

APPENDIX 6B

**JONES ISLAND WASTEWATER TREATMENT PLANT
AIR POLLUTION CONTROL OPERATING PERMIT**



(A-7)

File

LETTER OF TRANSMITTAL

TO HNTB
11414 West Park Place
Suite 300
Milwaukee, WI 53224

ATTN Bill Krill

RE 2020 Facility Plan
Title V Air Permits

FROM Milwaukee Metropolitan Sewerage District
260 W Seeboth Street
Milwaukee, WI 53204

DATE 1/4/05

CONTRACT NO. M03002P

WE ARE SENDING YOU ☒ Attached ☐ Under separate cover via _____ the following items:

☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications

☐ Copy of letter ☐ Change order

COPIES	NO.	DESCRIPTION
1		MMSD JI WTP Pollution Control Operating Permits
1		MMSD SS WTP Pollution Control Operating Permits

THESE ARE TRANSMITTED AS CHECKED BELOW:

☐ For acceptance ☐ No exception taken, as submitted ☐ Resubmit ___ copies for approval

☒ For your use ☐ Returned for corrections ☐ Submit ___ copies for distribution

☒ As requested ☐ Other ☐ Return ___ corrected prints

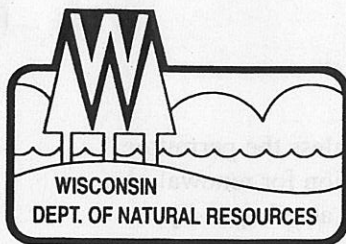
☐ For review and comment

REMARKS Final Permits of Jones Island and South Shore, dated November 22, 2004 and August 31, 2004 respectively

cc: (cover only): T.Bate, S.Anthony,J.Jankowski, 1465

SIGNED Jeffrey Schilling

If enclosures are not as noted, please notify us at once.



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor
Scott Hassett, Secretary
Gloria L. McCutcheon, Regional Director

Southeast Region Headquarters
2300 N. Dr. Martin Luther King, Jr. Drive
PO Box 12436
Milwaukee, Wisconsin 53212-0436
Telephone 414-263-8579
FAX 414-263-8716
TTY 414-263-8713

November 22, 2004

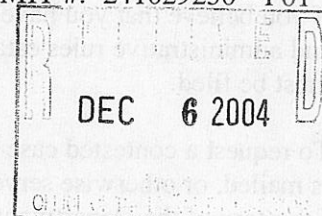
IN REPLY REFER TO: 4530-1

FID #: 241029250

PERMIT #: 241029250 - P01

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Kevin Shafer, P.E., Executive Director
Milwaukee Metropolitan Sewerage District
260 W. Seeboth St.
Milwaukee, WI 53207



Dear Mr. Shafer:

Your application for an air pollution control operation permit has been processed in accordance with s. 285.62, Wis. Stats.

The enclosed operation permit is issued to provide authorization for your source to operate an existing wastewater treatment facility at Jones Island in accordance with the requirements and conditions set forth within Parts I and II of the permit. Please read it carefully. This permit expires **November 22, 2009**. This source may not operate after this operation permit expires unless you have submitted a new operation permit application that has been deemed complete

A copy of this permit should be available at the source for inspection by any authorized representative of the Department. Questions about this permit should be directed to the Southeast Region Air Program, 2300 N. Martin Luther King Dr., Milwaukee, WI 53212, phone: (414) 263-8579, fax: (414) 263-8716.

Please note that the following emission limitations may apply to the insignificant emissions units listed in your permit application:

- 1) Section NR 415.05, Wis. Adm. Code - Particulate emission limits for processes;
- 2) Section NR 415.06, Wis. Adm. Code - Particulate emission limits for fuel burning installations;
- 3) Section NR 425.07, Wis. Adm. Code - Particulate emission limits for incinerators;
- 4) Section NR 423.03, Wis. Adm. Code - Solvent metal cleaning;
- 5) Sections NR 431.04 and 431.05, Wis. Adm. Code - Visible emission limitations;
- 6) Section NR 485.05, Wis. Adm. Code - Visible emission limits for motor vehicles, internal combustion engines and mobile sources; and
- 7) Section NR 485.055, Wis. Adm. Code - Particulate emission limits for motor gasoline and diesel internal combustion engines.

