Adm. Code] (2) The flare shall be designed to emit no more than 0.0334 pounds NO_x per 1000 gallons of material loaded.). [s. 285.63(3), Wis. Stats; s. NR 406.10, Wis. Adm. Code] (3) See I.CC.3.b. (4) Total facility process throughput of denatured ethanol may not exceed 4.375 million gallons per month (based on a 12 month rolling average). [s. NR 406.10, Wis. Adm. Code]	(1) Whenever nitrogen oxides compliance testing is required, USEPA Method 7, 7A, 7E, or another method approved by the Department in writing shall be used. When approved in writing, an equivalent test method may be substituted for the required test method. [s. NR 439.06(6), Wis. Adm. Code] (2) The permittee shall keep records of the fuel used in the flare to show that only natural gas was used. The facility shall maintain records of the vendor documentation / emission guarantees. [s. NR 439.04(1)(d), Wis. Adm. Code] (3) The permittee shall record the actual amounts of natural gas burned in the flare per month. [s. NR 439.04(1)(d) and s. NR 440.205(9)(g)2., Wis. Adm. Code.] (4) See I.CC.3.c. (5) The facility shall maintain records of the total amount denatured ethanol produced (gallons of denatured ethanol including associated organics) by this facility on a monthly basis and the calculated monthly average denatured ethanol production. The facility shall include any off specification production within the total, but this may be adjusted to the total mass of Ethanol and associated organics produced (not the water fraction). The facility shall conduct the calculation demonstrating compliance with the average emission rate on a monthly basis. [s. NR 439.04, Wis. Adm. Code]
5. Carbon Monoxide (CO) Emissions	(1) Emissions may not exceed 5.1 pounds per hour (from Stack S38). [s. NR 406.10, Wis. Adm. Code]	(1) Only natural gas may be used as supplemental fuel in the flare (note that this does not prohibit the combustion of VOCs produced by the process). [s. 285.63, Wis. Stats; s. NR 406.10, Wis. Adm. Code]	(1) Reference Test Method for Carbon Monoxide Emissions: Whenever compliance emission testing is required, the appropriate US EPA Method; 10, 10A or 10B shall be used. [s. NR 439.06(4)(a), Wis. Adm. Code]

CC. Stack, S38; P52, P53; Controls, C34 Railcar ethanol loadout (P52; 800 gpm), Tanker truck ethanol loadout (P53; 500 gpm), Controlled using flare (2007) Maximum throughput of 60,000 gallons per hour. [Conditions from 07-DCF-003 modified under 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
	(2) Emissions may not exceed 375 pounds per month (based on a 12 month rolling average). [s. NR 406.10, Wis. Adm. Code]	(2) The flare shall be designed to emit no more than 0.0853 pounds CO per 1000 gallons of material loaded. (3) See I.CC.3.b. (4) Total facility process throughput of denatured ethanol may not exceed 4.375 million gallons per month (based on a 12 month rolling average). [s. NR 406.10, Wis. Adm. Code]	(2) The permittee shall keep records of the fuel used in the flare to show that only natural gas was used. The facility shall maintain records of the vendor documentation / emission guarantees. [s. NR 439.04(1)(d), Wis. Adm. Code] (3) The permittee shall record the actual amounts of natural gas and propane burned in the dryers / oxidizer, per month. [s. NR 439.04(1)(d) and s. NR 440.205(9)(g)2., Wis. Adm. Code.] (4) See I.CC.3.c. and I.CC.5.c.(5)
6. Physical Stack Parameters	(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 stack height shall be at least 35.0 feet above ground level. [(s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code] (b) The stack inside diameter at the outlet may not exceed 1.25 feet. [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code] (c) The stack may not be equipped with a rainhat or other device which impedes the upward flow of the exhaust gases. [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code]	(1) The permittee shall maintain the records in I.CC.6.c.(1). [s. NR 407.09(4)(a)1., Wis. Adm. Code]	(1) 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]

D. Stack, S33; Processes P54, P55, P65; Control C33, - DDGS Elevator (P54), DDGS truck loadout (P55), DDGS rail loadout (P65); controlled with DDGS baghouse (C33); F03, F04, F07 – DDGS storage building, silos and DDGS Handling fugitives. (2007) [Conditions from 07-DCF-003 and 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter (PM / PM_{10}) Emissions	(1) 0.29 pounds per hour from S33. [s. 285.65(3), Wis. Stats.; s. NR 406.10 and s. NR 404.04(8), Wis. Adm. Code] [6] (2) 0.0725 tons per month PM and 0.0467 tons per month PM_{10} each (monthly average), for F03, F04 and F07 fugitives. [s. 285.65(3), Wis. Stats.; s. NR 406.10 and s. NR 404.04(8), Wis. Adm. Code] (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 stack height shall be at least 60.0 feet above ground level. [(s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code] (b) The stack inside (equivalent) diameter at the outlet may not exceed 1.3 feet. [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code]	(1) The DDGS baghouse control device shall be in line and shall be operated at all times when the process is in operation. The DDGS loadout, elevator, storage building and silos shall be directly vented to and controlled by the DDGS baghouse. [s. NR 406.10 and s. NR 407.09(4)(a)1., Wis. Adm. Code] (2) The pressure drop across the baghouse shall normally be maintained between 1.5 and 8 inches water column gauge pressure or with approval from the Department, an alternative range which has been demonstrated to achieve compliance. The pressure drop may be as low as 0.5 inches of water column following bag replacement and confirmation that the new bags are properly seated. [s NR 407.09(4)(a)1., Wis. Adm. Code] (3) The DDGS loading area shall be enclosed in roofed, four sided area with garage type doors. The garage doors shall be kept closed to the extent possible, to minimize particulate emissions through the openings (e.g. opening doors only as needed to allow entrance and exit of trucks, but allowing them to remain open briefly when multiple trucks are entering and exiting the enclosure.). [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code] (4) The permittee shall maintain the records in I.D.1.c.(6) for stack parameters. [s. NR 407.09(4)(a)1., Wis. Adm. Code] (5) The fabric filter baghouse design shall be that necessary to achieve an outlet concentration of not	(1) Reference Test Method for Particulate Matter Emissions: Whenever particulate matter emission testing is required, the permittee shall use the appropriate U.S. EPA Method 5, 5A, 5B, 5D, 5E, 5F, 5G, 5H or 17 including condensable back half emissions (U.S. EPA Method 202). [s. NR 439.06(1), Wis. Adm. Code] (2) The permittee shall monitor and record the pressure drop across the baghouse at least once every eight hours or once per day, whichever yields the greatest number of measurements. (a) If a pressure drop across the baghouse is observed as less than 1.5 inches during normal operation (or other specific low end value approved by the Department), or following bag replacement, the pressure drop shall be noted and recorded at least once every 2 hours. The facility shall note and record if the pressure drop is only falling below 1.5 inches w.c. (water column, or other specific low end value approved by the Department) immediately following a cleaning cycle or if the observed pressure drops are indicative of other problems, and shall note and record the actions taken to address the low pressure drops. More frequent monitoring may be discontinued following identification and correction of a specific problem (including bag conditioning), once the pressure drops are consistently within the normal range for this baghouse. Additional (every 2 hour) pressure drop monitoring / recording is not required for baghouses equipped with bag break detectors / recorders and alarms, or where the baghouse pressure drop reading is readily accessible to the process operator, equipped with an alarm, and recorded at 15 minute intervals. [s. NR 439.055., Wis. Adm. Code] (3) The permittee shall keep records of all inspections,

[6] This emission limit is needed to avoid any exceedance of an ambient air standard or increment. The emission limit is more restrictive than the limitation which would result under s. NR 415.05, Wis. Adm. Code. The stack parameters were previously noted as 60 ft. height, 1.47 ft. exit diameter.

D. Stack, S33; Processes P54, P55, P65; Control C33, - DDGS Elevator (P54), DDGS truck loadout (P55), DDGS rail loadout (P65); controlled with DDGS baghouse (C33); F03, F04, F07 – DDGS storage building, silos and DDGS Handling fugitives. (2007) [Conditions from 07-DCF-003 and 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
	(c) The stack may not be equipped with a rainhat or other device which impedes the upward flow of the exhaust gases. [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code]	more than 0.018 gr/acf. This and the maximum inlet flow of 1870 ACFM are the basis for the PM limitation. [s. NR 406.10, Wis. Adm. Code] (6) Compliance with I.D.1.a.(2) shall be demonstrated using I.D.1.b.(3). . [s NR 407.09(4)(a)1., Wis. Adm. Code] (7) Compliance emission tests shall be conducted within 180 days after the start of initial operation to demonstrate compliance with the PM emission limit and outlet grain loading (gr/dscf), and thereafter within 60 days of the five year anniversary of the prior test. See additional stack testing conditions under I.ZZZ.4. [s. NR 439.03, Wis. Adm. Code] (8) The DDGS throughput may not exceed 23.0 tons per hour (daily average). This, the AP-42 factor of 0.086 lbs/ton PM, 0.056 lbs/ton PM_{10} and 90% capture (e.g. through use of filters and enclosures), are the basis for the fugitive dust emissions limitation. [s. NR 406.10, Wis. Adm. Code]	checks and any maintenance or repairs performed on the baghouse, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code] (4) The permittee shall maintain records of the occurance of door movement, door position or other records sufficient to demonstrate that the doors are being kept closed to the extent possible (e.g. a count of the times when the doors are opened or closed, an hour meter for the door motors, a door position recording every 15 minutes, or other equivalent record) when the facility is in operation. The facility shall also maintain records of the number of trucks loaded per shift when the facility is in operation. [s. NR 439.04, Wis. Adm. Code] (5) The facility shall maintain prints, diagrams and other documentation of the process layout and of the baghouse design, specifications and guarantees. [s. NR 439.04, Wis. Adm. Code] (6) 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 (7) The facility shall maintain records / documentation of the fabric filter baghouse design, testing, maximum exhaust flows, fan / blower information and emission guarantees which document the baghouse is designed to achieve the noted outlet concentration, and emission limit. [s. NR 439.04(1)(d), Wis. Adm. Code] (8) Refer to the Malfunction Prevention and Abatement requirements of I.ZZZ.3. (9) The facility shall maintain records of the DDGS dryer output on a daily basis, and convert this value to a tons per hour basis (daily average). [s. NR 439.04, Wis. Adm. Code]

D. Stack, S33; Processes P54, P55, P65; Control C33, - DDGS Elevator (P54), DDGS truck loadout (P55), DDGS rail loadout (P65); controlled with DDGS baghouse (C33); F03, F04, F07 – DDGS storage building, silos and DDGS Handling fugitives. (2007) [Conditions from 07-DCF-003 and 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
2. Visible Emissions	(1) 20% Opacity for stack vented emissions [s. NR 431.05(1), Wis. Adm. Code] (2) 0% visible emissions for fugitives. . [s. NR 415.04, Wis. Adm. Code]	(1) See I.D.1.b and 3.b.	(1) Whenever visible emissions compliance testing is required, USEPA Method 9 or Method 22 (for fugitives) in 40 CFR part 60, Appendix A, incorporated by reference in s. NR 484.04, Wis. Adm. Code shall be used. [s. NR 439.06(9)(a)1., Wis. Adm. Code] (2) See I.D.1.c. and 3.c
3. Fugitive Emissions	(1) No person may cause, allow or permit any material to be handled, transported or stored without taking precaution to prevent particulate matter from becoming airborne. [s. NR 415.04, Wis. Adm. Code]	(1) The permittee shall comply with the requirements established in I.W.1.b. for demonstrating compliance with the limitations in I.D.3.a.(1) [s. 285.65(3), Wis. Stats.]	(1) The permittee shall comply with the requirements established in I.W.1.c. for recordkeeping and monitoring requirements. [s. 285.65(3), Wis. Stats.]

E. Burners, B04, B05 Stack(s) S34, S35 — Two natural gas fired Boilers, 92.05 MMBTU/hr each. These boilers are subject to NSPS [s. NR 440.207, Wis. Adm. Code]. [Conditions from 06-DCF-166 modified under 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter Emissions	(1) 0.0112 pounds per million BTU and not more than 1.03 lbs/hr.[7] [s. 285.65(3), s. 285.65(7), Wis. Stats.; s. NR 404.08(2) and s. NR 415.06, Wis. Adm. Code]	(1) Only natural gas may be used as a fuel. [s. NR 406.04(2) and s. NR 406.10, Wis. Adm. Code] (2) See I.E.3.b.(2) (3) Each boiler shall be properly tuned and maintained, in accordance with the manufacturer's specifications and requirements. The malfunction prevention and abatement plan section, I.ZZZ.3., also applies to the boilers. [s. NR 439.11, Wis. Adm. Code].	(1) Whenever particulate matter emission testing is required, the permittee shall use US EPA Method 5 (including condensable particulate by US EPA Method 202). [s. NR 439.06(1), Wis. Adm. Code] (2) The permittee shall record monthly the type and quantity of fuel (e.g. natural gas) used in the boilers. [s. NR 440.207(9)(g), Wis. Adm. Code]
2. Visible Emissions	(1) 20% Opacity [s. NR 431.05(1), Wis. Adm. Code]	(1) Only natural gas may be used as a fuel. [s. NR 406.04(2) and s. NR 406.10, Wis. Adm. Code]	(1) Whenever visible emissions compliance testing is required, USEPA Method 9 in 40 CFR part 60, Appendix A, incorporated by reference in s. NR 484.04, Wis. Adm. Code shall be used. [s. NR 439.06(9)(a)1., Wis. Adm. Code] (2) The permittee shall record monthly the type and quantity of fuel (e.g. natural gas) used in the boilers. [s. NR 440.207(9)(g), Wis. Adm. Code]
3. Nitrogen Oxides (NO_x) Emissions	(1) 0.04 pounds per million BTU when firing natural gas [8] [s. 285.65(3), s. 285.65(7), Wis. Stats.]	(1) Only natural gas may be used as a fuel. This is the only fuel listed in the permit application. [s. NR 406.10, Wis. Adm. Code]	(1) Whenever nitrogen oxides compliance testing is required, USEPA Method 7, 7A, 7E, or another method approved by the Department in writing shall be used. [s. NR 439.06(6), Wis. Adm. Code] (2) The permittee shall record monthly the type and quantity of fuel (e.g. natural gas) used in the boilers. [s. NR 439.04 and s. NR 440.207(9)(g), Wis. Adm. Code]

[7] This emission limit (based on the facilty maximum allowable of 1.03 lbs/hr, and 92.05 MMBTU/hr at max. capacity) is proposed by the permittee to avoid any exceedance of the ambient air standard or increment. The emission limit is more restrictive than that in s. NR 415.06(2)(a), Wis. Adm. Code (0.15 lbs/MMBTU).

[8] This emission limits (based on the manufacturer noted value of 0.04 lbs/MMBTU for NOx and 0.028 lbs/MMBTU for CO) is proposed by the permittee to avoid being a major source.

E. Burners, B04, B05 Stack(s) S34, S35 — Two natural gas fired Boilers, 92.05 MMBTU/hr each. These boilers are subject to NSPS [s. NR 440.207, Wis. Adm. Code]. [Conditions from 06-DCF-166 modified under 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
		(2) The facility shall conduct a compliance emissions test of each type (model) of boiler to determine the Particulate Matter, and Nitrogen Oxides (NO_x) emissions in units of pounds per million BTU of heat input. This test shall be conducted within 60 days of permit issuance. Tests conducted prior to permit issuance may also be used to demonstrate compliance. See additional stack testing conditions under I.ZZZ.4. [s. NR 439.03, Wis. Adm. Code] (3) Each boiler shall be properly tuned and maintained, in accordance with the manufacturer's specifications and requirements. The malfunction prevention and abatement plan section, I.ZZZ.3., also applies to the boilers. [s. NR 439.11, Wis. Adm. Code].	(3) The facility shall maintain records of the burners installed within the boilers, documentation of the burner specifications, emission guarantees and emission tests. [s. NR 439.04(1)(d) and s. NR 440.205(9)(g)2., Wis. Adm. Code.]
4. Carbon Monoxide (CO) Emissions	(1) 0.028 pounds per million BTU when firing natural gas	(1) Only natural gas may be used as a fuel. This is the only fuel listed in the permit application. [s. NR 406.10, Wis. Adm. Code] (2) The facility shall test the carbon monoxide (CO) emission rate from each boiler to determine the emissions in units of pounds per million BTU of heat input. This test shall be conducted within 60 days of permit issuance. Tests conducted prior to permit issuance may also be used to demonstrate compliance. [s. NR 439.03, Wis. Adm. Code] (3) Each boiler shall be properly tuned and maintained, in accordance with the manufacturer's specifications and requirements. The malfunction prevention and abatement plan section, I.ZZZ.3., also applies to the boilers. [s. NR 439.11, Wis. Adm. Code].	(1) Reference Test Method for Carbon Monoxide Emissions: Whenever compliance emission testing is required, the appropriate US EPA Method; 10, 10A or 10B shall be used. [s. NR 439.06(4)(a), Wis. Adm. Code] (2) See I.E.3.c.(2) and (3)

E. Burners, B04, B05 Stack(s) S34, S35 — Two natural gas fired Boilers, 92.05 MMBTU/hr each. These boilers are subject to NSPS [s. NR 440.207, Wis. Adm. Code]. [Conditions from 06-DCF-166 modified under 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
5. Physical Stack Parameters	(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 stack heights shall be at least 60.0 feet above ground level. [(s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code] (b) The stack inside diameter at the outlet may not exceed 3.0 feet (or not exceed the equivalent area). [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code] (c) The stack may not be equipped with a rainhat or other device which impedes the upward flow of the exhaust gases. [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code]	(1) The permittee shall maintain the records in I.E.5.c.(1). [s. NR 407.09(4)(a)1., Wis. Adm. Code]	(1) 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]