While these emission limitations are not specifically listed in your air pollution control permit, you are responsible for ensuring compliance with all emission limitations which apply to the insignificant emission units at your facility.

No permittee may continue operation of a source after the operation permit expires, unless the permittee submits a timely application for renewal of the permit. If you submit a timely application for renewal, the existing operation permit will not expire until the renewal application has been finally acted upon by DNR. [ss. 227.51(2), 285.62(8)(b), Wis. Stats. and NR 407.04(2), Wis. Adm. Code].

NOTICE OF APPEAL RIGHTS

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

To request a contested case hearing pursuant to s. 285.81, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to serve a petition for a contested case hearing on the Secretary of the Department of Natural Resources. Any such petition for hearing shall set forth the issues sought to be reviewed, the interest of the petitioner, the reasons why a hearing is warranted and the relief desired. Pursuant to s. 285.81(1m), Wis. Stats., if a permit holder or applicant seeks a hearing challenging part of a permit, the remainder of the permit shall become effective. If a permit holder or applicant challenges an emission limitation in a permit, the emission limitation becomes effective despite a challenge, unless the permit holder or applicant obtains a stay of the emission limitation.

A person other than a permit holder or applicant may file a petition for a contested case hearing if the requirements of s. 285.81(2), Wis. Stats., are met.

For judicial review of a decision pursuant to ss. 227.52 and 227.53, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to file your petition with the appropriate circuit court and serve the petition on the Department. Such a petition for judicial review shall name the Department of Natural Resources as the respondent.

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES



Chong-Le Li
Environmental Engineer
Wisconsin Department of Natural Resources
Southeast Region Air Program
Air Permit Section

cc: Ashok Singh - Southeast Region Headquarters
AM/7 - FOP

Enclosure

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

Findings of Fact

The Department of Natural Resources (DNR) finds that:

- 1) Jones Island Wastewater Treatment Plant, 700 E. Jones St., Milwaukee, WI 53207 has applied for an air pollution control operation permit. The authorized representative of the facility is Mr. Kevin Shafer, Executive Director.
- 2) Jones Island Wastewater Treatment Plant submitted an air pollution control permit application and plans and specifications and any additional information describing the air pollution source on 08/22/1995 (Operation permit application), 10/09/2002 (Inspection), 04/07/2003 (Updates for original FOP application), 01/12/2004 (Updates for stack parameters), 01/22/2004 (Updates for stack parameters), 05/14/2004 (Updates for emission factors for HAPs from D&D Facility), 07/14/2004 (Updates for stack parameters for S20 and S21), 09/16/2004 (Email, information about the type of the two boilers).
- 3) DNR has reviewed Jones Island Wastewater Treatment Plant's air pollution control operation permit application, plans, specifications and other information available to DNR.
- 4) DNR has prepared an analysis and a Preliminary Determination on the approvability of the operation permit application.
- 5) This permit is for the operation of a Part-70 Source.
- 6) DNR has complied with the procedures set forth in s. 285.62, Wis. Stats.
- 7) The air contaminant source meets all of the applicable criteria in ss. 285.63 and 285.64, Wis. Stats.
- 8) DNR has complied with the requirements of s. 1.11, Stats., and ch. NR 150, Wis. Adm. Code.

Conclusions of Law

DNR concludes that:

- 1) DNR has authority under sec. 285.11(1), Wis. Stats., to promulgate rules contained in chs. NR 400-499, Wis. Adm. Code, including but not limited to rules containing emission limits, compliance schedules and compliance determination methods.
- 2) DNR has the authority under ss. 285.11(1), (5) and (6), 285.27(1) and (2) and 285.65, Wis. Stats., and chs. NR 400-499, Wis. Adm. Code, to establish emission limits for sources of air pollution.

- 3) DNR has the authority to issue air pollution control permits and to include conditions in such permits under ss. 285.60, 285.62, 285.63, 285.64, and 285.65, Wis. Stats.
- 4) The emission limits included in this permit are authorized by ss. 285.65, Wis. Stats., and NR 400-499, Wis. Adm. Code.
- 5) DNR is required to comply with sec. 1.11, Stats., and ch. NR 150, Wis. Adm. Code, in conjunction with issuing an air pollution control permit.

Decision

Jones Island Wastewater Treatment Plant is authorized to operate an existing sewerage treatment facility in conformity with the emission limits, monitoring, record keeping and reporting requirements and specific and general conditions set forth in this permit.

AIR POLLUTION CONTROL OPERATION PERMIT

EI FACILITY NO. 241029250

PERMIT NO.

241029250 - P01

TYPE: Operation Permit, Part-70 Source

In compliance with the provisions of Chapter 285, Wis. Stats., and Chapters NR400 to NR499, Wis. Adm. Code,

Name of Source: Jones Island Wastewater Treatment Plant
Street Address: 700 E. Jones St.
Milwaukee,
Milwaukee County, Wisconsin

Responsible Official, & Title: Kevin Shafer, P.E., Executive Director

is authorized to operate an existing sewerage treatment facility in conformity with the conditions herein.

THIS OPERATION PERMIT EXPIRES November 22, 2009

RENEWAL APPLICATION MUST BE SUBMITTED AT LEAST 6 MONTHS, BUT NOT MORE THAN 18 MONTHS, PRIOR TO THIS EXPIRATION DATE. [s. NR 407.09(1)(b)1., Wis. Adm. Code].

No permittee may continue operation of a source after the operation permit expires, unless the permittee submits a timely and complete application for renewal of the permit [s.285.66(3), Wis. Stats. and NR 407.04(2), Wis. Adm. Code].

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 Milwaukee, Wisconsin, November 22, 2004

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
For the Secretary

By Daniel Schramm
Daniel Schramm, Supervisor
SER Air Management Program
Milwaukee Service Center

Preamble

An Asterisk "*" throughout this document denotes legal authority, limitations and conditions which are not federally enforceable.

Concurrent Permit Actions Performed as Part of the Review and Issuance of Permit 241029250 – P01

Construction Permits Issued (After the Fact) In Conjunction with Permit 241029250 – P01 under s. 285.61(8), Wis. Stats.:

Revised Construction Permits Issued in Conjunction with Permit 241029250 – P01 under s. NR 406.11, Wis. Adm. Code:

None.

Operation (CONOP) Permits Issued in Conjunction with Permit 241029250 – P01 under s. 285.62(7)(b), Wis. Stats.:

None.

Revised Operation Permits Issued in Conjunction with Permit 241029250 – P01 under ss. NR 407.11, 407.12, 407.13 and/or 407.14, Wis. Adm. Code:

None.

The following permits are adopted by Permit 241029250 – P01, under s. 285.65(3), Wis. Stats. and ss. NR 406.11(1)(c) and (d), and NR 407.15(3) and (4), Wis. Adm. Code, which then becomes the primary enforceable document:

96-VAR-221
96-DJH-211
96-RV-088
96-RV-088R1
96-RV-088-OP

Stack and Process Index

Stack S11

Process P01 – P12:	Rotary sludge dryers
Process P16:	Dust collection system for dryer and cyclone area.
Process P30	16 MW electricity generating turbine
Process P31	16 MW electricity generating turbine

Stack 01

Process P30:	16 MW electricity generating turbine
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Stack 02

Process P31:	16 MW electricity generating turbine
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Stack S17

Process P17:	Dust collection system for recycle bins and classification area.
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Stack S20	
B20:	11.7 MM Btu/hr Cleaver Brooks boiler produces hot water
Stack S21	
B21:	11.7 MM Btu/hr Cleaver Brooks boiler produces hot water
Stack S70 (Including S18, S40, S46 to S49, S50 to S58 and S60)	
Process F70 (Including P18, P19, P20, F40 to F45, F46 to F49, F50 to F58 and P60):	All wastewater treatment and solids handling processes
Stack S30	
Process F30:	Rail Loadout Dust Filter M-27-29-5
Stack S31	
Process F31:	Rail Loadout Dust Filter M-27-29-6
Stack S32	
Process F32:	Dense Phase System Filter Blower M-27-29-1-2
Stack S33	
Process F33:	Dense Phase System Filter Blower M-27-29-2-2
Stack S34	
Process F34:	Dust Return Receiving Filter Blower (Tank 33) M-27-48
Stack S35	
Process F35:	Vacuum Cleaning Filter VC-1-2
Stack S36	
Process F36:	Silo Air Purge Exhaust Fan M-27-39-1.
Stack S37	
Process F37:	Silo Air Purge Exhaust Fan M-27-39-2
Stack S38	
Process F38:	Dust Filter Exhaust Blower M-27-29-3-2
Stack S39	
Process F39:	Spare Dust Filter Exhaust Blower M-27-29-4-2