F. Burner B06, Stack S36 — Emergency (Diesel) generator set (unspecified capacity). [Conditions from 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Air Pollutant Emissions	(1) The facility may not install or operate an emergency generator unless authorized by a construction permit (except as provided below). This prohibition expires 18 months following commencing modification under this construction permit if there are no concurrent actions requiring construction permitting and the unit meets the exemption criteria and does not require additional limitations to limit the potential to emit or are needed to protect ambient air quality standards or increments. .[9] [s. NR 404.08(2) and s. NR 406.10, Wis. Adm. Code; s. 285.65(3) and (7), Wis. Stats.; 08-DCF-155]	(1) See I.F.1.c. (2) If subsequently installed, the diesel (compression ignition) engine used for the generator set shall comply with the federal NSPS standards of 40 CFR Part 60, Subpart IIII, if applicable to the engine / generator used by the facility. [s. 285.65(3), Wis. Adm. Code] (3) An emergency generator may not be operated for more than 2 hours per day for testing / maintenance operation. The generator may not be used for peak shaving or other non-emergency operation (except for testing / maintenance as noted above). This condition is in place to avoid applicability of s. NR 445.09, Wis. Adm. Code, and for the engine generator to be considered an emergency generator. [s. NR 404.08(2) and s. NR 406.10, Wis. Adm. Code]	(1) The facility shall notify the Department of its intention to subsequently install an emergency (diesel) generator by applying for a construction permit, including the proposed unit within the construction permit application for this and other proposed sources, or by submitting an amendment of the application for the source's operation permit application (following 18 months following commencing modification under 08-DCF-155). This shall include a demonstration that the proposed generator meets the exemption criteria of s. NR 406.04(1)(w), Wis. Adm. Code, that there are no concurrent actions subject to construction permitting, and that no additional limitations are required to limit the potential to emit or needed to protect ambient air quality standards or increments. The generator may not be installed unless formally authorized by a construction permit, or is exempt from construction permitting (following 18 months following commencing modification under 08-DCF-155). [s. 285.65(3), Wis. Stats.; 08-DCF-155]

[9] ***The facility has elected to withdraw the emergency generator from the construction permit authorization, in part due to air resource consumption issues. Within 18 months of commencing modification under permit 08-DCF-155, construction / initial operation of an emergency generator will require a new construction permit. Subsequent construction and initial operation of an emergency generator may be exempted from construction permitting (under s. NR 406.04(1)(w), Wis. Adm. Code), if there are no other concurrent actions subject to construction permitting, if the project complies with chs. NR 404, NR 406, NR 407, Wis. Adm. Code, other applicable portions of chs. NR 400 – NR 499, Wis. Adm. Code, ch. 285, Wis. Stats., and any applicable federal requirements (e.g. 40 CFR Part 60 Subpart IIII). If there are other subsequent concurrent actions subject to construction permitting and the facility intends to install a diesel generator, the proposed unit should be included within the application. A construction permit may also be needed if more restrictive limitations are needed to limit the potential to emit or if limitations are needed to protect ambient air quality standards or increments.***

G. Stack S37 (S37A – S37H); Process P56 and P57 –Two Cooling Towers (8 cells total): 1875 gpm max. each cell/ 149700 ACFM (each cell). (2007) Drift rate of 0.001% [Conditions from 06-DCF-166 and 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter (PM / PM_{10}) Emissions	(1) 0.023 pounds per hour PM / PM_{10} from each cooling tower stack. (0.18 lbs/hr aggregate) See Note 1. [s. NR 404.08(2) and s. NR 415.05(2), Wis. Adm. Code] (2) Chromium compounds may not be added to the cooling water. [s. NR 406.10, Wis. Adm. Code] (3) The cooling tower drift rate may not exceed 0.001 wt% of the circulating water flow rate. (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 stack height shall be at least 34.0 feet above ground level for each of the cooling towers. [(s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code] (b) The inside diameter of each cell at the outlet may not exceed 8.0 ft. [s. 285.65(3), Stats. and s. NR 406.10, Wis.	(1) The Total Dissolved Solids (TDS) or Total Solids (TS) concentration in the cooling water may not exceed 2,500 parts per million (ppmw), or 2,500 mg/l. This information, the 15,000 gallon per minute design capacity and the design 0.001% max. circulation drift rate, was the basis of the calculated potential to emit. See Note 2. [s. NR 439.04, Wis. Adm. Code] (2) The permittee shall maintain the records in I.G.1.c. [s. NR 407.09(4)(a)1., Wis. Adm. Code] (3) The facility shall conduct tests or provide copies of manufacturer testing which demonstrate that the cooling tower drift rate does not exceed 0.001 wt% of the circulating water flow rate. [s. NR 439.06, Wis. Adm. Code]	(1) Whenever particulate matter emission testing is required, the permittee shall use US EPA Method 5 (including condensable particulate by US EPA Method 202). [s. NR 439.06(1), Wis. Adm. Code] (2) The permittee shall determine and record the concentration of Total Dissolved Solids (TDS) or Total Solids (TS) in the cooling water on at least a weekly basis or more frequently if required more frequently under any WPDES permit. [s. NR 439.04, Wis. Adm. Code] (3) The facility shall keep and maintain documentation of the manufacture's design circulation flow rate and circulation drift rate specification for the cooling towers installed at the facility. [s. NR 439.04, Wis. Adm. Code] (4) The permittee shall maintain a description of the type of water treatment program used in the industrial process cooling tower(s), including the chemical name(s); the average concentration; and a copy of the material safety data sheet for each water treatment additive or chemical compound used in the industrial process cooling tower. [s. NR 439.04 and s. NR 468.30(4)(a), Wis. Adm. Code] (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] (6) Refer to the Malfunction Prevention and Abatement requirements of I.ZZZ.3. (The facility will need to insure that the cooling tower and its associated drift eliminators are maintained and operated properly).

G. Stack S37 (S37A – S37H); Process P56 and P57 –Two Cooling Towers (8 cells total): 1875 gpm max. each cell/ 149700 ACFM (each cell). (2007) Drift rate of 0.001% [Conditions from 06-DCF-166 and 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
	Adm. Code] (c) The stack may not be equipped with a rainhat or other device which impedes the upward flow of the exhaust gases. [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code]		
2. Visible Emissions	(1) 20% Opacity [s. NR 431.05(1), Wis. Adm. Code]	(1) The requirements in I.G.1.b. [s. 285.65(3), Stats.]	(1) Whenever visible emissions compliance testing is required, USEPA Method 9 in 40 CFR part 60, Appendix A, incorporated by reference in s. NR 484.04, Wis. Adm. Code shall be used. [s. NR 439.06(9)(a)1., Wis. Adm. Code] (2) The recordkeeping requirements in I.G.1.c. [s. NR 439.04, Wis. Adm. Code]

Note 1: The particulate matter emissions limitation of 0.18 pounds per hour (total) is more restrictive than the limitation of s. NR 415.05(2), Wis. Adm. Code. This is necessary to prevent a violation of an ambient air quality standard and/or increment.

Note 2: This requirement implies that compliance is demonstrated if either the TDS or TS values are not in excess of 2,500 ppmw or mg/l. The facility may elect to measure and record the values of either TDS or TS (e.g. to correspond to testing required under a WPDES permit).

H. Fugitive F05 - Process Equipment (Valves, Pumps, Flanges, etc.) Leaks - This is subject to new source performance standard (NSPS, s. NR 440.62, Wis. Adm. Code) (2007) [Conditions from 06-DCF-166 and 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Volatile organic compound (VOC) Emissions	**(1)** Pumps. a. Each pump shall be monitored monthly to detect leaks by the methods specified in I.H.1.c.(1). b. Each pump shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. [s. NR 440.62(3)(b), Wis. Adm. Code] (2) Pressure relief devices in gas/vapor service. 1. Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in I.H.1.c.(2). 2.a. After each pressure release the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable but no later than 5 calendar days after the pressure release, except as provided in I.H.1.c.(3). [s. NR 440.62(3)(d), Wis. Adm. Code]	(1) When a leak is detected it shall be repaired as soon as practicable but not later than 15 calendar days after it is detected, except as provided in I.H.1.c.(3). a. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [s. NR 440.62(3)(b), Wis. Adm. Code] (2) a. For pumps, if an instrument reading of 10,000 ppm or greater is measured a leak is detected. a. If there are indications of liquids dripping from the pump seal a leak is detected. [s. NR 440.62(3)(b), Wis. Adm. Code] (3) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of I.H.1.a.(1). provided the following requirements are met: a. Each dual mechanical seal system is: 1) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or 2) Equipped with a system that purges the barrier fluid into a process stream with a zero VOC emissions to the atmosphere. b. Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both. c. Each pump is checked by visual inspection each calendar week for indications of liquids dripping from the pump seals. d.1) Each sensor as described in I.H.1.b.(3)b. is checked daily or is equipped with an audible alarm, and	(1) Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used: a. Zero air (less than 10 ppm of hydrocarbon in air); and b. A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [s. NR 440.62(6), Wis. Adm. Code] (2) Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance with the no detectable emission requirement. [s. NR 440.62(6), Wis. Adm. Code] (3) Delay of repair. [s. NR 440.62(3)(i), Wis. Adm. Code]

H. Fugitive F05 - Process Equipment (Valves, Pumps, Flanges, etc.) Leaks - This is subject to new source performance standard (NSPS, s. NR 440.62, Wis. Adm. Code) (2007) [Conditions from 06-DCF-166 and 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
	b. No later than 5 calendar days after the pressure release the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in I.H.1.c.(2). [s. NR 440.62(3)(d), Wis. Adm. Code] (3) Sampling connection systems. 1. Each sampling connection system shall be equipped with a closed purge system. 2. Each closed purge system shall: a. Return the purged process fluid directly to the process line with zero VOC emissions to the atmosphere; or b. Collect and recycle the purged process fluid with zero VOC emissions to the atmosphere; or c. Be designed and operated to capture and transport all the purged process fluid to a control device. 3. In situ-sampling systems are exempt from subd. 1. and 2. [s. NR 440.62(3)(e), Wis. Adm. Code]	3) The owner or operator determines, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both. e. If there are indications of liquids dripping from the pump seal or the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined in I.H.1.(3)d. 2) a leak is detected. [s. NR 440.62(3), Wis. Adm. Code] (4)(a) If an instrument reading of 10,000 ppm or greater is measured for a valve, a leak is detected. (b) Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. (c) If a leak is detected the valve shall be monitored monthly until a leak is not detected for 2 successive months. (d) First attempts at repair include, but are not limited to, the following best practices where practicable: a. Tightening of bonnet bolts; b. Replacement of bonnet bolts; c. Tightening of packing gland nuts; d. Injection of lubricant into lubricated packing. (e) Any valve that is designated for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of subd. 1. if the valve: a. Has no external actuating mechanism in contact with the process fluid; b. Is operated with emission less than 500 ppm above background as determined by the method specified in I.H.1.c.(2), and	(a). Delay of repair of equipment for which leaks have been detected will be allowed if the repair is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown. (b) Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service. (c) Delay of repair for valves will be allowed if: a. The owner or operator demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and b. When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with par. (j). (d) Delay of repair for pumps will be allowed if: a. Repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and b. Repair is completed as soon as practicable but not later than 6 months after the leak was detected. (e) Delay of repair beyond a process unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.

H. Fugitive F05 - Process Equipment (Valves, Pumps, Flanges, etc.) Leaks - This is subject to new source performance standard (NSPS, s. NR 440.62, Wis. Adm. Code) (2007) [Conditions from 06-DCF-166 and 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
	(4) Open-ended valves or lines. 1.a. Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve. b. The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line. 2. Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. 3. When a double block-and-bleed system is being used the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with subd. 1. [I.H.1.a.(4)1.] at all times. [s. NR 440.62(3)(f), Wis. Adm. Code; 40 CFR Part 60, Subpart VV; § 60.482-6; 08-DCF-155] (5) Valves in gas/vapor service in light liquid service. 1. Each valve shall be monitored monthly to detect leaks by the methods specified in I.H.1.c.(1). [s. NR 440.62(3)(f), Wis. Adm. Code] (6) Pressure relief devices in light liquid and flanges and other connectors shall be monitored within 5 days by the method specified in I.H.1.c.(1) if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method. [s. NR 440.62(3)(h), Wis. Adm. Code]	c. Is tested for compliance with subd. 6. b. initially upon designation, annually, and at other times requested by the department. (4)(f) Any valve that is designated as a difficult-to-monitor valve is exempt from the requirements of subd. 1. if: a. The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with subd. 1., and b. The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times. (g) Any valve that is designated as described in sub. (7)(f)2. as a difficult-to-monitor valve, is exempt from the requirements of subd. 1. if: a. The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface. b. The process unit within which the valve is located either becomes an affected facility through s. NR 440.14 or 440.15, or the owner or operator designates less than 3.0% of the total number of valves as difficult-to-monitor, and c. The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year. [s. NR 440.62(3)(g), Wis. Adm. Code]	(4) When each leak is detected the following requirements apply: 1. A weather proof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment. 2. The identification on a value may be removed after it has been monitored for 2 successive months and no leak has been detected during those 2 months. 3. The identification on equipment except on valve may be removed after it has been repaired. [s. NR 440.62(7), Wis. Adm. Code] (5) When each leak is detected the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location: 1. The instrument and operator identification numbers and the equipment identification number. 2. The date the leak was detected and the dates each attempt to repair the leak. 3. Repair methods applied in each attempt to repair the leak. 4. "Above 10,000" if the maximum instrument reading measured by the methods specified in I.H.1.c.(2) after each repair attempt is equal to or greater than 10,000 ppm. 5. "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak. 6. The signature of the owner or operator (or designate) whose decision it was that repair could not be affected without a process shutdown. 7. The expected date of successful repair of the leak if a leak is not repaired within 15 days.

H. Fugitive F05 - Process Equipment (Valves, Pumps, Flanges, etc.) Leaks - This is subject to new source performance standard (NSPS, s. NR 440.62, Wis. Adm. Code) (2007) [Conditions from 06-DCF-166 and 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
	(7) Compressors. (a) Each compressor shall be equipped with a seal system that includes a barrier fluid system that prevents leakage of VOC to the atmosphere, except as provided in (h) and (i). [s. NR 440.62(3)(c), Wis. Adm. Code] (b) Each compressor seal system as required in subd. 1. shall be: i. Operated with a barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or ii. Equipped with a barrier fluid system that is connected by a closed vent system to a control device that complies with the requirements of par. (j); or iii. Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere. (c) The barrier fluid system shall be in heavy liquid service or may not be in VOC service. (d). Each barrier fluid system as described in (a) shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both. (e) i. Each sensor as required in (d) shall be checked daily or shall be equipped with an audible alarm. ii. The owner or operator shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both. . (f) If the sensor indicates failure of the seal system, the barrier system, or both based on the criterion determined under (e) ii. a leak is detected. (g) i. When a leak is detected it shall be repaired as soon as practicable, but not later than 15		8. Dates of process unit shutdown that occur while the equipment is unrepaired. 9. The date of successful repair of the leak. (6) The following information pertaining to all equipment shall be recorded in a log that is kept in a readily accessible location: 1. A list of identification numbers for equipment subject to the requirements of this section. 2.a. A list of identification numbers for equipment that are designated for no detectable emissions. The designation of equipment shall be signed by the owner or operator. [s. NR 440.62(7), Wis. Adm. Code] 3. A list of equipment identification numbers for pressure relief devices. 4.a. The dates of each compliance test. b. The background level measured during each compliance test. c. The maximum instrument reading measured at the equipment during each compliance test. (7) The following information shall be recorded in a log that is kept in a readily accessible location [s. NR 440.62(7), Wis. Adm. Code]: 1. A list of identification numbers for valves that are designated as unsafe-to-monitor, an explanation for each valve stating why the valve is unsafe-to-monitor and the plan for monitoring each valve. 2. A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor and the schedule for monitoring each valve. (8) The following information shall be recorded in a log that is kept in a readily accessible location. 1. Design criterion required in and explanation

H. Fugitive F05 - Process Equipment (Valves, Pumps, Flanges, etc.) Leaks - This is subject to new source performance standard (NSPS, s. NR 440.62, Wis. Adm. Code) (2007) [Conditions from 06-DCF-166 and 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
	calendar days after it is detected, except as provided in I.H.1.c.(3). ii. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. (h) Any compressor that is designated as described in sub. (7)(e)1. and 2. for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of (a) through (g) if the compressor: i. Is demonstrated to be operating with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background, as measured by the methods specified in c.(3); and ii. Is tested for compliance with (h) i. initially upon designation, annually and at other times requested by the department. [s. NR 440.62(3)(c), Wis. Adm. Code]		of the design criterion; and 2. Any changes to this criterion and the reasons for the changes.