Permit Shield Unless precluded by the Administrator of the USEPA, compliance with all emission limitations in this operation permit is considered to be compliance with all emission limitations established under ss. 285.01 to 285.87, Wis. Stats., and emission limitations under the federal clean air act, that are applicable to the source if the permit includes the applicable limitation or if the Department determines that the emission limitations do not apply. The following emission limitations were reviewed in the analysis and preliminary determination and were determined not to apply to this stationary source:

1. S11, P30 and P31 (two turbines)
 - s. NR 440.50, Wis. Adm. Code
 - National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines
2. S70, P70 (wastewater treatment facility)
 - POTW MACT
3. S20, B20 and S21, B21 (two natural gas fired Cleaver Brooks four-pass firetube hot water boilers, rated at 11.7 mmBtu/hr, #2 fuel oil is the backup fuel)
 - Boiler MACT
 - s. NR 440.207, Wis. Adm. Code

Part I The headings for the areas in the permit are defined below. The legal authority for these limitations or methods follows them in [brackets].

Pollutant -- This area will note which pollutant is being regulated by the permit.

Limitations -- This area will list all applicable emission limitations that apply to the source, including case-by-case limitations such as Latest Available Control Techniques (LACT), Best Available Control Technology (BACT), or Lowest Achievable Emission Rate (LAER). It will also list any voluntary restrictions on hours of operation, raw material use, or production rate requested by the permittee to limit potential to emit.

Compliance Demonstration -- The compliance demonstration methods outlined in this area may be used to demonstrate compliance the associated emission limit or work practice standard listed under the corresponding Limitations area. The compliance demonstration area contains limits on parameters or other mechanisms that will be monitored periodically to insure compliance with the limitations. The requirement to test as well as initial and periodic test schedules, if testing is required, will be stated here. Notwithstanding the compliance determination methods which the owner or operator of a sources is authorized to use under ch. NR 439, Wis. Adm. Code, the Department may use any relevant information or appropriate method to determine a source's compliance with applicable emission limitations.

Reference Test Methods, Recordkeeping, and Monitoring Requirements -- Specific USEPA Reference test methods or other approved test methods will be contained in this area and are the methods that must be used whenever testing is required. A reference test method will be listed even if no testing is immediately required. Also included in this area are any recordkeeping requirements and their frequency and reporting requirements. Accuracy of monitoring equipment and frequency of monitoring shall meet, at a minimum, the requirements of ss. NR 439.055(3) and (4), Wis. Adm. Code, as specified in Part II of this permit.

Condition Type -- This column will specify other conditions that are applicable to the entire facility that may not be tied to one specific pollutant.

Conditions -- Specific conditions usually applicable to the entire facility or compliance requirements.

Compliance Demonstration -- This area contains monitoring and testing requirements and methods to demonstrate compliance with the conditions.

PART II -- This section contains the general limitations that the permittee must abide by. These requirements are standard for most sources of air pollutants so they are included in this section with every permit.

PART I
APPLICABLE LIMITATIONS AND SPECIFIC CONDITIONS

- A. S11, P01 – P12, C01: Rotary sludge dryers, installed in 1994
P16, C16: Dust collection system for dryer and cyclone area.
P30: 16 MW electricity generating turbine, installed in 1971 (please see B. S11 for limitations)
P31: 16 MW electricity generating turbine, installed in 1971 (please see B. S11 for limitations)