I. Tanks T01, T02, T03, T04, T05 — Two Storage Tanks for 200 proof product (T01, T02; 128,000 gallons each), One denaturant (gasoline) storage tank (T03; 89,400 gallons), Two denatured ethanol storage tanks (T04, T05; 711,459 gallons each). All tanks are vertical fixed roof tanks with internal floating roofs [subject to NSPS under s. NR 440.285, Wis. Adm. Code] [Conditions from 07-DCF-003 and 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Volatile organic compounds (VOC) Emissions	(1) The storage tank shall be a vertical fixed roof tank equipped with an internal floating roof. [s. NR 406.10, Wis. Adm. Code and s. NR 440.285(3)(a), Wis. Adm. Code] (2) The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it). The internal floating roof shall be floating on the liquid surface at all times except during initial fill and those times when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying or refilling shall be continuous and shall be accomplished as rapidly as possible. [s. NR 406.10 and s. NR 440.285(3)(a)1.a., Wis. Adm. Code]	(1) The permittee shall visually inspect the storage vessel with the seal in place before the initial fill of the volatile organic liquid. If there are any openings in the seals or other defects in the internal floating roof, the owner or operator shall repair these before filling the vessel. [s. NR 440.285(4)(a)1., Wis. Adm. Code] (2) The permittee shall visually inspect the storage vessel internal floating roof and the primary seal through manholes and roof hatches on the fixed roof once every 12 months after the initial fill of the volatile organic liquid. If the internal floating roof is not resting on the surface of the Volatile Organic Liquid (VOL) inside the storage vessel, or there is liquid accumulated on the floating roof, or if the seal is detached or if there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required under this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Department in the inspection report required in s. NR 440.285(6)(a)3., Wis. Adm. Code. A request for an extension shall document that alternate storage capacity is unavailable and specify a schedule of actions the company owner or operator shall take to assure that the control equipment is repaired or the vessel will be emptied as soon as possible. [s. NR 440.285(4)(a)2., Wis. Adm. Code]	(1) Whenever VOC compliance testing is required, USEPA Method 18 or 25A shall be used. When approved in writing an equivalent test method may be substituted for the required test method. [§ NR 439.06(8), Wis. Adm. Code] (2) The permittee shall maintain a record of the volatile organic liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period. The maximum true vapor pressure is the equilibrium partial pressure exerted by the VOL based upon the maximum local monthly average ambient temperature (listed by the National Weather Service as 72° F in July) [s. NR 440.285(7)(c), Wis. Adm. Code] (3) The permittee of each storage vessel shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. The permittee shall also keep and maintain on site current "as built" technical drawings, blueprints or equivalent records of the storage tanks. These records shall be kept for the life of the vessel. [s. NR 439.04 and s. NR 440.285(7)(a) and (b), Wis. Adm. Code]

I. Tanks T01, T02, T03, T04, T05 — Two Storage Tanks for 200 proof product (T01, T02; 128,000 gallons each), One denaturant (gasoline) storage tank (T03; 89,400 gallons), Two denatured ethanol storage tanks (T04, T05; 711,459 gallons each). All tanks are vertical fixed roof tanks with internal floating roofs [subject to NSPS under s. NR 440.285, Wis. Adm. Code] [Conditions from 07-DCF-003 and 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Volatile organic compound (VOC) Emissions [Continued]	(3) Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof: [s. NR 406.10 and s. NR 440.285(3)(a)1.b.), Wis. Adm. Code; 08-DCF-155] (a) A foam or liquid filled seal mounted in contact with the liquid (a liquid- mounted seal). The seal shall be in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the storage vessel. [s. NR 440.285(3)(a)1.b.1), Wis. Adm. Code; 07-DCF-003] (b) Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor−mounted, but both must be continuous. [s. NR 440.285(3)(a)1.b.2), Wis. Adm. Code; 07-DCF-003] (c) A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof. [s. NR 440.285(3)(a)1.b.3), Wis. Adm. Code; 07-DCF-003]	(3) Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes (if any), and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears or other openings in the seal or the seal fabric, the secondary seal has holes, tears or other openings in the seal or the seal fabric, the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10% open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event may inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels undergoing annual visual inspections. [s. NR 440.285(4)(a)4., Wis. Adm. Code]	(4) After installing the fixed roof, internal floating roof tank, the owner or operator shall meet the following requirements: (a) Furnish the department with a report that describes the control equipment and certifies that the control equipment meets the specifications of s. NR 440.285(3)(a)1. and (4)(a)1., Wis. Adm. Code. This report shall be an attachment of the notification required by s. NR 440.07(1)(c), Wis. Adm. Code. [See I.I.1.a.(1)(c)] (b) Keep a record of each inspection performed as required by I.I.1.b.(1)-(4). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof and fittings). (c) If any of the conditions described in I.I.1.b.(2) [s. NR 440.285(4)(a)2., Wis. Adm. Code] are detected during the annual inspection, a report shall be furnished to the department within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects and the date the storage vessel was emptied or the nature of and the date the repair was made. [s. NR 440.285(6)(a), Wis. Adm. Code]

I. Tanks T01, T02, T03, T04, T05 — Two Storage Tanks for 200 proof product (T01, T02; 128,000 gallons each), One denaturant (gasoline) storage tank (T03; 89,400 gallons), Two denatured ethanol storage tanks (T04, T05; 711,459 gallons each). All tanks are vertical fixed roof tanks with internal floating roofs [subject to NSPS under s. NR 440.285, Wis. Adm. Code] [Conditions from 07-DCF-003 and 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
	(4) The storage tank shall be equipped with a submerged fill pipe. [s. NR 406.10, Wis. Adm. Code] (5) Each opening in a non-contact internal floating roof except for automatic bleeder vents (vacuum break vents) and the rim space vents is to provide a projection below the liquid surface. [s. NR 440.285(3)(a)1.c., Wis. Adm. Code]		

I. Process T01, T02, T03, T04, T05 — Two Storage Tanks for 200 proof product (T01, T02; 128,000 gallons each), One denaturant (gasoline) storage tank (T03; 89,400 gallons), Two denatured ethanol storage tanks (T04, T05; 711,459 gallons each). All tanks are vertical fixed roof tanks with internal floating roofs [subject to NSPS under s. NR 440.285, Wis. Adm. Code] [Conditions from 07-DCF-003]

Pollutant	a. Limitations	b. Compliance Demonstration
1. Volatile organic compound (VOC) Emissions [Continued]	(6) Each opening in the internal floating roof, except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells and stub drains, is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use. [s. NR 440.285(3)(a)1.d., Wis. Adm. Code] (7) Automatic bleeder vents (vacuum break vents) shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [s. NR 440.285(3)(a)1.e., Wis. Adm. Code] (8) Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [s. NR 440.285(3)(a)1.f., Wis. Adm. Code] (9) Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90% of the opening.[s. NR 440.285(3)(a)1.g., Wis. Adm. Code] (10) Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover. [s. NR 440.285(3)(a)1.h., Wis. Adm. Code] (11) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover. [s. NR 440.285(3)(a)1.i., Wis. Adm. Code]	(4) Notify the department in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by (1) and (3) to afford the department the opportunity to have an observer present. If the inspection required by (3) is not planned and the owner or operator could not have known about the inspection 30 days in advance of refilling the storage vessel, the owner or operator shall notify the department at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the department at least 7 days prior to the refilling.[s. NR 440.285(4)(a)5., Wis. Adm. Code]

II. Process T06 — Corrosion inhibitor tank. Tank is a 2000 gallon horizontal fixed roof tank. [Conditions from 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Volatile organic compounds (VOC) Emissions	(1) General limitations: No person may cause, allow or permit organic compound emissions into the ambient air which substantially contribute to the exceeding of an air quality standard or cause air pollution. [s. NR 419.03(1), Wis. Adm. Code] (2) No person may cause, allow or permit organic compounds to be used or handled without using good operating practices to prevent the spillage, escape or emissions of organic compounds, solvents or mixtures. Such precautions shall include, but are not limited to: (a) Use of caution to prevent spillage or leaking when filling tanks, trucks or trailers. [s. NR 419.03(2), Wis. Adm. Code] (3) Tank Loading. For transfers to storage tanks having greater than 3,785 liter (1,000 gallon) capacity, a permanent submerged fill pipe shall be used. [s. NR 419.06(2), Wis. Adm. Code]	(1) The facility shall use and handle the organic compounds in accordance with good operating practices to prevent spillage, escape or emissions of organic compounds, solvents or mixtures. See I.II.c.(2). (2) See I.II.c.(3).	(1) Whenever VOC compliance testing is required, USEPA Method 18 or 25A shall be used. When approved in writing an equivalent test method may be substituted for the required test method. [§ NR 439.06(8), Wis. Adm. Code] (2) The facility shall document the practices and procedures constituting good operating practices in the handling and storage of VOCs in the tank. [s. NR 439.04 Wis. Adm. Code] (3) The permittee of each storage vessel shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. The permittee shall also keep and maintain on site current "as built" technical drawings, blueprints or equivalent records of the storage tanks (including the submerged fill pipe details). These records shall be kept for the life of the vessel. [s. NR 439.04 Wis. Adm. Code]

J. .P01/S01 /C01 – North Truck/Rail Unload / Load Building Filter: Grain Receiving [Conditions from 02-RV-166, revised under 06-DCF-166 and 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter (PM) and PM_{10} Emissions	(1) The emissions may not exceed 0.122 lbs/hr of PM and PM_{10} from the baghouse stack S01.[10] [s. NR 415.05(1)(n), Wis. Adm. Code and s. NR 415.05(2), Wis. Adm. Code; s. 285.65(3) and (7), Wis. Stats.] (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 stack height shall be at least 51.25 feet above ground level. [(s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code] (b) The stack inside diameter at the outlet may not exceed 1.6 feet. [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code]	(1) The facility shall operate / direct emissions to the baghouse at all times the process is in operation. [s. 285.65(3), Wis. Stats.] (2) The facility shall install, calibrate, operate and maintain the instrumentation necessary to monitor the pressure drop across the baghouse (or other monitoring technology as approved by the Department in writing). [s. NR 439.055(1) and (4), Wis. Adm. Code] (3) The pressure drop across the baghouse shall normally be maintained within the range of 1.5 to 8 inches of water column or with approval from the Department in writing, an alternative range or monitoring technology which has been demonstrated to achieve compliance. The pressure drop may be as low as 0.5 inches of water column following bag replacement and confirmation that the new bags are properly seated. [s. 285.65(3), Wis. Stats.; s. NR 407.09(1)(c), Wis. Adm. Code] (4) The baghouse shall be inspected once per month for any leaks or tears. [s. NR 439.055(5), Wis. Adm. Code and s. 285.65(3), Wis. Stats.] (5) This process shall unload grain only to silo/bins 1-6 and W1-W8. [s. 285.65(7), Wis. Stats.] This condition is established so this process is not subject to NSPS. (6) The fabric filter baghouse shall be that necessary to achieve an outlet concentration of not more than	(1) Whenever compliance emission testing for PM & PM_{10} is required, USEPA Method 5, including backhalf (Method 202) shall be used to demonstrate compliance or an alternate method approved in writing by the Department, shall be used. [s. NR 439.06(1m), Wis. Adm. Code] (2) The facility shall monitor and record the pressure drop across the baghouse at least once for each 8 hours of operation of any process or once per day of operation, whichever yields the greater number of measurements. Any alternative monitoring technology monitoring / records shall be at the frequency required for that technology (but not less than the above frequency). (a) If a pressure drop across the baghouse is observed as less than 1.5 inches during normal operation (or other specific low end value approved by the Department), or following bag replacement, the pressure drop shall be noted and recorded at least once every 2 hours. The facility shall note and record if the pressure drop is only falling below 1.5 inches w.c. (water column, or other specific low end value approved by the Department) immediately following a cleaning cycle or if the observed pressure drops are indicative of other problems, and shall note and record the actions taken to address the low pressure drops. More frequent monitoring may be discontinued following identification and correction of a specific problem (including bag conditioning), once the pressure drops are consistently within the normal range for this baghouse. Additional (every 2 hour) pressure drop monitoring / recording is not required for baghouses equipped with bag break detectors / recorders and alarms, or where the baghouse pressure drop reading is readily accessible to the process operator, equipped with an alarm, and recorded at 15 minute intervals. [s. NR 439.055(2), Wis. Adm. Code]

[10] ***The facility has elected to meet this limit in order to attain and maintain the national ambient air quality standard and increment for PM_{10}. This restriction also ensures that this project is minor under PSD. The stack parameters were previously noted as 32 ft. height, 1.6 ft. exit diameter, subsequently 50 ft., and are now identified as 51.25 ft. high, 1.6 ft. diam.***

J. .P01/S01 /C01 – North Truck/Rail Unload / Load Building Filter: Grain Receiving [Conditions from 02-RV-166, revised under 06-DCF-166 and 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
	(c) The stack may not be equipped with a rainhat or other device which impedes the upward flow of the exhaust gases. [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code]	0.006 gr/acf. This and the maximum inlet flow of 2200 ACFM are the basis for the PM limitation. [s. NR 406.10, Wis. Adm. Code] (7) Compliance emission tests of the PM emissions, exhaust flows and outlet grain loading (gr/dscf) shall be conducted upon request of the Department. See additional stack testing conditions under I.ZZZ.4. [s. NR 439.03, Wis. Adm. Code]	(3) Refer to the Malfunction Prevention and Abatement requirements of I.ZZZ.3. (4) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the baghouse. These records shall include the date of action and a description of any corrective actions taken. [s. NR 439.04(1)(d), Wis. Adm. Code] (5) The facility shall maintain records / documentation of the fabric filter baghouse design, testing, maximum exhaust flows, fan / blower information and emission guarantees which document the baghouse is designed to achieve the noted outlet concentration, and emission limit when properly operated and maintained. [s. NR 439.04(1)(d), Wis. Adm. Code] (6) 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]
2. Visible Emissions	(1) The permittee may not discharge from S01, P01 into the atmosphere any gases which exhibit greater than 20% opacity. [s. NR 431.05(1), Wis. Adm. Code]	(1) A visible emissions compliance test shall be performed simultaneous with the PM & PM_{10} emissions test if required under I.J.1.b.(7). [s. NR 439.07(1), Wis. Adm. Code] (2) The requirements in I.J.1.b. shall be used to demonstrate compliance with the visible emissions limit. [s. 285.65(3), Wis. Stats.]	(1) Whenever compliance testing is required, USEPA Method 9 shall be used or an alternate method approved in writing by the Department, shall be used. [s. NR 439.06(9)(a)1., Wis. Adm. Code] (2) The records required in I.J.1.c. shall be used as recordkeeping and monitoring requirements for the visible emissions limit. [s. 285.65(3), Wis. Stats.]
3. Fugitive Emissions	(1) No person may cause, allow or permit any material to be handled, transported or	(1) The permittee shall comply with the requirements established in I.W.1.b. for compliance	(1) The permittee shall comply with the requirements established in I.W.1.c. for recordkeeping and monitoring requirements. [s. 285.65(3), Wis. Stats.]

J. .P01/S01 /C01 – North Truck/Rail Unload / Load Building Filter: Grain Receiving [Conditions from 02-RV-166, revised under 06-DCF-166 and 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
	stored without taking precaution to prevent particulate matter from becoming airborne. [s. NR 415.04, Wis. Adm. Code]	demonstration. [s. 285.65(3), Wis. Stats.]	

K. P08/S08 /C08 - Mill Truck Bulk Loadout Building Filter: Product Loadout [Conditions from 02-RV-166, revised under 06-DCF-166 and 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter (PM) and PM_{10} Emissions	(1) The emissions may not exceed 0.080 lbs/hr of PM and PM_{10} from the baghouse stack S08.[11] [s. NR 415.05(1)(n), Wis. Adm. Code and s. NR 415.05(2), Wis. Adm. Code; s. 285.65(3) and (7), Wis. Stats.] (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 stack height shall be at least 63.0 feet above ground level. [(s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code]	(1) The facility shall operate / direct emissions to the baghouse at all times the process is in operation. [s. 285.65(3), Wis. Stats.] (2) The facility shall install, calibrate, operate and maintain the instrumentation necessary to monitor the pressure drop across the baghouse (or other monitoring technology as approved by the Department). [s. NR 439.055(1) and (4), Wis. Adm. Code] (3) The pressure drop across the baghouse shall normally be maintained within the range of 1.5 to 8 inches of water column or with approval from the Department in writing, an alternative range or monitoring technology which has been demonstrated to achieve compliance. The pressure drop may be as low as 0.5 inches of water column following bag replacement and confirmation that the new bags are properly seated. [s. 285.65(3), Wis. Stats.; s. NR 407.09(1)(c), Wis. Adm. Code]	(1) Whenever compliance emission testing for PM & PM_{10} is required, USEPA Method 5, including backhalf (Method 202) shall be used to demonstrate compliance or an alternate method approved in writing by the Department, shall be used. [s. NR 439.06(1m), Wis. Adm. Code] (2) The facility shall monitor and record the pressure drop across the baghouse at least once for each 8 hours of operation of any process or once per day of operation, whichever yields the greater number of measurements. Any alternative monitoring technology monitoring / records shall be at the frequency required for that technology (but not less than the above frequency). (a) If a pressure drop across the baghouse is observed as less than 1.5 inches during normal operation (or other specific low end value approved by the Department), or following bag replacement, the pressure drop shall be noted and recorded at least once every 2 hours. The facility shall note and record if the pressure drop is only falling below 1.5 inches w.c. (water column, or other specific low end value approved by the Department) immediately following a cleaning cycle or if the observed pressure drops are

[11] ***The facility has elected to meet this limit in order to attain and maintain the national ambient air quality standard and increment for PM_{10}. This restriction also ensures that this project is minor under PSD. The stack parameters were previously noted as 32 ft. height, 1.6 ft. exit diam., subsequently 50 ft. and are now identified as 63 ft. high, 0.5 ft. diam.***

K. P08/S08 /C08 - Mill Truck Bulk Loadout Building Filter: Product Loadout [Conditions from 02-RV-166, revised under 06-DCF-166 and 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter (PM) and PM_{10} Emissions [Continued]	(b) The stack inside (equivalent) diameter at the outlet may not exceed 0.5 feet. [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code] (c) The stack may not be equipped with a rainhat or other device which impedes the upward flow of the exhaust gases. [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code]	(4) The baghouse shall be inspected once per month for any leaks or tears. [s. NR 439.055(5), Wis. Adm. Code and s. 285.65(3), Wis. Stats.] (5) The fabric filter baghouse shall be that necessary to achieve an outlet concentration of not more than 0.0050 gr/acf. This and the exhaust flow of 1,861 ACFM are the basis for the PM limitation. [s. NR 406.10, Wis. Adm. Code] (6) Compliance emission tests of the PM emissions, exhaust flows and outlet grain loading (gr/dscf) shall be conducted upon request of the Department. See additional stack testing conditions under I.ZZZ.4. [s. NR 439.03, Wis. Adm. Code]	indicative of other problems, and shall note and record the actions taken to address the low pressure drops. More frequent monitoring may be discontinued following identification and correction of a specific problem (including bag conditioning), once the pressure drops are consistently within the normal range for this baghouse. Additional (every 2 hour) pressure drop monitoring / recording is not required for baghouses equipped with bag break detectors / recorders and alarms, or where the baghouse pressure drop reading is readily accessible to the process operator, equipped with an alarm, and recorded at 15 minute intervals. [s. NR 439.055(2), Wis. Adm. Code] (3) Refer to the Malfunction Prevention and Abatement requirements of I.ZZZ.3. (4) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the baghouse. These records shall include the date of action and a description of any corrective actions taken. [s. NR 439.04(1)(d), Wis. Adm. Code] (5) The facility shall maintain records / documentation of the fabric filter baghouse design, testing, maximum exhaust flows, fan / blower information and emission guarantees which document the baghouse is designed to achieve the noted outlet concentration, and emission limit when properly operated and maintained. [s. NR 439.04(1)(d), Wis. Adm. Code] (6) 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]

K. P08/S08 /C08 - Mill Truck Bulk Loadout Building Filter: Product Loadout [Conditions from 02-RV-166, revised under 06-DCF-166 and 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
2. Visible Emissions	(1) The permittee may not discharge from S08, P08 into the atmosphere any gases which exhibit greater than 20% opacity. [s. NR 431.05, Wis. Adm. Code]	(1) The requirements in I.K.1.b. shall be used to demonstrate compliance with the visible emissions limit. [s. 285.65(3), Wis. Stats.]	(1) Whenever compliance testing is required, USEPA Method 9 shall be used or an alternate method approved in writing by the Department, shall be used. [s. NR 439.06(9)(a)1., Wis. Adm. Code] (2) The records required in I.K.1.c. shall be used as recordkeeping and monitoring requirements for the visible emissions limit. [s. 285.65(3), Wis. Stats.]
3. Fugitive Emissions	(1) No person may cause, allow or permit any material to be handled, transported or stored without taking precaution to prevent particulate matter from becoming airborne. [s. NR 415.04, Wis. Adm. Code]	(1) The permittee shall comply with the requirements established in I.W.1.b. for compliance demonstration. [s. 285.65(3), Wis. Stats.]	(1) The permittee shall comply with the requirements established in I.W.1.c. for recordkeeping and monitoring requirements. [s. 285.65(3), Wis. Stats.]

L. P10, P12S /S10 /C10 - South Filters: Grain Milling and Mill Bins [Conditions from 02-RV-166, modified under 07-DCF-003 and 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter (PM) and PM_{10} Emissions	(1) The emissions may not exceed 0.743 lbs/hr of PM and PM_{10} from the baghouse stack S10.[12] [s. NR 415.05(1)(n), Wis. Adm. Code and s. NR 415.05(2), Wis. Adm. Code; s. 285.65(3) and (7), Wis. Stats.] (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 stack height shall be at least 106.9 feet above ground level. [(s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code] (b) The stack inside dimension (equivalent diameter) at the outlet may not exceed 3.0 feet (diameter). [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code]	(1) The facility shall operate / direct emissions to the baghouse at all times the process is in operation. [s. 285.65(3), Wis. Stats.] (2) The facility shall install, calibrate, operate and maintain the instrumentation necessary to monitor the pressure drop across the baghouse (or other monitoring technology as approved by the Department in writing). [s. NR 439.055(1) and (4), Wis. Adm. Code] (3) The pressure drop across the baghouse shall normally be maintained within the range of 1.5 to 8 inches of water column or with approval from the Department in writing, an alternative range or monitoring technology which has been demonstrated to achieve compliance. The pressure drop may be as low as 0.5 inches of water column following bag replacement and confirmation that the new bags are properly seated. [s. 285.65(3), Wis. Stats. s;. NR 407.09(1)(c), Wis. Adm. Code] (4) The baghouse shall be inspected once per month for any leaks or tears. [s. NR 439.055(5), Wis. Adm. Code; s. 285.65(3), Wis. Stats.] (5) The fabric filter baghouse shall be that necessary to achieve an outlet concentration of not more than 0.0050 gr/acf. This and the exhaust flow of 17,346 ACFM are the basis for the PM limitation. [s. NR 406.10, Wis. Adm. Code]	(1) Whenever compliance emission testing for PM & PM_{10} is required, USEPA Method 5, including backhalf (Method 202) shall be used to demonstrate compliance or an alternate method approved in writing by the Department, shall be used. [s. NR 439.06(1m), Wis. Adm. Code] (2) The facility shall monitor and record the pressure drop across the baghouse at least once for each 8 hours of operation of any process or once per day of operation, whichever yields the greater number of measurements. Any alternative monitoring technology monitoring / records shall be at the frequency required for that technology (but not less than the above frequency). (a) If a pressure drop across the baghouse is observed as less than 1.5 inches during normal operation (or other specific low end value approved by the Department), or following bag replacement, the pressure drop shall be noted and recorded at least once every 2 hours. The facility shall note and record if the pressure drop is only falling below 1.5 inches w.c. (water column, or other specific low end value approved by the Department) immediately following a cleaning cycle or if the observed pressure drops are indicative of other problems, and shall note and record the actions taken to address the low pressure drops. More frequent monitoring may be discontinued following identification and correction of a specific problem (including bag conditioning), once the pressure drops are consistently within the normal range for this baghouse. Additional (every 2 hour) pressure drop monitoring / recording is not required for baghouses equipped with bag break detectors / recorders and alarms, or where the baghouse pressure drop reading is readily accessible to the process operator, equipped with an alarm, and recorded at 15 minute intervals. [s. NR 439.055(2), Wis. Adm. Code]

[12] ***The facility has elected to meet this limit in order to attain and maintain the national ambient air quality standard and increment for PM_{10}. This restriction also ensures that this project is minor under PSD. The stack parameters were previously noted as 84 ft. height, 3 ft. x2.2 ft. exit, subsequently 103 ft., and are now identified as 106.92 ft. high, 3.0 ft. diam.***

L. P10, P12S/S10 /C10 - South Filters: Grain Milling and Mill Bins [Conditions from 02-RV-166, modified under 07-DCF-003 and 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter (PM) and PM_{10} Emissions [Continued]	(c) The stack may not be equipped with a rainhat or other device which impedes the upward flow of the exhaust gases. [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code]	(6) Compliance emission tests of the PM emissions, exhaust flows and outlet grain loading (gr/dscf) shall be conducted upon request of the Department. See additional stack testing conditions under I.ZZZ.4. [s. NR 439.03, Wis. Adm. Code]	(3) Refer to the Malfunction Prevention and Abatement requirements of I.ZZZ.3. (4) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the baghouse. These records shall include the date of action and a description of any corrective actions taken. [s. NR 439.04(1)(d), Wis. Adm. Code] (5) The facility shall maintain records / documentation of the fabric filter baghouse design, testing, maximum exhaust flows, fan / blower information and emission guarantees which document the baghouse is designed to achieve the noted outlet concentration, and emission limit when properly operated and maintained. [s. NR 439.04(1)(d), Wis. Adm. Code] (6) 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]
2. Visible Emissions	(1) The permittee may not discharge from S10, P10 / P12S into the atmosphere any gases which exhibit greater than 20% opacity. [s. NR 431.05, Wis. Adm. Code]	(1) The requirements in I.L.1.b. shall be used to demonstrate compliance with the visible emissions limit. [s. 285.65(3), Wis. Stats.]	(1) Whenever compliance testing is required, USEPA Method 9 shall be used or an alternate method approved in writing by the Department, shall be used. [s. NR 439.06(9)(a)1., Wis. Adm. Code] (2) The records required in I.L.1.c.(2)&(3) shall be used as recordkeeping and monitoring requirements for the visible emissions limit. [s. 285.65(3), Wis. Stats.]
3. Fugitive Emissions	(1) No person may cause, allow or permit any material to be handled, transported or stored without taking precaution to prevent particulate matter from becoming airborne. [s. NR 415.04, Wis. Adm. Code]	(1) The permittee shall comply with the requirements established in I.W.1.b. for compliance demonstration. [s. 285.65(3), Wis. Stats.]	(1) The permittee shall comply with the requirements established in I.W.1.c. for recordkeeping and monitoring requirements. [s. 285.65(3), Wis. Stats.]

M. P11, P12N /S11 /C11– North Filters: Grain Milling and Mill Bins [Conditions from 02-RV-166, revised / superseded under 07-DCF-003 and 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter (PM) and PM_{10} Emissions	(1) The emissions may not exceed 1.36 lbs/hr of PM and PM_{10} from the baghouse stack S11.[13] [s. NR 404.08(2), Wis. Adm. Code, and s. 285.65(3), Wis. Stats.] (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 stack height shall be at least 106.9 feet above ground level. [(s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code] (b) The stack inside dimension at the outlet may not exceed 3.0 feet (equivalent diameter). [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code]	(1) The facility shall operate / direct emissions to the baghouse at all times the process is in operation. [s. 285.65(3), Wis. Stats.] (2) The facility shall install, calibrate, operate and maintain the instrumentation necessary to monitor particulate matter emissions using a bag break detector / emissions monitor, and shall continue to monitor pressure drop. [s. NR 439.055(1) and (4), Wis. Adm. Code] (3) The output from the bag break detector shall be monitored and shall be set to alert of possible problems at the value noted in the malfunction prevention and abatement plan. The pressure drop shall be measured and maintained within the range of 1.5 to 8 inches of water column (except following bag replacement). The pressure drop may be as low as 0.5 inches of water column following bag replacement and confirmation that the new bags are properly seated. [s. 285.65(3), Wis. Stats. s;. NR 407.09(1)(c), Wis. Adm. Code] (4) The baghouse shall be inspected once per month for any leaks or tears. [s. NR 439.055(5), Wis. Adm. Code; s. 285.65(3), Wis. Stats.] (5) The fabric filter baghouse shall be that necessary to achieve an average outlet concentration of not more than 0.012 gr/acf (including back half). This and the exhaust flow of 12,805 ACFM are the basis for the PM limitation. [s. NR 406.10, Wis. Adm. Code]	(1) Whenever compliance emission testing for PM & PM_{10} is required, USEPA Method 5, including backhalf (Method 202) shall be used to demonstrate compliance or an alternate method approved in writing by the Department, shall be used. [s. NR 439.06(1m), Wis. Adm. Code] (2) The facility shall monitor and record the pressure drop across the baghouse at least once for each 8 hours of operation of any process or once per day of operation, whichever yields the greater number of measurements. [s. NR 439.055(2), Wis. Adm. Code] (3) Upon installation, calibration and initial operation of the bag break detector / emissions monitor, the facility shall monitor and record the output from a bag break detector / emissions monitor at 15 minute intervals (e.g. electrodynamic or triboelectric or detectors). [s. NR 439.055(2), Wis. Adm. Code] (4) Refer to the Malfunction Prevention and Abatement requirements of I.ZZZ.3. (5) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the baghouse. These records shall include the date of action and a description of any corrective actions taken. [s. NR 439.

[13] ***The facility has elected to meet this limit in order to attain and maintain the national ambient air quality standard and increment for PM_{10}. This restriction also ensures that this project is minor under PSD. The stack parameters were previously noted as 84 ft. height, 4.0 ft. x4.0 ft. exit, subsequently 103 ft., and are now identified as 106.92 ft. high, 3.0 ft. diam.***

M. P11, P12N /S11/ C11 – North Filters: Grain Milling and Mill Bins [Conditions from 07-DCF-003]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter (PM) and PM_{10} Emissions [Continued]	(c) The stack may not be equipped with a rainhat or other device which impedes the upward flow of the exhaust gases. [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code]	(6) Compliance emission tests shall be conducted if requested by the Department. See additional stack testing requirements under I.ZZZ.4. [s. NR 439.07(1), Wis. Adm. Code]	(6) The facility shall maintain records / documentation of the fabric filter baghouse design, testing, maximum exhaust flows, fan / blower information and emission guarantees which document the baghouse is designed to achieve the noted outlet concentration, and emission limit when properly operated and maintained. [s. NR 439.04(1)(d), Wis. Adm. Code] (7) 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]
2. Visible Emissions	(1) The permittee may not discharge from S11, P11 and P12N into the atmosphere any gases which exhibit greater than 20% opacity. [s. NR 431.05, Wis. Adm. Code]	(1) The requirements in I.M.1.b. shall be used to demonstrate compliance with the visible emissions limit. [s. 285.65(3), Wis. Stats.]	(1) Whenever compliance testing is required, USEPA Method 9 shall be used or an alternate method approved in writing by the Department, shall be used. [s. NR 439.06(9)(a)1., Wis. Adm. Code] (2) The records required in I.M.1.c. shall be used as recordkeeping and monitoring requirements for the visible emissions limit. [s. 285.65(3), Wis. Stats.]
3. Fugitive Emissions	(1) No person may cause, allow or permit any material to be handled, transported or stored without taking precaution to prevent particulate matter from becoming airborne. [s. NR 415.04, Wis. Adm. Code]	(1) The permittee shall comply with the requirements established in I.W.1.b. for compliance demonstration. [s. 285.65(3), Wis. Stats.]	(1) The permittee shall comply with the requirements established in I.W.1.c. for recordkeeping and monitoring requirements. [s. 285.65(3), Wis. Stats.]

(Prior) Section N removed under 07-DCF-003. (process P12S, P12N were noted as associated with P10, and P11 respectively)

N. Stack S39; Control C35; C36 (baghouses); Processes P58 – P64 – Ethanol plant dry grain milling and handling (hammermills); Stack S40; Control C37 (baghouse); Control C38 (Cyclone) Processes P68, P69, P70, P71, P72, P73, P74, P75, P76, P77, P79 – A Mill aspirators and gravity tables. Control C44 (baghouse) Processes P78, P80, P82, P83, P84, P86. – C Mill aspirators and gravity tables (2009) [Conditions from 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter (PM) and PM_{10} Emissions	(1)(a) The emissions may not exceed 1.03 lbs/hr of PM and PM_{10} from stack S39 [14]. (b) The emissions may not exceed 1.25 lbs/hr of PM and PM_{10} from stack S40. [s. NR 404.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.] (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 stack height of S39 shall be at least 135.5 feet above ground level. [(s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code] (b) The stack height of S40 shall be at least 135.5 feet above ground level. [(s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code]	(1) The facility shall operate / direct emissions to the baghouses at all times the process is in operation. [s. 285.65(3), Wis. Stats.] (2) The facility shall install, calibrate, operate and maintain the instrumentation necessary to monitor the pressure drop across each baghouse (or other monitoring technology as approved by the Department in writing). [s. NR 439.055(1) and (4), Wis. Adm. Code] (3) The pressure drop across each baghouse shall normally be maintained within the range of 1.5 to 8 inches of water column or with approval from the Department in writing, an alternative range or monitoring technology which has been demonstrated to achieve compliance. The pressure drop may be as low as 0.5 inches of water column following bag replacement and confirmation that the new bags are properly seated. [s. 285.65(3), Wis. Stats. s;. NR 407.09(1)(c), Wis. Adm. Code] (4) Each baghouse shall be inspected once per month for any leaks or tears. [s. NR 439.055(5), Wis. Adm. Code; s. 285.65(3), Wis. Stats.] (5) The fabric filter baghouses C37 and C44 (S40) shall be that necessary to achieve an outlet concentration of not more than 0.00415 gr/dscf (including back half). This and the exhaust flow of 35,157 ACFM are the basis for the PM limitation. [s. NR 406.10, Wis. Adm. Code]	(1) Whenever compliance emission testing for PM & PM_{10} is required, USEPA Method 5, including backhalf (Method 202) shall be used to demonstrate compliance or an alternate method approved in writing by the Department, shall be used. Compliance with the test methods and procedures to meet the NSPS requirements are identified in s. NR 440.47(4), Wis. Adm. Code. [s. NR 439.06(1m), Wis. Adm. Code] (2) The facility shall monitor and record the pressure drop across the baghouse at least once for each 8 hours of operation of any process or once per day of operation, whichever yields the greater number of measurements. Any alternative monitoring technology monitoring / records shall be at the frequency required for that technology (but not less than the above frequency).

[14] ***The facility has elected to meet these limits in order to attain and maintain the national ambient air quality standard and increment for PM_{10}. This restriction also ensures that this project is minor under PSD. The stack parameters were previously noted as 135 ft., and are now identified as 135.5 ft. high.***

N. Stack S39; Control C35; C36 (baghouses); Processes P58 – P64 – Ethanol plant dry grain milling and handling (hammermills); Stack S40; Control C37 (baghouse); Control C38 (Cyclone) Processes P68, P69, P70, P71, P72, P73, P74, P75, P76, P77, P79 – A Mill aspirators and gravity tables. Control C44 (baghouse) Processes P78, P80, P82, P83, P84, P86. – C Mill aspirators and gravity tables (2009) [Conditions from 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter (PM) and PM_{10} Emissions [Continued]	(c) The stack inside diameter at the outlet of S39 may not exceed 1.5 feet [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code] (d) The stack inside diameter at the outlet of S40 may not exceed 3.0 feet [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code] (e) The stack(s) may not be equipped with a rainhat or other device which impedes the upward flow of the exhaust gases. [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code]	(6) The fabric filter baghouse C35 and C36 (S39) shall be that necessary to achieve an average outlet concentration of not more than 0.0105 gr/dscf (including backhalf). This and the exhaust flow of 11,412 ACFM are the basis for the PM limitation. [s. 285.65(3), Wis. Stats.; s. NR 406.10 and s. NR 440.47(3)(b)1., Wis. Adm. Code] (7) Compliance emission tests for S39 and S40 shall be conducted within 90 days after the start of initial operation of the ethanol grain milling operation to demonstrate compliance with the PM emission limits, grain loading (gr/dscf), and confirm the exhaust flow rate. See I.N.1.b.(8). See additional stack testing requirements under I.ZZZ.4. [s. NR 439.07(1), Wis. Adm. Code] (8) The new (ethanol plant milling) operations or any other new emission points may not commence initial operation until all of the stack parameters elsewhere at the facility have been updated to comply with the construction permit 08-DCF-155. [s. NR 406.10, Wis. Adm. Code]	(2)(a) If a pressure drop across the baghouse is observed as less than 1.5 inches during normal operation (or other specific low end value approved by the Department), or following bag replacement, the pressure drop shall be noted and recorded at least once every 2 hours. The facility shall note and record if the pressure drop is only falling below 1.5 inches w.c. (water column, or other specific low end value approved by the Department) immediately following a cleaning cycle or if the observed pressure drops are indicative of other problems, and shall note and record the actions taken to address the low pressure drops. More frequent monitoring may be discontinued following identification and correction of a specific problem (including bag conditioning), once the pressure drops are consistently within the normal range for this baghouse. Additional (every 2 hour) pressure drop monitoring is not required for baghouses equipped with bag break detectors / recorders and alarms, or where the baghouse pressure drop reading is readily accessible to the process operator, equipped with an alarm, and recorded at 15 minute intervals. [s. NR 439.055(2), Wis. Adm. Code] (3) Refer to the Malfunction Prevention and Abatement requirements of I.ZZZ.3. (4) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the baghouse. These records shall include the date of action and a description of any corrective actions taken. [s. NR 439.04(1)(d), Wis. Adm. Code] (5) The facility shall maintain records / documentation of the fabric filter baghouse design, testing, maximum exhaust flows, fan / blower information and emission guarantees which document the baghouse is designed to achieve the noted outlet concentration, and emission limit when properly operated and maintained. [s. NR 439.04(1)(d),

N. Stack S39; Control C35; C36 (baghouses); Processes P58 – P64 – Ethanol plant dry grain milling and handling (hammermills); Stack S40; Control C37 (baghouse); Control C38 (Cyclone) Processes P68, P69, P70, P71, P72, P73, P74, P75, P76, P77, P79 – A Mill aspirators and gravity tables. Control C44 (baghouse) Processes P78, P80, P82, P83, P84, P86. – C Mill aspirators and gravity tables (2009) [Conditions from 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
			Wis. Adm. Code] (6) 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]
2. Visible Emissions	(1) The permittee may not discharge from S40, S44 into the atmosphere any gases which exhibit greater than 20% opacity. [s. NR 431.05, Wis. Adm. Code] (2) The permittee may not discharge into atmosphere any gases from stacks S40, S44 which exhibit greater than 0% opacity. [s. NR 440.47(3)(b)2., Wis. Adm. Code	(1) The requirements in I.N.1.b. shall be used to demonstrate compliance with the visible emissions limit. [s. 285.65(3), Wis. Stats.] (2) A visible emissions compliance testing shall be performed simultaneous with the PM and PM10 emission test required in I. N. 1.b.(5). [s. NR 439.07(1), Wis. Adm. Code]	(1) Whenever compliance testing is required, USEPA Method 9 shall be used or an alternate method approved in writing by the Department shall be used. [s. NR 439.06(9)(a)1., Wis. Adm. Code] (2) The records required in I.N.1.c. shall be used as recordkeeping and monitoring requirements for the visible emissions limit. [s. 285.65(3), Wis. Stats.]
3. Fugitive Emissions	(1) No person may cause, allow or permit any material to be handled, transported or stored without taking precaution to prevent particulate matter from becoming airborne. [s. NR 415.04, Wis. Adm. Code] ((2) The permittee may not discharge fugitive emissions into atmosphere from grain handling which exhibit greater than 0% opacity. [s. NR 440.47(3)(c)2.., Wis. Adm. Code]	(1) The permittee shall comply with the requirements established in I.W.1.b. for compliance demonstration. [s. 285.65(3), Wis. Stats.]	(1) The permittee shall comply with the requirements established in I.W.1.c. for recordkeeping and monitoring requirements. [s. 285.65(3), Wis. Stats.]