a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING REQUIREMENTS
<p>1. Particulate matter emissions</p> <p>(1) 0.010 grains per dscf (w/o P15); or, (2) ¹ 23.50 pounds per hour. [s. NR 415.05(1)(m), Wis. Adm. Code and s. 285.65(7), Wis. Stats.]</p> <p style="text-align: right;">(CONTINUED TO NEXT PAGE)</p>	<p>(1) During the operation of each dryer, dust handling system and fines handling system, the permittee shall demonstrate compliance with I.A.1.a.(1) or (2) by operating all associated TSP/PM₁₀ pollution control equipment (C01 and C16) at all time. [s. 285.65(7), Wis. Stats., s. NR 439.11(4), Wis. Adm. Code]</p> <p>(2) Stack Parameters²</p> <p>(a) The stack height for stack S11 shall be at least 350 feet above ground level. [s. 285.65(3), Wis. Stats.]</p> <p>(b) The stack inside diameter for stack S11 at the outlet may not exceed 16 feet. [s. 285.65(3), Wis. Stats.]</p> <p>(c) The stack S11 may not be equipped with a rainhat or other device which impedes the upward flow of the exhaust gases. [s. 285.65(3), Wis. Stats.]</p> <p style="text-align: right;">(CONTINUED)</p>	<p>(1) <u>Reference Test Method for Particulate Matter Emissions:</u> Whenever compliance emission testing is required, US EPA Method 5 or Method 202 in 40 CFR Part 51, Appendix M, or methods and plans approved, in writing, by the Department shall be used. [s. NR 439.06(1), Wis. Adm. Code]</p> <p>(2) <u>Reference Test Method for PM₁₀ Emissions:</u> Whenever compliance emission testing is required, US EPA Method 201 or 201A, or methods and plans approved, in writing, by the Department shall be used. [s. NR 439.06(1m), Wis. Adm. Code]</p> <p>(3) The compliance tests for TSP, PM₁₀ shall be performed at least once every 24 months, according to s. NR 439.075(3)(b), Wis. Adm. Code. [s. 285.65(3), Wis. Stats. and s. NR 439.075(3)(b), Wis. Adm. Code]</p> <p style="text-align: right;">(CONTINUED)</p>

¹ In order to ensure that the particulate matter emission limitations are not subject to LAER the allowable particulate matter emissions from the process is set 0.010 grains per dscf (w/o P15), or, 23.50 pounds per hour. This condition is carried over from Permit 96-RV-088-OP.

² 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. S11, P01 – P12, C01: Rotary sludge dryers, installed in 1994
P16, C16: Dust collection system for dryer and cyclone area.
P30: 16 MW electricity generating turbine, installed in 1971 (please see B. S11 for limitations)
P31: 16 MW electricity generating turbine, installed in 1971 (please see B. S11 for limitations)

a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING REQUIREMENTS
<p>(CONT...)</p> <p>1. Particulate matter emissions</p>	<p>(CONT...)</p> <p>(d) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(3) Unless otherwise required by statute, rule or permit condition, the facility shall perform the compliance emission tests for TSP and PM10 every 24 months as long as the permit remains valid. Each biennial test shall be performed within 90 days of the anniversary date of the issuance of the permit or within 90 days of an alternative date specified by the Department. [s. NR 439.075(3)(b), Wis. Adm. Code]</p> <p>(4) The permittee shall reduce particulate matter emissions from dryers through operation of control equipment. If the quench chamber, mist eliminator and electrostatic precipitator system is used, the permittee shall perform inspection of each quench chamber, mist eliminator and electrostatic precipitator in accordance with an approved malfunction prevention and abatement plan to ensure that the control equipment is operating properly. The parameters established in I.A.1.c.(4) shall be monitored and recorded. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code and s. 285.65(3), Wis. Stats.]</p> <p>(CONTINUED)</p>	<p>(CONT...)</p> <p>(4) For each ESP the following operational variables shall be measured and recorded once for every 8 hours of source operation or once per day, whichever yields the greater number of measurements:</p> <ul style="list-style-type: none"> (a) Primary current in mamps for each electrostatic precipitators; (b) Secondary voltage in kvolts for each electrostatic precipitators. <p>[s. NR 439.055(2)(b) 2 and NR 407.09(1)(c)1.b., Wis. Adm. Code]</p> <p>(5) For each baghouse, the permittee shall monitor the following parameters:</p> <ul style="list-style-type: none"> (a) Differential pressure across the bag filters (b) Broken bag condition (with two redundant Electronic Particle Sensors) (c) Inlet temperature and (d) Outlet temperature <p>The range of these parameters shall be identified in the Malfunction and Abatement Plans. Pressure drop across the baghouse shall be measured and recorded once for every 8 hours of source operation or once per day, whichever yields the greater number of measurements. [s. NR 439.055(1)(b) 2 and NR 407.09(1)(c)1.b., Wis. Adm. Code]</p> <p>(CONTINUED)</p>
(CONTINUED TO NEXT PAGE)		

- A. S11, P01 – P12, C01: Rotary sludge dryers, installed in 1994
 P16, C16: Dust collection system for dryer and cyclone area.
 P30: 16 MW electricity generating turbine, installed in 1971 (please see B. S11 for limitations)
 P31: 16 MW electricity generating turbine, installed in 1971 (please see B. S11 for limitations)

a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING REQUIREMENTS
<p>(CONT...)</p> <p>1. Particulate matter emissions</p>	<p>(CONT...)</p> <p>(5) The permittee shall reduce particulate matter emissions from dust collection system through operation of control equipment. If baghouses are used, the permittee shall inspect, operate and maintain the baghouses according to manufacturer's specification and directions, and good engineering practice as established by operating experience any time when the dust collecting system is in operation. The parameters established in I.A.1.c.(5) shall be monitored and recorded. [s. NR 439.11(4) and NR 407.09(4)3.b., Wis. Adm. Code]</p> <p>(6) The permittee shall only fire natural gas in these dryers.³ [s. NR 407.09(1)(c)1.b., Wis. Adm. Code, s. 285.65(3) and 285.65(7), Wis. Stats.]</p>	<p>(CONT...)</p> <p>(6) All instruments used for measuring source or air pollution control equipment operational variables shall be calibrated yearly or at a frequency based on good engineering practices as established by operational history, whichever is more frequent. [s. NR 439.055(4), Wis. Adm. Code]</p> <p>(7) The permittee shall maintain on file, at the site, all records of fuel oil analysis and fuel type used in the dryers and turbines for a period not less than 5 years. The permittee shall make these records available to any Department representative upon request. [s. 285.65(3), Wis. Stats., s. NR 439.04, Wis. Adm. Code, s. NR 439.05, Wis. Adm. Code]</p>

³ Because the maximum theoretical emissions of particulate matter while firing natural gas in these dryers are examined.

- A. S11, P01 – P12, C01: Rotary sludge dryers, installed in 1994
P16, C16: Dust collection system for dryer and cyclone area.
P30: 16 MW electricity generating turbine, installed in 1971 (please see B. S11 for limitations)
P31: 16 MW electricity generating turbine, installed in 1971 (please see B. S11 for limitations)

	a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING REQUIREMENTS
2. NO _x	(1) ⁴ 49.35 million cubic feet of natural gas per month, averaged over any 12 consecutive calendar months. [s. NR 408.02(32)(a)2., Wis. Adm. Code and s. 285.65(7), Wis. Stats.]	(1) The permittee shall only fire natural gas in these dryers. ⁵ [s. NR 407.09(1)(c)1.b., Wis. Adm. Code, s. 285.65(3), Wis. Stats.] (2) To be in compliance with I.A.2 a.(1), the permittee shall keep monthly records of the rolling averaged natural gas usage in the dryers. [s. NR 407.09(1)(c)1.b., Wis. Adm. Code, s. 285.65(3), Wis. Stats.]	(1) Reference Test Method for Nitrogen Compounds Emissions: Whenever compliance emission testing is required, US EPA Method 7,7A, 7B, 7C, 7D or 7E in 40 CFR part 60, Appendix A, incorporated by reference in s. NR 484.04(13), or methods and plans approved, in writing, by the Department shall be used. [s. NR 439.06(6)(a), Wis. Adm. Code] (2) The permittee shall keep monthly records of natural gas used in the dryers. [s. NR 407.09(1)(c)2., Wis. Adm. Code and s. 285.65(3), Wis. Stats.]
3. Sulfur dioxide	(1) ⁶ No person may cause, allow or permit emission of Sulfur or sulfur compounds into the ambient air which substantially contribute to the exceeding of an air standard or cause air pollution. [s. NR 417.03, Wis. Adm. Code]	(1) The permittee shall only fire natural gas in these dryers. ⁷ [s. NR 407.09(1)(c)1.b., Wis. Adm. Code, s. 285.65(3), Wis. Stats.]	(1) Whenever compliance emission testing is required for Sulfur Dioxide Emissions, US EPA Method 6, 6A, 6B or 6C shall be used to demonstrate compliance. [s. NR 439.06(2)(a), Wis. Adm. Code]