O. P22; P23 /S14 / C14– Product Storage (Silos) and Transfer. [Conditions from 07-DCF-003 and 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter (PM) and PM_{10} Emissions	(1) The emissions may not exceed 0.14 lbs/hr of PM and PM_{10} from the baghouse stack S14[15]. [s. NR 408.04(2), Wis. Adm. Code; s. 285.65(3) and (7), Wis. Stats.] (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 stack height shall be at least 140.0 feet above ground level. [(s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code] (b) The stack inside (equivalent) diameter at the outlet may not exceed 1.0 feet [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code]	(1) The facility shall direct emissions to the baghouse at all times the process is in operation. [s. 285.65(3), Wis. Stats.] (2) The facility shall install, calibrate, operate and maintain the instrumentation necessary to monitor the pressure drop across the baghouse (or other monitoring technology as approved by the Department in writing). [s. NR 439.055(1) and (4), Wis. Adm. Code] (3) The pressure drop across the (each) baghouse shall normally be maintained within the range of 1.5 to 8 inches of water column when materials are being loaded to the silos, or with approval from the Department in writing, an alternative range or monitoring technology which has been demonstrated to achieve compliance. The pressure drop may be as low as 0.5 inches of water column following bag replacement and confirmation that the new bags are properly seated. [s. 285.65(3), Wis. Stats. s;. NR 407.09(1)(c), Wis. Adm. Code; 09-DCF-242] (4) The baghouse shall be inspected once per month for any leaks or tears. [s. NR 439.055(5), Wis. Adm. Code; s. 285.65(3), Wis. Stats.] (5) The fabric filter baghouse shall be that necessary to achieve an outlet concentration of not more than 0.005 gr/acf as noted within the application. This and the exhaust flow of 3,077 ACFM are the basis for the PM limitation. [s. NR 406.10, Wis. Adm. Code]	(1) Whenever compliance emission testing for PM & PM_{10} is required, USEPA Method 5, including backhalf (Method 202) shall be used to demonstrate compliance or an alternate method approved in writing by the Department, shall be used. [s. NR 439.06(1m), Wis. Adm. Code] (2) The facility shall monitor and record the pressure drop across the baghouse at least once for each 8 hours of operation of any process or once per day of operation, whichever yields the greater number of measurements. (a). If a pressure drop across the baghouse is observed as less than 1.5 inches during normal operation (or other specific low end value approved by the Department), or following bag replacement, the pressure drop shall be noted and recorded at least once every 2 hours. The facility shall note and record if the pressure drop is only falling below 1.5 inches w.c. (water column, or other specific low end value approved by the Department) immediately following a cleaning cycle or if the observed pressure drops are indicative of other problems, and shall note and record the actions taken to address the low pressure drops. More frequent monitoring may be discontinued following identification and correction of a specific problem (including bag conditioning), once the pressure drops are consistently within the normal range for this baghouse. Additional (every 2 hour) pressure drop monitoring / recording is not required for baghouses equipped with bag break detectors / recorders and alarms, or where the baghouse pressure drop reading is readily accessible to the process operator, equipped with an alarm, and recorded at 15 minute intervals. [s. NR 439.055(2), Wis. Adm. Code]

[15] ***The facility has elected to meet this limit in order to attain and maintain the national ambient air quality standardand increment for PM_{10}. This restriction also ensures that this project is minor under PSD. The stack parameters were previously noted as 126 ft. height, 1.0 ft. exit diameter.***

O. P22; P23 /S14 / C14– Product Storage (Silos) and Transfer. [Conditions from 07-DCF-003 and 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter (PM) and PM_{10} Emissions [Continued]	(c) The stack may not be equipped with a rainhat or other device which impedes the upward flow of the exhaust gases. [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code]	(6) Compliance emission tests shall be conducted if requested by the Department. See additional stack testing requirements under I.ZZZ.4. [s. NR 439.07(1), Wis. Adm. Code] (7) The permittee may not exhaust emissions from any vents / fans on the storage silos (P22 / P23): These emissions shall be collected and directed to the control C14. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]	(3) Refer to the Malfunction Prevention and Abatement requirements of I.ZZZ.3. (4) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the baghouse. These records shall include the date of action and a description of any corrective actions taken. [s. NR 439.04(1)(d), Wis. Adm. Code] (5) The facility shall maintain records / documentation of the fabric filter baghouse design, testing, maximum exhaust flows, fan / blower information and emission guarantees which document the baghouse is designed to achieve the noted outlet concentration, and emission limit when properly operated and maintained. [s. NR 439.04(1)(d), Wis. Adm. Code] (6) The permittee shall keep the following records: **(a)** Maximum silo/bin capacities and maximum throughputs in tons. **(b)** emissions factor based on AP-42. **(c)** Manufacturer specifications information of the baghouse and information / documentation regarding the means of directing the emissions to the baghouse. [s. 285.65(3), Wis. Stats.] (7) 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]

O. P22; P23 /S14 / C14– Product Storage (Silos) and Transfer. [Conditions from 07-DCF-003 and 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
2. Visible Emissions	(1) The permittee may not discharge from S14, P14 into the atmosphere any gases which exhibit greater than 20% opacity. [s. NR 431.05, Wis. Adm. Code]	(1) The requirements in I.O.1.b. shall be used to demonstrate compliance with the visible emissions limit. [s. 285.65(3), Wis. Stats.]	(1) Whenever compliance testing is required, USEPA Method 9 shall be used or an alternate method approved in writing by the Department, shall be used. [s. NR 439.06(9)(a)1., Wis. Adm. Code] (2) The records required in I.O.1.c. shall be used as recordkeeping and monitoring requirements for the visible emissions limit. [s. 285.65(3), Wis. Stats.]
3. Fugitive Emissions	(1) No person may cause, allow or permit any material to be handled, transported or stored without taking precaution to prevent particulate matter from becoming airborne. [s. NR 415.04, Wis. Adm. Code]	(1) The permittee shall comply with the requirements established in I.W.1.b. for compliance demonstration. [s. 285.65(3), Wis. Stats.]	(1) The permittee shall comply with the requirements established in I.W.1.c. for recordkeeping and monitoring requirements. [s. 285.65(3), Wis. Stats.]

P. P15/S17 /C17 – South Truck Unload/Loading Building Filter: Grain Receiving. This source is subject to NSPS. [Conditions from 02-RV-166, revised / superseded under 06-DCF-166 and 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter (PM) and PM_{10} Emissions	(1) The emissions may not exceed 0.458 lb/hr of PM and PM_{10} from the baghouse stack S17.[16] [s. NR 404.08(2), Wis. Adm. Code; s. 285.65(3) and (7), Wis. Stats.] (2) The exhaust concentration from the source may not exceed 0.010 gr/dscf (front half only). [s. NR 440.47(3)(b)1., Wis. Adm. Code] (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 stack height shall be at least 115.0 feet above ground level. [(s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code]	(1) The facility shall operate / direct emissions to the baghouse at all times the process is in operation. [s. 285.65(3), Wis. Stats.] (2) The facility shall install, calibrate, operate and maintain the instrumentation necessary to monitor particulate matter emissions using a bag break detector / emissions monitor, and shall continue to monitor pressure drop. [s. NR 439.055(1) and (4), Wis. Adm. Code]. (3) The output from the bag break detector shall be monitored and shall be set to alert of possible problems at the value noted in the malfunction prevention and abatement plan. The pressure drop shall be measured and be maintained within the range of 1.5 to 8 inches of water column (except following bag replacement). The pressure drop may be as low as 0.5 inches of water column following bag replacement and confirmation that the new bags are properly seated. [s. 285.65(3), Wis. Stats. s;. NR 407.09(1)(c), Wis. Adm. Code] (4) The baghouse shall be inspected once per month for any leaks or tears. [s. NR 439.055(5), Wis. Adm. Code and s. 285.65(3), Wis. Stats.]	(1) Whenever compliance emission testing for PM & PM_{10} is required, USEPA Method 5, including backhalf (Method 202) shall be used to demonstrate compliance or an alternate method approved in writing by the Department, shall be used. Compliance with the test methods and procedures to meet the NSPS requirements are identified in s. NR 440.47(4), Wis. Adm. Code. [s. NR 440.47(4)(b)1., and (c), Wis. Adm. Code, s. NR 439.06(1m), Wis. Adm. Code] (2) The facility shall monitor and record the pressure drop across the baghouse at least once for each 8 hours of operation of any process or once per day of operation, whichever yields the greater number of measurements. [s. NR 439.055(2), Wis. Adm. Code] (3) Upon installation, calibration and initial operation of the bag break detector / emissions monitor, the facility shall monitor and record the output from a bag break detector / emissions monitor at 15 minute intervals (e.g. electrodynamic or triboelectric detectors). [s. NR 439.055(2), Wis. Adm. Code] (4) Refer to the Malfunction Prevention and Abatement requirements of I.ZZZ.3. (5) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the baghouse. These records shall include the date of action and a description of any corrective actions taken. [s. NR 439.04(1)(d), Wis. Adm. Code]

[16] ***The facility has elected to meet this limit in order to attain and maintain the national ambient air quality standard and increment for PM_{10}. This restriction also ensures that this project is minor under PSD. The stack parameters were previously noted as 100 ft. height, 1.67 ft. exit diameter.***

P. P15/S17 /C17 – South Truck Unload/Loading Building Filter: Grain Receiving. This source is subject to NSPS. [Conditions from 02-RV-166, revised / superseded under 06-DCF-166 and 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter (PM) and PM_{10} Emissions [Continued]	(b) The stack inside diameter at the outlet may not exceed 1.67 feet [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code] (c) The stack may not be equipped with a rainhat or other device which impedes the upward flow of the exhaust gases. [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code]	(5) The fabric filter baghouse shall be that necessary to achieve an average outlet concentration of not more than 0.00739 gr/acf (including back half). This and the exhaust flow of 7230 ACFM are the basis for the PM limitation. [s. NR 406.10, Wis. Adm. Code] (6) Compliance emission tests shall be conducted if requested by the Department. See additional stack testing requirements under I.ZZZ.4. [s. NR 439.07(1), Wis. Adm. Code]	(6) The facility shall maintain records / documentation of the fabric filter baghouse design, testing, maximum exhaust flows, fan / blower information and emission guarantees which document the baghouse is designed to achieve the noted outlet concentration, and emission limit when properly operated and maintained. [s. NR 439.04(1)(d), Wis. Adm. Code] (7) 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]
2. Visible Emissions	(1) The permittee may not discharge into atmosphere any gases from stack S17, P15 which exhibit greater than 0% opacity. [s. NR 440.47(3)(b)2.., Wis. Adm. Code]	(1) A visible emissions compliance test shall be performed if requested by the Department. [s. NR 439.07(1), Wis. Adm. Code] (2) The requirements in I.P.1.b. shall be used to demonstrate compliance with the visible emissions limit. [s. 285.65(3), Wis. Stats.]	(1) Whenever compliance testing is required, USEPA Method 9 shall be used. [s. NR 440.47(4)(b)3., Wis. Adm. Code, s. NR 439.06(9)(a)1., Wis. Adm. Code] (2) The records required in I.P.1.c. shall be used as recordkeeping and monitoring requirements for the visible emissions limit. [s. 285.65(3), Wis. Stats.]

P. P15/S17 /C17 – South Truck Unload/Loading Building Filter: Grain Receiving. This source is subject to NSPS. [Conditions from 02-RV-166, revised / adopted under 06-DCF-166 and 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
3. Fugitive Emissions	(1) No person may cause, allow or permit any material to be handled, transported or stored without taking precaution to prevent particulate matter from becoming airborne. [s. NR 415.04, Wis. Adm. Code] (2) The permittee may not discharge fugitive emissions into atmosphere from P15 which exhibit greater than 5% opacity. [s. NR 440.47(3)(c)1.., Wis. Adm. Code]	(1) The permittee shall comply with the requirements established in I.W.1.b. for compliance demonstration. [s. 285.65(3), Wis. Stats.]	(1) The permittee shall comply with the requirements established in I.W.1.c. for recordkeeping and monitoring requirements. [s. 285.65(3), Wis. Stats.]

Q. P19/S21 / C21 – Mill flour operations Filter – Grain Milling [Conditions from 02-RV-166, revised under 06-DCF-166 and 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter (PM) and PM_{10} Emissions	(1) The emissions may not exceed 0.174 lb/hr of PM and PM_{10} from the baghouse stack S21[17]. [s. NR 404.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.] (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 stack height shall be at least 106.5 feet above ground level. [(s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code] (b) The stack inside diameter at the outlet may not exceed ~~2.0~~ 1.0 feet [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code]	(1) The facility shall operate / direct emissions to the baghouse at all times the process is in operation. [s. 285.65(3), Wis. Stats.] (2) The facility shall install, calibrate, operate and maintain the instrumentation necessary to monitor the pressure drop across the baghouse (or other monitoring technology as approved by the Department in writing). [s. NR 439.055(1) and (4), Wis. Adm. Code] (3) The pressure drop across the baghouse shall normally be maintained within the range of 1.5 to 8 inches of water column or with approval from the Department in writing, an alternative range or monitoring technology which has been demonstrated to achieve compliance. The pressure drop may be as low as 0.5 inches of water column following bag replacement and confirmation that the new bags are properly seated. [s. 285.65(3), Wis. Stats. s;. NR 407.09(1)(c), Wis. Adm. Code] (4) The baghouse shall be inspected once per month for any leaks or tears. [s. NR 439.055(5), Wis. Adm. Code and s. 285.65(3), Wis. Stats.] (5) The fabric filter baghouse shall be that necessary to achieve an outlet concentration of not more than 0.0050 gr/acf. This and the exhaust flow of 4070 ACFM are the basis for the PM limitation. [s. NR 406.10, Wis. Adm. Code]	(1) Whenever compliance emission testing for PM & PM_{10} is required, USEPA Method 5, including backhalf (Method 202) shall be used to demonstrate compliance or an alternate method approved in writing by the Department, shall be used. [s. NR 439.06(1m), Wis. Adm. Code] (2) The facility shall monitor and record the pressure drop across the baghouse at least once for each 8 hours of operation of any process or once per day of operation, whichever yields the greater number of measurements. Any alternative monitoring technology monitoring / records shall be at the frequency required for that technology (but not less than the above frequency). (a) If a pressure drop across the baghouse is observed as less than 1.5 inches during normal operation (or other specific low end value approved by the Department), or following bag replacement, the pressure drop shall be noted and recorded at least once every 2 hours. The facility shall note and record if the pressure drop is only falling below 1.5 inches w.c. (water column, or other specific low end value approved by the Department) immediately following a cleaning cycle or if the observed pressure drops are indicative of other problems, and shall note and record the actions taken to address the low pressure drops. More frequent monitoring may be discontinued following identification and correction of a specific problem (including bag conditioning), once the pressure drops are consistently within the normal range for this baghouse. Additional (every 2 hour) pressure drop monitoring / recording is not required for baghouses equipped with bag break detectors / recorders and alarms, or where the baghouse pressure drop reading is readily accessible to the process operator, equipped with an alarm, and recorded at 15 minute intervals. [s. NR 439.055(2), Wis. Adm. Code]

[17] ***The facility has elected to meet this limit in order to attain and maintain the national ambient air quality standard and increment for PM_{10}. This restriction also ensures that this project is minor under PSD. The stack parameters were previously noted as 92 ft. height, 2.0 ft. exit diameter, subsequently 104 ft, and now 106.5 ft.***

Q. P19/S21 / C21 – Mill flour operations Filter – Grain Milling [Conditions from 02-RV-166, revised under 06-DCF-166 and 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter (PM) and PM_{10} Emissions [Continued]	(c) The stack may not be equipped with a rainhat or other device which impedes the upward flow of the exhaust gases. [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code]	(6) Compliance emission tests of the PM emissions, exhaust flows and outlet grain loading (gr/dscf) shall be conducted upon request of the Department. See additional stack testing conditions under I.ZZZ.4. [s. NR 439.03, Wis. Adm. Code]	(3) Refer to the Malfunction Prevention and Abatement requirements of I.ZZZ.3. (4) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the baghouse. These records shall include the date of action and a description of any corrective actions taken. [s. NR 439.04(1)(d), Wis. Adm. Code] (5) The facility shall maintain records / documentation of the fabric filter baghouse design, testing, maximum exhaust flows, fan / blower information and emission guarantees which document the baghouse is designed to achieve the noted outlet concentration, and emission limit when properly operated and maintained. [s. NR 439.04(1)(d), Wis. Adm. Code] (6) 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]
2. Visible Emissions	(1) The permittee may not discharge from S21, P19 into the atmosphere any gases which exhibit greater than 20% opacity. [s. NR 431.05, Wis. Adm. Code]	(1) The requirements in I.Q.1.b. shall be used to demonstrate compliance with the visible emissions limit. [s. 285.65(3), Wis. Stats.]	(1) Whenever compliance testing is required, USEPA Method 9 shall be used or an alternate method approved in writing by the Department, shall be used. [s. NR 439.06(9)(a)1., Wis. Adm. Code] (2) The records required in I.Q.1.c. shall be used as recordkeeping and monitoring requirements for the visible emissions limit. [s. 285.65(3), Wis. Stats.]
3. Fugitive Emissions	(1) No person may cause, allow or permit any material to be handled, transported or stored without taking precaution to prevent particulate matter from becoming airborne. [s. NR 415.04, Wis. Adm. Code]	(1) The permittee shall comply with the requirements established in I.W.1.b. for compliance demonstration. [s. 285.65(3), Wis. Stats.]	(1) The permittee shall comply with the requirements established in I.W.1.c. for recordkeeping and monitoring requirements. [s. 285.65(3), Wis. Stats.]

R. P20/S22 / C22 – Mill/Germ Recovery/Toasting (including two new toasting units)/ Grinding Filter – Grain Milling [Conditions from 07-DCF-003 and 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter (PM) and PM_{10} Emissions	(1) The emissions may not exceed 0.275 lbs/hr of PM and PM_{10} from the baghouse stack S22[18]. [s. NR 404.08(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.] (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 stack height shall be at least 106.5 feet above ground level. [(s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code] (b) The stack inside diameter at the outlet may not exceed 1.5 feet [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code]	(1) The facility shall operate / direct emissions to the baghouse at all times the process is in operation. [s. 285.65(3), Wis. Stats.] (2) The facility shall install, calibrate, operate and maintain the instrumentation necessary to monitor the pressure drop across the baghouse (or other monitoring technology as approved by the Department in writing). [s. NR 439.055(1) and (4), Wis. Adm. Code] (3) The pressure drop across the baghouse shall normally be maintained within the range of 1.5 to 8 inches of water column or with approval from the Department in writing, an alternative range or monitoring technology which has been demonstrated to achieve compliance. The pressure drop may be as low as 0.5 inches of water column following bag replacement and confirmation that the new bags are properly seated. [s. 285.65(3), Wis. Stats. s;. NR 407.09(1)(c), Wis. Adm. Code] (4) The baghouse shall be inspected once per month for any leaks or tears. [s. NR 439.055(5), Wis. Adm. Code; s. 285.65(3), Wis. Stats.] (5) The fabric filter baghouse shall be that necessary to achieve an outlet concentration of not more than 0.005 gr/dscf. This and the exhaust flow of 6,428 ACFM are the basis for the PM limitation. [s. NR 406.10, Wis. Adm. Code]	(1) Whenever compliance emission testing for PM & PM_{10} is required, USEPA Method 5, including backhalf (Method 202) shall be used to demonstrate compliance or an alternate method approved in writing by the Department, shall be used. [s. NR 439.06(1m), Wis. Adm. Code] (2) The facility shall monitor and record the pressure drop across the baghouse at least once for each 8 hours of operation of any process or once per day of operation, whichever yields the greater number of measurements. Any alternative monitoring technology monitoring / records shall be at the frequency required for that technology (but not less than the above frequency). (a) If a pressure drop across the baghouse is observed as less than 1.5 inches during normal operation (or other specific low end value approved by the Department), or following bag replacement, the pressure drop shall be noted and recorded at least once every 2 hours. The facility shall note and record if the pressure drop is only falling below 1.5 inches w.c. (water column, or other specific low end value approved by the Department) immediately following a cleaning cycle or if the observed pressure drops are indicative of other problems, and shall note and record the actions taken to address the low pressure drops. More frequent monitoring may be discontinued following identification and correction of a specific problem (including bag conditioning), once the pressure drops are consistently within the normal range for this baghouse. Additional (every 2 hour) pressure drop monitoring / recording is not required for baghouses equipped with bag break detectors / recorders and alarms, or where the baghouse pressure drop reading is readily accessible to the process operator, equipped with an alarm, and recorded at 15 minute intervals. [s. NR 439.055(2), Wis. Adm. Code]

[18] ***The facility has elected to meet this limit in order to attain and maintain the national ambient air quality standard and increment for PM_{10}. This restriction also ensures that this project is minor under PSD. The stack height was previously noted as 104 ft.***

R. P20/S22 / C22 – Mill/Germ Recovery/Toasting (including two new toasting units)/ Grinding Filter – Grain Milling [Conditions from 07-DCF-003 and 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter (PM) and PM_{10} Emissions [Continued]	(c) The stack may not be equipped with a rainhat or other device which impedes the upward flow of the exhaust gases. [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code]	(6) Compliance emission tests of the PM emissions, exhaust flows and outlet grain loading (gr/dscf) shall be conducted upon request of the Department. See additional stack testing conditions under I.ZZZ.4. [s. NR 439.03, Wis. Adm. Code]	(3) Refer to the Malfunction Prevention and Abatement requirements of I.ZZZ.3. (4) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the baghouse. These records shall include the date of action and a description of any corrective actions taken. [s. NR 439.04(1)(d), Wis. Adm. Code] (5) The facility shall maintain records / documentation of the fabric filter baghouse design, testing, maximum exhaust flows, fan / blower information and emission guarantees which document the baghouse is designed to achieve the noted outlet concentration, and emission limit when properly operated and maintained. [s. NR 439.04(1)(d), Wis. Adm. Code] (6) 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]
2. Visible Emissions	(1) The permittee may not discharge from S22, P20 into the atmosphere any gases which exhibit greater than 20% opacity. [s. NR 431.05, Wis. Adm. Code]	(1) The requirements in I.R.1.b. shall be used to demonstrate compliance with the visible emissions limit. [s. 285.65(3), Wis. Stats.] (2) A visible emissions compliance testing shall be performed simultaneous with the PM and PM10 emission test required in I. R. 1.b.(5). [s. NR 439.07(1), Wis. Adm. Code]	(1) Whenever compliance testing is required, USEPA Method 9 shall be used or an alternate method approved in writing by the Department shall be used. [s. NR 439.06(9)(a)1., Wis. Adm. Code] (2) The records required in I.R.1.c. shall be used as recordkeeping and monitoring requirements for the visible emissions limit. [s. 285.65(3), Wis. Stats.]
3. Fugitive Emissions	(1) No person may cause, allow or permit any material to be handled, transported or stored without taking precaution to prevent particulate matter from becoming airborne. [s. NR 415.04, Wis. Adm. Code]	(1) The permittee shall comply with the requirements established in I.W.1.b. for compliance demonstration. [s. 285.65(3), Wis. Stats.]	(1) The permittee shall comply with the requirements established in I.W.1.c. for recordkeeping and monitoring requirements. [s. 285.65(3), Wis. Stats.]

~~S. P16, S23, Grain Dryer No. 3 Natural gas fired burner 19.34 MMBTU/hr (1999) This source is subject to NSPS. [Conditions from 07-DCF-003 and 08-DCF-155]. Permanently converted to a stack vented source and subsequently shut down.~~

~~Pollutant~~	~~a. Limitations~~	~~b. Compliance Demonstration~~	~~c. Reference Test Methods, Recordkeeping and Monitoring Requirements~~
~~1. Particulate Matter (PM) and PM_{10} Emissions~~	~~(1) This process may not be operated. .[19] [s. NR 404.08(2), and s. NR 415.05(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.]~~	~~(1) The permittee shall demonstrate compliance with the permit and facility application noting that the process will no longer be operated by maintaining records that the process has been shut down, disconnecting the fuel piping / connections, and placing seals / locks or other means to prevent operation of the equipment on the operating panels. [s. 285.65(3) and (7), Wis. Stats.]~~	~~(1) The facility shall maintain records of any operation of the equipment, records of the process shutdown, fuel disconnection and of the other steps taken to prevent operation of the process. [s. NR 439.04, Wis. Adm. Code]~~

[19] ***The facility has elected to permanently discontinue use of this process. Resumption of operation will require a construction permit.***

S'. P16, S23, Grain Dryer No. 3 Natural gas fired burner 19.34 MMBTU/hr; 84 ton per hour (~3000 Bu/hr) capacity (1999) This source is subject to NSPS. [Conditions from 07-DCF-003 and 09-DCF-242].

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter (PM) and PM_{10} Emissions	(1) The emissions may not exceed 30.0 lb/hr of PM and 20.0 lb/hr of PM_{10} from S23.[20] [s. NR 404.08(2), and s. NR 415.05(2), Wis. Adm. Code; s. 285.65(3), Wis. Stats.] (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 discharge height shall be at least 167.0 feet above ground level. [(s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code] (b) The stack inside diameter at the outlet may not exceed 8.0 feet [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code]	(1) The permittee may not operate the grain dryer (P16) at a throughput of more than 84 ton / hr. (24 hour average), based on the output mass at 15.5% moisture. [s. NR 406.10, Wis. Adm. Code; s. 285.65(3), Wis. Stats.] (2) The grain dryer may only be fired using natural gas. [s. NR 406.10, Wis. Adm. Code] (3) The facility shall conduct a stack test of the grain dryer PM (TSP) and PM10 emission rate if requested by the Department. [s. NR 439.07(1), Wis. Adm. Code] (4) The monthly average throughput of grain may not exceed 39,900 tons per month (based on a 12 consecutive month average). [s. 285.65(7), Wis. Stats.] (5) The grain dryer (P16) may not be routinely or intentionally used to dry raw grain that is used for ethanol production. Incidental small quantities of dried grain (5% or less), originally intended for the milling operation that is subsequently determined to not have sufficient quality for milled grain production may be used for ethanol production. Recordkeeping to demonstrate compliance with this requirement may be found in section.I.S'1.c.(6). [21] [s. 285.65(3), Wis. Stats.; 09-DCF-242]	(1) Whenever compliance emission testing for PM is required, USEPA Method 5, including backhalf (Method 202) shall be used to demonstrate compliance or an alternate method approved in writing by the Department, shall be used. [s. NR 439.06(1m), Wis. Adm. Code] (2) Reference Test Method for PM_{10} Emissions: Whenever compliance emission testing is required, the appropriate US EPA Method; 201 or 201A, including backhalf, shall be used to demonstrate compliance. [s. NR 439.06(1m), Wis. Adm. Code] (3) The permittee shall keep the following records: (a) Maximum capacities and maximum throughputs in tons. (b) Emissions factors. (c) Detailed (hourly) records of the throughput setting, (as recorded and converted to tons per hour of dried (15.5% moisture) grain, detailed hours of operation, and of the daily throughput checks / calibration. This information shall be converted to a daily throughput value (in tons per day) and tons per hour (24 hour average). (d) The daily grain throughput values shall be summarized monthly and used to determine the 12 month average throughput. [s. 285.65(3), Wis. Stats.] (4) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical discharge parameters (including total enclosure, and stack venting). [s. NR 439.04(1)(d), Wis. Adm. Code]

[20] ***The facility has elected to meet this limit in order to attain and maintain the national ambient air quality standard and increment for PM_{10}. This restriction also ensures that this project is minor under PSD.***

[21] This condition is necessary to assure that the emission increase from the ethanol plant, and other associated emissions increases were less than the PSD major source threshold that applied when the ethanol facility was initially constructed.

S'. P16, S23, Grain Dryer No. 3 Natural gas fired burner 19.34 MMBTU/hr; 84 ton per hour (~3000 Bu/hr) capacity (1999) This source is subject to NSPS. [Conditions from 07-DCF-003 and 09-DCF-242].

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter (PM) and PM_{10} Emissions	(c) The stack may not be equipped with a rainhat or other device which impedes the upward flow of the exhaust gases. [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code] (3) Emissions from the grain dryer may not exceed a monthly average of 7.13 tons per month (averaged over any 12 consecutive month period). [s. 285.65(3) and s. 285.65(7), Wis. Stats.]		(5) The facility shall maintain records of the physical changes made to the grain dryer elevator. [s. NR 439.04, Wis. Adm. Code] (6)(a) The facility shall have operational policies and instructions that prohibit drying of grain that is intended for ethanol production (including during wet harvest periods). (b) The facility shall also maintain monthly records of all of the following: (i) quantity of grain used for human consumption (non-ethanol) corn milling, in tons; (ii) quantity of grain dried at the facility, in tons; and (iii) quantity of post-milling grain used in the ethanol plant, in tons (not having sufficient quality to be used in the milling operation). (c) The facility shall conduct a calculation that shows that the monthly average quantity of grain dried on site is less than or equal to the monthly average quantity of grain directed to the human consumption (non-ethanol) corn milling operation with the exception of small quantities of grain (5% or less) originally intended for the milling operation that is subsequently determined to not have sufficient quality to be used for the milling operation (averaged over the most recent 12 consecutive month period). (d) All such records and calculations for the prior 12 months shall be summarized monthly and available within 15 days of the end of any month. [s. 285.65(3), Wis. Stats.; s. NR 439.04, Wis. Adm. Code; 09-DCF-242]

S'. P16, S23, Grain Dryer No. 3 Natural gas fired burner 19.34 MMBTU/hr; 84 ton per hour (~3000 Bu/hr) capacity (1999) This source is subject to NSPS. [Conditions from 07-DCF-003 and 09-DCF-242].

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
2. Visible emissions	(1) (a)The permittee may not discharge from P16, S23 into the atmosphere any gases which exhibit greater than 0% opacity from any column dryer with column plate perforation exceeding 2.4 mm diameter (ca. 0.094 inch) to meet NSPS. [s. NR 440.47(3)(a)1., Wis. Adm. Code] (1)(b) The permittee may not discharge from P16, S23 into atmosphere any gases which exhibit greater than 20% opacity from any column plate perforation not exceeding 2.4 mm diameter (ca. 0.094 inch) [s. 285.65(3), Wis. Stats.; s. NR 431.05, Wis. Adm. Code]	(1) Compliance emission tests shall be conducted to demonstrate compliance with the visible emission limit when process #P16, is operating at its allowable capacity if requested by the Department. If the compliance emission tests cannot be conducted within 30 days of the requested testing, the permit holder may request and the Department may approve, in writing, an extension of time to conduct the test(s). [s. NR 439.07(1), Wis. Adm. Code]	(1) Whenever compliance testing is required, USEPA Method 9 and the procedures in s. NR 440.11, Wis. Adm. Code shall be used to determine the opacity. [s. NR 440.47(4), Wis. Adm. Code, s. NR 439.06(9)(a)1., Wis. Adm. Code]
3. Fugitive Emissions	(1) No person may cause, allow or permit any material to be handled, transported or stored without taking precaution to prevent particulate matter from becoming airborne. [s. NR 415.04, Wis. Adm. Code]	(1) The permittee shall comply with the requirements established in I.W.1.b. and c. for compliance demonstration. [s. 285.65(3), Wis. Stats.] (2) The facility shall submit the measured fugitive dust 'silt loading' (as measured under I.W.c.) for the prior 6 month period to the Department with the monitoring submittal. [s. NR 439.04, Wis. Adm. Code; 09-DCF-242]	(1) The permittee shall comply with the requirements established in I.W.1.c. for recordkeeping and monitoring requirements. [s. 285.65(3), Wis. Stats.

S'. P16, S23, Grain Dryer No. 3 Natural gas fired burner 19.34 MMBTU/hr; 84 ton per hour (~3000 Bu/hr) capacity (1999) This source is subject to NSPS. [Conditions from 07-DCF-003 and 09-DCF-242].

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
4. Volatile Organic Compounds	(1) Latest Available Control Techniques and operating practices (LACT). (a) LACT is operation of a grain dryer with temperature controls to limit excessive temperatures. [s. NR 424.03(2)(c), Wis. Adm. Code] (b) 4.0 pounds per hour[22]. [s.285.65(7), Wis. Stats.; s. NR 406.10 and s. NR 424.03(2)(c), Wis. Adm. Code]	(1) The facility shall conduct a compliance emissions test of the grain dryer VOC emission rate if requested by the Department. See additional stack testing conditions under I.ZZZ.4. [s. NR 439.03, Wis. Adm. Code] (2) The facility shall monitor the temperature of the grain dryer, and establish the temperature range necessary to accomplish grain drying while avoiding excessive VOC emissions or odors [s. NR 439.04, Wis. Adm. Code]	(1) Reference Test Method for Volatile Organic Compound Emissions: Whenever compliance emission testing is required, the appropriate U.S. EPA Method; 18 or 25/25A shall be used to demonstrate compliance. Use of Method 25/25A results shall be appropriately adjusted to reflect emissions as VOCs. When approved in writing an equivalent test method may be substituted for the required test method. [s. NR 439.06(3)(a) and (8), Wis. Adm. Code] (2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the enclosed grain dryer. [s. NR 439.04(1)(d), Wis. Adm. Code] (3) The facility shall maintain records of the grain dryer operating temperature. The dryer temperature and temperature setting shall be recorded at least once every 8 hours. If the dryer temperature is recorded more frequently, the facility shall also maintain these more frequent records. These records shall be submitted to the Department upon request of the Department. [s. NR 439.04, Wis. Adm. Code; 09-DCF-242]

[22] The VOC emission limit of 4.0 pounds per hour is based on an estimated emission rate. LACT applies as it has been determined that obtaining 85% control of the emissions from (exiting) the dryer is not feasible under the standards applied under ch. NR 424, Wis. Adm. Code.

T. B01, S15, Boiler No. 1 8.4 MMBTU/hr. B02; S16 – Boiler No. 2. 6.3 MMBTU/hr These boilers are not subject to NSPS (< 10 MMBTU/hr) [Conditions from 02-RV-166, revised / superseded under 06-DCF-166 and 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter (PM) and PM_{10} Emissions	(1) The emissions may not exceed 0.064 lb/hr of PM and PM_{10} from S15.[23] [s. 285.65(3) and (7), Wis. Stats.] (2) The emissions may not exceed 0.048 lbs/hr of PM and PM_{10} from S16. [s. 285.65(3) and (7), Wis. Stats.] (3) 0.0076 pounds per million BTU from each respective stack. [24] [s. 285.65(3), Wis. Stats.; s. NR 404.08(2) and s. NR 415.06, Wis. Adm. Code] (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.	(1) The permittee may fire only natural gas. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code] (2) Each boiler shall be properly tuned and maintained, in accordance with the manufacturer's specifications and requirements. The malfunction prevention and abatement plan section, I.ZZZ.3. also applies to the boilers. [s. NR 439.11, Wis. Adm. Code].	(1) Whenever compliance emission testing for PM & PM_{10} is required, USEPA Method 5, including backhalf (Method 202) shall be used to demonstrate compliance or an alternate method approved in writing by the Department, shall be used. [s. NR 439.06(1m), Wis. Adm. Code] (2) 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]

[24] This emission limit (based on the AP-42 Emission Factor of 7.6 lbs/cf6, and a fuel containing 1000 BTU/cf) is more restrictive than that in s. NR 415.06(2)(a), Wis. Adm. Code (0.15 lbs/MMBTU). ***The stack parameters were previously noted as 30 ft. height, 1.33 ft. exit diameter for both stacks.***

T. B01, S15, Boiler No. 1 8.4 MMBTU/hr. B02; S16 – Boiler No. 2. 6.3 MMBTU/hr These boilers are not subject to NSPS (< 10 MMBTU/hr) [Conditions from 02-RV-166, revised / superseded under 06-DCF-166 and 08-DCF-155]

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter (PM) and PM_{10} Emissions	(a) The stack heights shall be at least 30 feet above ground level. [(s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code] (b) The stack inside diameter at the outlet of S15 may not exceed 1.25 feet. [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code] (c) The stack inside diameter at the outlet of S16 may not exceed 1.0 feet. [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code] (d) The stack may not be equipped with a rainhat or other device which impedes the upward flow of the exhaust gases. [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code]		**(3)** 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]
2. Visible Emissions	(1) The permittee may not discharge into the atmosphere any gases which exhibit greater than 20% opacity. [s. NR 431.05., Wis. Adm. Code]	(1) The permittee may fire only natural gas in the boilers. [s. 285.65(3), Wis. Stats.]	(1) Whenever compliance testing is required, USEPA Method 9 shall be used or an alternate method approved in writing by the Department, shall be used. [s. NR 439.06(9)(a)1., Wis. Adm. Code]

U. PM Monitoring [Conditions from 02-RV-166, revised / adopted under 06-DCF-166, 07-DCF-003, 08-DCF-155, and 09-DCF-242]

Condition Type	a. Specific Conditions
1. PM Monitoring	**(1)** The particulate matter ambient air quality monitor (e.g. TSP or PM_{10} as specified by the Department) shall be operated for a period of thirty six (36) months from permit issuance (of 09-DCF-242). This shall be installed and operated (at a new location if determined to be appropriate), according to guidance provided by the Department's Ambient Air Monitoring Section of the Bureau of Air Management as found in the Air Monitoring Comparability Program guidelines, and in consultation with the Department's regional air compliance inspector. If any exceedance of the particulate matter standards is detected by the monitor, the Permittee shall submit a written report for the Department's South Central Region, Air Management Section within 15 days of its occurrence. The report shall specify what activities took place during the exceedance period, if any on-site meteorological station is installed with the particulate monitor then the wind speed and wind direction recorded on those meteorological instruments during the exceedance period shall also be reported. This condition is necessary to show that the particulate matter ambient air quality standards are not violated. Additional control technology or operation restrictions may be requested by the Department if violations of the Ambient Air Quality Standards for particulate matter are detected by the monitor. [ss. 285.65(3) and s. 285.65(10), Wis. Stats.]

V. Fugitive F08 - Wet Cake Storage – Covered, walled area used to store the spent grain following centrifugation and prior to removal for use as a feed material or drying **(2007) [Conditions from 06-DCF-166]**

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Volatile Organic Compound (VOC) Emissions	(1) Latest Available Control Techniques and operating practices (LACT). LACT is distillation, evaporation and centrifugation of the stillage (wet cake) material to remove water and VOC's from the wet cake prior to storage. LACT includes implementation of an odor prevention and abatement plan (I.X.1.) which minimizes emissions resulting from extended storage. [s. NR 424.03(2)(c) and s. NR 426.03, Wis. Adm. Code]	(1) The permittee shall implement an odor prevention and abatement plan. See I.X.1. [s. NR 424.03(2)(c) and s. NR 426.03, Wis. Adm. Code] (2) The wet cake shall be de-watered to insure that the solids fraction is not less than 33 %, or with approval from the Department, an alternative range or limit determined to demonstrate compliance. [s. NR 424.03(2)(c) and s. NR 426.03, Wis. Adm. Code] (3) Wet cake may not be stored for more than 72 hours when the daily noon-time temperature exceeds 45° F. See I.X.1. [s. NR 424.03(2)(c) and s. NR 426.03, Wis. Adm. Code]	(1) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the wet cake storage area. [s. NR 439.04(1)(d), Wis. Adm. Code] (2) On any day when spent grain (wet cake) is being sent to the wet cake storage area, the facility shall measure and record, the solids fraction of the wet cake on a daily basis. [s NR 407.09(4)(a)1., and s. NR 439.04, Wis. Adm. Code] (3) The facility shall maintain records of the dates when wet cake is produced and sent to the storage area. [s. NR 439.04, Wis. Adm. Code] (4) See I.X.1.c.(4)
2. Visible Emissions	**(1)** The permittee may not discharge from F08 into the atmosphere any gases which exhibit greater than 0% opacity. [s. NR 415.04, Wis. Adm. Code]	**(1)** During normal operations, the requirements in I.V.3.b. shall be used to demonstrate compliance with the visible emissions limit. [s. 285.65(3), Wis. Stats.]	**(1)** Whenever compliance testing is required, USEPA Method 9 shall be used or an alternate method approved in writing by the Department, shall be used. [s. NR 439.06(9)(a)1., Wis. Adm. Code] **(2)** The records required in I.V.1.c.(2)&(3) shall be used as recordkeeping and monitoring requirements for the visible emissions limit. [s. 285.65(3), Wis. Stats.]
3. Fugitive Emissions	**(1)** No person may cause, allow or permit any material to be handled, transported or stored without taking precaution to prevent particulate matter from becoming airborne. [s. NR 415.04, Wis. Adm. Code]	**(1)** The permittee shall comply with the requirements established in I.W.1.b. for compliance demonstration. [s. 285.65(3), Wis. Stats.] (2) Wet cake may not be stored for more than 72 hours when the daily noon-time temperature exceeds 45° F. See I.X.1. [s. NR 424.03(2)(c) and s. NR 426.03, Wis. Adm. Code]	**(1)** The permittee shall comply with the requirements established in I.W.1.c. for recordkeeping and monitoring requirements. [s. 285.65(3), Wis. Stats.]

W. Facility Fugitive Particulate Matter Emissions (Fugitive Dust from the total facility; including F01, F02, F03, F04, F06, F07, F08; F09/P21) - Grain Conveyor to Ethanol Plant. [Conditions from 07-DCF-003, 08-DCF-155; 09-DCF-242]

Condition Type	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter Emissions (Fugitive Dust from the total facility; including F01, F02, F03, F04, F06, F07, F08)	(1) Minimization of fugitive dust emissions: No person may cause, allow or permit any materials to be handled, transported or stored without taking precautions to prevent particulate matter from becoming airborne. Nor may a person allow a structure, a parking lot, or a road to be used, constructed, altered, repaired, sand blasted or demolished without taking such precautions. [s. NR 415.04, Wis. Adm. Code] (2) Fugitive road dust (F06) may not exceed an average of 4.0 tons per month of total PM and not more than 0.79 tons per of PM_{10} (averaged over any 12 consecutive month period), prior to operation of the ethanol plant, following initial operation of the ethanol plant [s. 285.65(3), Wis. Stats.; s. NR 415.04, Wis. Adm. Code] (3) The facility fugitive dust plan shall be updated to incorporate the P21/F09 conveyor within 90 days of permit issuance (if not already specifically incorporated). The updated plan shall be submitted to the Department as per I.W.1,b.(4). [s. 285.65(3), Wis. Stats.; s. NR 415.04, Wis. Adm. Code]	(1) The permittee shall evaluate the road, scale, parking and material handling area conditions on a daily basis. Other areas of the plant shall also be evaluated as needed to prevent fugitive emissions. [s. NR 415.04, Wis. Adm. Code] (2) The permittee shall clean, sweep and remove dust material from the roads, scale, parking, material handling areas and other areas as needed to prevent fugitive dust emissions. The 'road', parking and material handling areas of the facility, shall be paved (e.g. hard surfaced: concrete or asphalt paving). [s. NR 415.04, Wis. Adm. Code] (3) Fabric spout extensions, covered conveyors and/or other controls shall be used where practical to minimize fugitive dust. [s. NR 415.04, Wis. Adm. Code] (4) The facility shall maintain and follow a fugitive dust plan for control of fugitive dust emissions from the facility. This plan shall be updated and submitted to the Wisconsin Department of Natural Resources; South Central Region Air Program, Reedsburg Area Office, PO Box 281, Reedsburg, WI, 53959 for approval within 90 days following initial operation of the ethanol facility, or upon request by the Department to address fugitive emissions. The Department may approve, conditionally approve, conditionally deny, deny or amend the plan. [s. NR 415.04, Wis. Adm. Code]	(1) Reference Test Method for Visible (Fugitive Dust) emissions: Whenever compliance emissions testing is required, US EPA Method 22 shall be used to demonstrate compliance. [s. NR 439.06(9)(b), Wis. Adm. Code] (2) The permittee shall keep daily records of the road conditions, evaluations, cleaning, sweeping and dust removal activities. The facility shall document the protocol used to evaluate the road, scale, parking and material handling area conditions and determine when cleaning, sweeping, and dust removal are needed. [s. NR 439.04, Wis. Adm. Code] (3) Facility shall keep copies of the fugitive dust plan at the facility available for inspection by the Department and available for use by the process operators. [s. NR 439.04, Wis. Adm. Code] (4) If using water or chemicals for dust control, the permittee shall record: (a) The date and time of the water or chemical application, what was applied; and (b) The area(s) at the facility where water or chemicals are applied. [s. NR 439.04(1)(d), Wis. Adm. Code] (5) The facility shall maintain prints, diagrams and other documentation of the fabric spout extensions, covered conveyors and/or other controls used where practical to minimize fugitive dust. [s. NR 415.04, Wis. Adm. Code] (6) The facility shall maintain and document

W. Facility Fugitive Particulate Matter Emissions (Fugitive Dust from the total facility; including F01, F02, F03, F04, F06, F07, F08; F09/P21) - Grain Conveyor to Ethanol Plant. [Conditions from 07-DCF-003, 08-DCF-155; 09-DCF-242]

Condition Type	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
		(5) The permittee shall take precautions to prevent particulate matter from becoming airborne. (a) Such precautions shall include, but not be limited to: i. Use, where possible, of water or chemicals for control of dust in construction operations. ii. Application of asphalt, water, suitable chemicals or plastic covering on dirt roads, material stockpiles and other surfaces which can create airborne dust, provided such application does not create a hydrocarbon, odor or water pollution problem. iii. Installation and use of hoods, fans and air cleaning devices to enclose and vent the areas where dusty materials are handled. iv. Covering or securing of materials likely to become airborne while being moved on public roads or railroads. v. The paving or maintenance of roadway areas so as not to create air pollution. [s. NR 415.04, Wis. Adm. Code] (6) The facility shall require and insure that all open grain or product trucks have the truck bed covered when leaving the facility and when entering where practical (and if so equipped). This shall be incorporated within the fugitive dust plan. [s. NR 415.04, Wis. Adm. Code] (7) Road surface silt loading may not exceed 6.0 g/m^2. [s. NR 415.04, Wis. Adm. Code; 09-DCF-242] (8) Other precautions such as truck speed limits, weight limits and/or other truck restrictions shall be applied as needed and incorporated into the fugitive dust plan. [s. NR 415.04, Wis. Adm. Code]	procedures and practices used to assure that each open truck is covered prior to exit from the facility as well as prior to entry where practical (e.g. excludes gravity trucks). The facility shall maintain records of observations which insure that their trucking contractors comply with the requirements of b.(6). [s. NR 439.04, Wis. Adm. Code] (7) The facility shall take samples and measure the road surface silt loading on a quarterly basis, or more frequently when requested by the Department (e.g. during dry periods) or at a lower frequency approved by the Department in writing, if less frequent sampling is determined sufficient. (a) Sampling shall be conducted prior to water flushing and/or sweeping for that day. For Road Surface Silt Loading: shall be calculated in grams of silt per square meter and be determined by sweeping and vacuuming at least 0.5 pounds of material (constituting the silt fraction) from representative strips of known area of the surface, an exposed filter bag weight of at least 3 times the tared (clean / precollection) filter bag weight and establishing the 75 micron or silt fraction through the use of a 200 mesh screen, unless all of the material is presumed to be 75 micron or less (USEPA AP-42 "Compilation of Air Pollutant Emission Factors" Appendix C1 and C2), or other methods as approved by the Department in writing. [s. NR 415.02(9), and s. NR 439.04, Wis. Adm. Code] (8) The facility shall maintain detailed records of truck and tanker traffic (Vehicle mile traveled) and other information sufficient to determine the road dust emission factors, using the 6.0 gram / m2 silt loading factor or a value

W. Facility Fugitive Particulate Matter Emissions (Fugitive Dust from the total facility; including F01, F02, F03, F04, F06, F07, F08; F09/P21) - Grain Conveyor to Ethanol Plant. [Conditions from 07-DCF-003, 08-DCF-155; 09-DCF-242]

Condition Type	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
			measured that month and shall calculate the monthly fugitive dust emissions (both PM and PM_{10}). The monthly values shall be used to determine the 12 month average values. [s. NR 439.04, Wis. Adm. Code]

X. Conditions Applicable to the Entire Facility [Conditions from 06-DCF-166, 07-DCF-003, 08-DCF-155, and 09-DCF-242]

Condition Type	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Malodorous Emissions	(1) General Limitations. No person may allow or permit emissions into the ambient air any substance or combination of substances in such quantities that an objectionable odor is determined to result unless preventative measures satisfactory to the department are taken to abate or control such emission. [s. NR 429.03(1), Wis. Adm. Code]	(1) The permittee shall prepare and implement an odor prevention, abatement and response plan. The plan shall be submitted to the Wisconsin Department of Natural Resources, Reedsburg Area Office Air Program; P.O. Box 281; Reedsburg, WI 53959 for approval within 90 days of initial operation. The department may approve, conditionally approve, conditionally deny, deny or amend the plan. [s. NR 426.03, Wis. Adm. Code] (2) If objectionable odors are determined to exist/persist as a result of process operations, the facility shall propose additional means of odor control by providing an amended odor prevention, abatement and response plan proposing the actions/controls needed to minimize the odors (See (1)). Any additional odor control required by the plan shall be outlined within a compliance schedule that accompanies the amended plan. [s. NR 426.03, Wis. Adm. Code] (3) The odor prevention and abatement plan shall include elements that require 72 hour limitations on the period that the wet cake may be stored, when the noon daily temperatures exceed 45° F. Operational procedures, housekeeping details, use of first-in/first out, use of food grade preservatives, etc. shall be incorporated into the plan as needed. [s. NR 426.03, Wis. Adm. Code]	(1) OBJECTIONABLE ODOR TESTS. An odor shall be deemed objectionable (malodorous) when either or both of the following tests are met: (a) Upon decision resulting from investigation by the department, based upon the nature, intensity, frequency, and duration of the odor as well as the type of area involved and other pertinent factors. (b) Or when 60% of a random sample of persons exposed to the odor in their place of residence or employment, other than employment at the odor source, claim it to be objectionable and the nature, intensity, frequency, and duration of the odor are considered. [s. NR 429.03(2), Wis. Adm. Code] (2) Facility shall maintain records and the procedures necessary to assure compliance with the odor prevention and abatement plan and shall incorporate these into the plan. [s. NR 439.04, Wis. Adm. Code] (3) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the entire facility. [s. NR 439.04(1)(d), Wis. Adm. Code] (4) The facility shall maintain a daily record of the noon time temperature measured at the facility and records of how the wet cake is being managed (e.g storage duration, daily records of wet cake produced and wet cake shipped). [s. NR 439.04, Wis. Adm. Code]

X. Conditions Applicable to the Entire Facility [Conditions from 06-DCF-166, 07-DCF-003, 08-DCF-155, and 09-DCF-242]

Condition Type	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
		(4) Where possible, the facility shall have the facility staff make observations to determine if malodors may be occurring, and shall investigate possible odor complaints received from the public. In the event of either, the facility, shall notify the department (Reedsburg office) of these within a day following the observation or complaint. [s. NR 426.03 and s. NR 439.03(4), Wis. Adm. Code].	(5) The facility shall maintain records of possible malodor observations and odor complaints received by the public. [s. NR 439.04, Wis. Adm. Code]
2. Synthetic Minor Limitations	(1) Total Ethanol production (200 proof equivalent including associated organics, prior to denaturing) from the facility may not exceed 4.167 million gallons per month (averaged over 12 consecutive months). Prior to the first 12 months of operation, the averaging shall be conducted over the number of months since initial operation [s. 285.65(3) and (7), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]	(1) This shall be calculated according to: P (avg.) = Σ Pi / n where the summation is from 1 to n where n= months since initial operation, not to exceed n=12. Pi is the production in the ith month (in gallons of 200 proof equivalent Ethanol, including associated organics), for the most recent (up to 12) months. The facility may use calendar or accounting months, but may not change the basis selected without approval from the Department. [s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code]	(1) The facility shall maintain records of the total amount Ethanol produced (gallons of 200 proof equivalent including associated organics, prior to denaturing) by this facility on a monthly basis and the calculated monthly average Ethanol production. The facility shall include any off specification production within the total, but this may be adjusted to the total mass of Ethanol and associated organics produced (not the water fraction). [s. NR 439.04, Wis. Adm. Code]
3. Violations.	(1) Any owner or operator who fails to construct a stationary source in accordance with the application as approved by the Department; any owner or operator who fails to construct and operate a stationary source in accordance with conditions imposed by the department under s. 285.65, Stats.; any owner or operator who modifies a stationary source in violation of conditions imposed by the department under s.		

X. Conditions Applicable to the Entire Facility [Conditions from 06-DCF-166, 07-DCF-003, 08-DCF-155, and 09-DCF-242]

Condition Type	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
	285.65, Stats.; or any owner or operator who commences construction or modification of a stationary source without applying for and receiving a permit as required under ch. NR 406, Wis. Adm. Code, shall be considered in violation of s. 285.60, Stats. **[s. NR 406.10, Wis. Adm. Code]**		
4. Revises / Modifies / Adopts	(1) The construction permit 08-DCF-155 revises / modifies and adopts the permit nos. 06-DCF-166 and 07-DCF-003 and represents the applicable limits that apply to the facility upon permit issuance and completion of the stack changes for sections. Lower emission limits (from the prior permits) will continue to apply until all of the noted stack changes have been completed in accordance with the permit See specific requirements within the individual process unit sections for individual limitations and ZZZ.6., for when they become effective. **[s. 285.65(3), Wis. Stats. and s. 285.65(7), Wis. Stats.]**	(1) The facility shall provide written monthly updates of the status of the stack changes being made. The facility shall notify the Department in writing when all of the stack changes have been completed, including a detailed listing of the stacks, their parameters, the changes made, and the stack parameters as noted within the permit. This shall be certified by the responsible official of the facility. The Department may request additional documentation confirming the stack parameter changes. [s. NR 406.10, Wis. Adm. Code]	

X. Conditions Applicable to the Entire Facility [Conditions from 06-DCF-166, 07-DCF-003, 08-DCF-155, and 09-DCF-242]

Condition Type	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
5. Additional Stack Requirements, applicable to all stacks noted as vertical / unobstructed stacks and other conditions associated with modeling	(1) For those stacks that are not inherently vertical / unobstructed, the permittee shall install appropriate mechanical system to open / remove the rain hats on stacks that have rain hats when the processes are operating, and which insure that the stack discharges vertically. The permittee shall let the South Central Regional, Reedsburg Service Center, P. O. Box 281, Reedsburg, WI 53959 know in writing when the mechanical systems on all the existing stacks are in place or of any changes to the existing systems. The permittee will install mechanical systems to open the rain hat on all new stacks and silos. The permittee shall keep and maintain appropriate records of installation of mechanical systems on the stacks and silos. [s. 285.65(3), Wis. Stats.; NR 406.10, Wis. Adm. Code] (2) In the absence of the mechanical system in place, the permittee shall manually remove the rain hats when the processes are in operation.[s. 285.65(3), Wis. Stats.; s. NR 406.10, Wis. Adm. Code **(3)** The facility shall install, and maintain fences / physical barriers / gates with sufficient supervision that assure that the general public is excluded from the area enclosed by the fences noted on the plot plan (as a portion of the permit application.).[25] [s. 285.65(3), Wis. Stats., s. NR 406.10, and s. NR 439.06(3)(a), Wis. Adm. Code]	(1) Refer to I.X.5.c.	(1) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the stack parameters, including information / documentation associated with mechanical systems and/or removable rain hats. [s. NR 439.04(1)(d), Wis. Adm. Code] (2) The facility shall conduct daily inspections and maintain associated records for each mechanical system to open / remove obstructions from the stacks, and for each manually removed rainhat. These records shall include the status of the stack, whether the process is in operation, the date / time of the observation, and the observers name. [s. NR 439.04(1)(d), Wis. Adm. Code] (3) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the fences and other barriers at the facility. The facility shall also maintain records of practices / procedures that assure that the facility fences / barriers / gates are supervised to restrict public access to the facility enclosure. [s. NR 439.04(1)(d), Wis. Adm. Code]

[25] The applicant relied upon use of fences and other physical barriers (e.g. buildings), to restrict access to the facility such that these areas were not considered "ambient air." The facility will be required to assure that the fences and other physical barriers are installed, and supervised to assure that the general public is excluded from the contained areas.

ZZZ. Conditions Applicable to the Entire Facility. [Conditions from 09-DCF-242]

Condition Type	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Federal Hazardous Air Pollutants (Federal HAPs).	(1) No person may cause, allow or permit the combined individual monthly average emission of any federal hazardous air pollutant (federal HAP) emitted, as identified in Section 112(b) of the Clean Air Act [42 USC 7412(b)], to exceed 1,666 pounds per month, averaged over any 12 consecutive calendar months. **[s. 265.65(7), Wis. Stats. (Elected Condition/Avoid MACT)]** (2) No person may cause, allow or permit the combined monthly average emission of all federal hazardous air pollutants (federal HAPs) emitted each month, as identified in Section 112(b) of the Clean Air Act (42 USC 7412(b)), to exceed 4,166 pounds per month, averaged over any 12 consecutive calendar months. **[s. 265.65(7), Wis. Stats. (Elected Condition/Avoid MACT)]**	(1) The permittee shall determine, either analytically or through the use of published literature (e.g., MSDS or AP-42) and good engineering practices, for each material used or applied (e.g., fuels, coatings, thinning agents and cleanup solvents), the identity of all federal HAPs present or emitted, as identified in Section 112(b) of the Clean Air Act, and the maximum concentrations or emission rates of these HAPs. **[s. NR 407.09(4)(a)3.b., Wis. Adm. Code]** (2) The permittee shall determine monthly the combined monthly average emission of each federal HAP emitted, in units of pounds per month, averaged over the 12 most recent consecutive calendar months. **[s. NR 407.09(4)(a)3.b., Wis. Adm. Code]**	(1) Whenever any hazardous air pollutant concentration or emission rate testing of any material (e.g., ink, coating, thinning agent or cleanup solvent) 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]** (2) Recordkeeping and monitoring are not required for any emission unit or operation that does not have the potential to violate the emission limitation under normal operating conditions. **[ss. 285.65(3) and 285.63(4)(b), Wis. Stats.]**
2. State Hazardous Air Pollutants (State HAPs).	(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	(1) The permittee shall only burn Group 1 virgin fossil fuels (Natural gas, propane, distillate #2 and diesel fuel oil) when firing any fuel combustion sources.	(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

ZZZ. Conditions Applicable to the Entire Facility. [Conditions from 09-DCF-242]

Condition Type	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
	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)]***	**[s. NR 407.09(4)(a)3.b., Wis. Adm. Code]*** (2) 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]*** (3) 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]*** (4) When the facility's new or increased potential emission rate of any State HAP exceeds a published de minimus	US EPA or the Department. **[ss. NR 407.09(1)(c)1.a. & 4(a)1. and NR 439.06(8), Wis. Adm. Code]** (2) Recordkeeping and monitoring are not required for any applicable requirement where the facility does not have the potential to violate the emission limitations under normal operating conditions. The facility does not presently have the potential to emit, under normal operation conditions, any State HAP at an emission rate that has been determined to be injurious. **[ss. 285.65(3) and 285.63(4)(b), Wis. Stats.]***

ZZZ. Conditions Applicable to the Entire Facility. [Conditions from 09-DCF-242]

Condition Type	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
		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]***	
3. Malfunction Prevention and Abatement Plan.	(1) A malfunction prevention and abatement plan shall be prepared and followed for the plant. **[s. NR 439.11, Wis. Adm. Code]** (2) 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]** (3) The facility shall submit the plan to the Wisconsin Department of Natural Resources, South Central Region Air Program, Reedsburg Area Office for review. The department may amend the	(1) The malfunction prevention and abatement 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 malfunction prevention and abatement plan shall include installation, maintenance and routine calibration procedures for the process monitoring and control equipment instrumentation. This plan shall require an instrumentation calibration at the frequency specified by the manufacturer, yearly or at a frequency based on good engineering practice as established by operational history, whichever is more frequent. Inspection and calibration shall also be conducted	(1) The malfunction prevention and abatement plan shall include additional practices and procedures to address low measured pressure drops (less than 1.5 inches of water column or other low level value approved by the Department) that are observed with fabric filters that have not been recently replaced, and establish standards for each baghouse as to when a new bag is expected to be 'conditioned' (following replacement) and have a pressure drop of 1.5 inches of water column or more (or other approved value). This shall include procedures to insure that the bags are properly seated (attached to the baghouse frame), and additional practices to address continued low pressure drops following bag replacement: The plan shall require fabric filter baghouses that have or are expected to have continued low pressure drops following bag replacement should be treated with an appropriate conditioning agent after 24 hours (or sooner if appropriate for the conditioning agent used, but not more than 48 hours) of operation following bag replacement, or other timeframes approved by the

ZZZ. Conditions Applicable to the Entire Facility. [Conditions from 09-DCF-242]

Condition Type	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
	plan if deemed necessary for malfunction prevention or for the reduction of excess emissions during malfunctions. **[s. NR 439.11(2), Wis. Adm. Code]**	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 malfunction prevention and abatement plan shall require a copy of the operation and maintenance manual for the control equipment to 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]**	Department in writing. [s. NR 439.11(1), Wis. Adm. Code] (2) The facility shall notify the Department within 14 days of making changes to monitoring which are authorized by the permit. These shall be accompanied with documentation that is used to establish an alternative range. The Department may approve, deny or amend proposed changes to monitoring ranges, or request additional documentation and/or compliance testing justifying the proposed changes. [s. NR 439.11(1), Wis. Adm. Code] (3) The facility shall maintain records of baghouse fabric filter bag replacement, the observed initial pressure drop, the period of time for the baghouse to operate in its normal / operational pressure drop, whether a conditioning agent is applied and whether any additional checks or inspections of the baghouse were necessary as a result of low pressure drops. [s. NR 439.04, Wis. Adm. Code]

ZZZ. Conditions Applicable to the Entire Facility. [Conditions from 09-DCF-242]

Condition Type	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
4. Stack Testing Requirements.	(1) If any required compliance emission test(s) cannot be conducted within the time frames specified in this permit, the permit holder may request and the Department may approve, in writing, an extension of time to conduct the test(s). **[s. NR 439.07, Wis. Adm. Code]** (2) 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]** (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. The notification and test plan	(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]**	None Applicable.

ZZZ. Conditions Applicable to the Entire Facility. [Conditions from 09-DCF-242]

Condition Type	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
	shall be submitted to the Wisconsin Department of Natural Resources. **[s. NR 439.07(2), Wis. Adm. Code]** (4) VOC emission rate limits within the permit refers to the overall mass emission rate of all species of VOCs emitted and are not limited to the VOCs as measured by Method 25 or 25A, referred to as "VOCs as carbon," which may exclude the mass of some of the emissions. [s. 285.65(3), Wis. Stats.]		
5. Compliance Reports/Records.	(1) Except as provided under ZZZ.7.a.(7), the permittee shall submit periodic monitoring reports (commencing for the period ending Dec. 31, 2009). **[s. NR 407.09(1)(c)3. and s. NR 439.03, Wis. Adm. Code]** (2) Except as provided under ZZZ.7.a.(7), the permittee shall submit periodic certification of compliance (commencing for the period ending Dec. 31, 2009). **[s. NR 407.09(4)(a)3. and s. NR 439.03,, Wis. Adm. Code]**	(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. (a) The time periods to be addressed by the submittal January 1 to June 30 and July 1 to December 31. (b) The report shall be submitted to the Wisconsin Department of Natural Resources, South Central Region Air Program, Reedsburg Area Office within 45 days after the end of each reporting period.	

ZZZ. Conditions Applicable to the Entire Facility. [Conditions from 09-DCF-242]

Condition Type	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
	(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]**	(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. **[ss. NR 407.09(1)(c)3. & NR 439.03(1)(b), Wis. Adm. Code]** (2) The permittee shall submit an annual certification of compliance with the requirements of this permit to the Wisconsin Department of Natural Resources, South Central Region Air Program, Reedsburg Area Office and to Compliance Data – Wisconsin, Air and Radiation Division, US EPA, 77 W. Jackson Street, Chicago, IL 60604. (a) The time period to be addressed by the report is January 1 to December 31 of the preceding year. (b) The report shall be submitted to the Wisconsin Department of Natural	

ZZZ. Conditions Applicable to the Entire Facility. [Conditions from 09-DCF-242]

Condition Type	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
		Resources and the US EPA within 45 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. **[ss. NR 407.09(4)(a)3. & NR 439.03(1)(c), Wis. Adm. Code]**	
6. Revises / Modifies / Adopts	(1) The construction permit 09-DCF-242 revises / modifies and adopts the permit nos. 06-DCF-166, 07-DCF-003 and 08-DCF-155 and represents the applicable limits that apply to the facility upon permit issuance. See specific requirements within the individual process unit sections for individual limitations and I.ZZZ.7. for when they become effective. **[s. 285.65(3), Wis. Stats. and s. 285.65(7), Wis. Stats.]**	(1) The facility shall provide written monthly updates of the status of the stack changes being made. The facility shall notify the Department in writing when all of the stack changes have been completed, including a detailed listing of the stacks, their parameters, the changes made, and the stack parameters as noted within the permit. This shall be certified by the responsible official of the facility. The Department may request additional documentation confirming the stack parameter changes. [s. NR 406.10, Wis. Adm. Code]	
7. Construction Permit 09-DCF-242 Transitional Language	**(1) Notifications.** The permittee shall inform the Department of the following dates: (a) The date construction or modification	(1) Notifications. The permittee shall submit to the Department of Natural Resources, South Central Region Air Program, Reedsburg Area Office in writing, within 15 days of the date the	None Applicable.

ZZZ. Conditions Applicable to the Entire Facility. [Conditions from 09-DCF-242]

Condition Type	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
	commences (or commenced) on any new or modified emission unit(s) addressed in Permit 09-DCF-242 (The grain dryer was issued a construction waiver, and has already begun initial operation). (b) The date the modified emission unit(s) (sections I.S'., I.U. and I.W.) becomes operational under 09-DCF-242. (c) The date revised emission unit(s) (sections I.A., I.J., I.K., I.L., I.M., I.N., I.O., I.R., I.V. and I.X.) becomes operational under 09-DCF-242 (upon permit issuance). For purposes of this permit, "operational" shall be defined as the first time any process related air contaminant is emitted into the ambient air, and the respective facility stack parameters have been updated in accordance with 09-DCF-242. **[s. NR 439.03(1), Wis. Adm. Code (Permit 08-DCF-155)]** **(2) Construction Authorization Expiration.** The Authorization to Construct, under Construction Permit	event, the following: (a) The date construction or modification commences on the any new or modified emission unit(s) addressed in Permit 09-DCF-242. (b) The date the revised / modified emission unit(s) (sections I.S'., I.U. and I.W.) becomes operational under 09-DCF-242. ~~(c) The date new emission unit(s) (section I.N., I.II.) becomes operational under 08-DCF-155.~~ **[s. NR 439.04(1)(d), Wis. Adm. Code (Permit 09-DCF-242)]** (2) **Malfunction Prevention and Abatement Plan.** The owner or operator shall update the facility's Malfunction Prevention and Abatement Plan to include the modified emission unit (sections I.S.) within 60 days of permit issuance . **[s. NR 439.11(1), Wis. Adm. Code (Permit 09-DCF-242)]** (3) **Emission Stack Testing.** Upon completion of any required compliance	

ZZZ. Conditions Applicable to the Entire Facility. [Conditions from 09-DCF-242]

Condition Type	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
	09-DCF-242 expires 18 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. If 18 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 (Permit 08-DCF-155)]** **(3) Modified Emission Unit(s)** The sections I.S'., I.U., I.W., and I.ZZZ. shall apply upon permit issuance (of	emission tests of the revised / modified emission unit (sections I.S'., …), ~~and the new emission unit (section I.N., I.II.)~~ the permittee shall submit to the Department of Natural Resources, South Central Region Air Program, Reedsburg Area Office two copies of the report on the tests for evaluation within 60 days of the date the tests were completed. **[s. NR 439.04(1)(d), Wis. Adm. Code (Permit 08-DCF-242)]** (4) **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 specified or described in the plans and specifications dated Novermber 24, 2009 (initial application received); December 24, 2009; February 9, 2010; February 26, 2010; March 3, 2010; March 18, 2010; March 29, 2010; March 30, 2010; April 5, 2010; April 28, 2010. The updates shall be made within 60 days of the date of the change. Other information to be submitted shall include the notification	

ZZZ. Conditions Applicable to the Entire Facility. [Conditions from 09-DCF-242]

Condition Type	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
	09-DCF-242) ~~and commencing construction / modification under this permit~~. **[s. NR 439.03(1), Wis. Adm. Code (Permit 09-DCF-242)]** **(4) Revised Emission Unit(s) (**I.A., I.J., I.K., I.L., I.M., I.N., I.O., I.R., I.V. and I.X.**). T**he revised operations shall operate under the conditions in Section I.A., I.J., I.K., I.L., I.M., I.N., I.O., I.R. I.V. and I.X., of the construction permit 09-DCF-242 upon issuance. **[s. NR 439.03(1), Wis. Adm. Code (Permit 09-DCF-242)]** **(5) Malfunction Prevention and Abatement Plan.** The permittee shall update the facility's Malfunction Prevention and Abatement Plan to include the operation and maintenance of the control equipment associated with the revised / modified emission unit(s) (I.S., I.U.). **[s. NR 439.11, Wis. Adm. Code (Permit 09-DCF-242)]** **(6) Emission Stack Testing.** The permittee shall conduct a compliance	requirements and stack tests results. The continued operation of the modified and new emission units addressed in this construction permit are prohibited once the authorization to construct expires per Condition ZZZ.7.a.(2), unless any required updates have been submitted and the permittee has satisfied the notification requirements of Condition ZZZ.7.b.(1). **[s. NR 439.04(1)(d), Wis. Adm. Code (Permit 08-DCF-155)]** (5) **Submittal of Malfunction Prevention and Abatement Plan.** The permittee shall update the facility's Malfunction Prevention and Abatement Plan to include the operation and maintenance of the control equipment associated with any new and modified emission unit(s). **[s. NR 439.04(1)(d), Wis. Adm. Code (Permit 09-DCF-242)]** (6) 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	

ZZZ. Conditions Applicable to the Entire Facility. [Conditions from 09-DCF-242]

Condition Type	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
	emission stack test of modified emission unit(s) (sections I.S'.), for volatile organic compound emissions [and other pollutants, if appropriate] within 90 days of the date these units become operational under the construction permit (or longer if specified within the respective section). (a) If compliance emission test(s) cannot be conducted within the time frames specified, the permit holder may request and the Department may approve, in writing, an extension of time to conduct the test(s). (b) 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. (c) 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	affected emission unit(s). **[s. NR 439.04(1)(d), Wis. Adm. Code (Permit 09-DCF-242)]**	

ZZZ. Conditions Applicable to the Entire Facility. [Conditions from 09-DCF-242]

Condition Type	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
	approval. When approved in writing, an equivalent test method may be substituted for the reference test method. **[s. NR 439.07, Wis. Adm. Code (Permit 09-DCF-242)]** **(7) Compliance Reports/Records.** The permittee shall submit periodic monitoring reports and certification of compliance as required by s. ZZZ.5.a.(1) and (2) for any modified and new emission unit for the period when that unit becomes operational. Note that compliance monitoring and reporting requirements and limitations of any unmodified units remain in effect. **(8) 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 09-DCF-242. **NR 407.04(1)(b), Wis. Adm. Code (Permit 09-DCF-242)]**		

ZZZ. Conditions Applicable to the Entire Facility. [Conditions from 09-DCF-242]

Condition Type	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
	(9) Phased/Staged Construction. Phased/Staged construction refers to construction/modification of an operation that occurs in separate/distinct phases or stages. Separate notification of commencing construction of each stage/phase of construction shall be submitted to the Department. Applicable limitations for each stage/phase of the operation do not apply until the source has [commenced/initially operated/completed] construction/modification of the stage/phase. For phased construction/modification subject to PSD review, that commences 18 months or more following initial permit issuance, the permittee shall submit information for reevaluating BACT to the Department at least 18 months prior to the commencement of construction/modification. The facility shall submit a permit revision application to incorporate the new PSD BACT, if necessary to update the PSD BACT. **[ss. 285.60(1)(a)2 and 285.66(1), Wis. Stats.; s. NR 405.08(4), s. NR 406.12,**		

ZZZ. Conditions Applicable to the Entire Facility. [Conditions from 09-DCF-242]

Condition Type	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
	Wis. Adm. Code (Permit 09-DCF-242)]		