⁴ Since the hourly MTE of NO_x from the dryers is 29.557 lbs/hr, the original hourly emission limit of 43.96 pounds per hour is removed. The original natural gas usage limit was 11.39 cubic feet per week, which is equivalent to 49.35 million cubic feet of natural gas per month. To be a minor modification to a major nonattainment area source, the net increase of NO_x emissions from D & D facility shall be less than 47.61 TPY. Please see the Preliminary Determination for 88-VAR-221 for details.

⁵ Because the maximum theoretical emissions of NO_x while firing natural gas in the dryers are examined.

⁶ The original SO₂ emission limits were 95.66 pounds per hour and #2 fuel usage limit was 34.59 x 10³ gallons per week. Since #2 fuel oil is no longer used in the dryers and the hourly MTE of SO₂ from the dryers is 0.177 lbs/hr. The hourly emission limit to SO₂ and #2 fuel usage limits are removed. To be a minor modification to a major nonattainment area source, the net increase of SO₂ emissions from D & D facility shall be less than 40.325 TPY. Please see the Preliminary Determination for 88-VAR-221 for details.

- A. S11, P01 – P12, C01: Rotary sludge dryers, installed in 1994
 P16, C16: Dust collection system for dryer and cyclone area.
 P30: 16 MW electricity generating turbine, installed in 1971 (please see B. S11 for limitations)
 P31: 16 MW electricity generating turbine, installed in 1971 (please see B. S11 for limitations)

a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING REQUIREMENTS
<p>4. Carbon monoxide</p> <p>(1) ⁸ 49.35 million cubic feet of natural gas per month, averaged over any 12 consecutive calendar months. [s. NR 408.02(32)(a)2., Wis. Adm. Code and s. 285.65(7), Wis. Stats.]</p>	<p>(1) The permittee shall only fire natural gas in these dryers.⁹ [s. NR 407.09(1)(c)1.b., Wis. Adm. Code, s. 285.65(3), Wis. Stats.]</p> <p>(2) To be in compliance with I.A.4 a.(1), the permittee shall keep monthly records of rolling averaged natural gas usage in the dryers. [s. NR 407.09(1)(c)1.b., Wis. Adm. Code, s. 285.65(3), Wis. Stats.]</p>	<p>(1) Reference Test Method for Carbon Monoxide Emissions; Whenever compliance emission testing is required, US EPA Method 10, 10A or 10B in 40 CFR part 60, Appendix A, incorporated by reference in s. NR 484.04(13), or methods and plans approved, in writing, by the Department shall be used. [s. NR 439.06(4)(a), Wis. Adm. Code]</p> <p>(2) The permittee shall keep monthly records of natural gas used in the dryers. [s. NR 407.09(1)(c)2., Wis. Adm. Code and s. 285.65(3), Wis. Stats.]</p>

⁷ Because the maximum theoretical emissions of SO₂ while firing natural gas in the dryers are examined.

⁸ The original hourly emission limit was 10.94 pounds per hour. The new hourly MTE of CO from the dryers is 24.828 lbs/hr, which does not cause significant ambient air quality impact (please see modeling results). To be a minor modification to a major nonattainment area source, the net increase of CO emissions from D & D facility shall be less than 101.53 TPY. Please see the Preliminary Determination for 88-VAR-221 for details.

⁹ Because the maximum theoretical emissions of CO while firing natural gas in the dryers are examined.

A. S11, P01 - P12, C01: Rotary sludge dryers, installed in 1994
P16, C16: Dust collection system for dryer and cyclone area.
P30: 16 MW electricity generating turbine, installed in 1971 (please see B. S11 for limitations)
P31: 16 MW electricity generating turbine, installed in 1971 (please see B. S11 for limitations)

a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING REQUIREMENTS
<p>5. VOC</p> <p>(1) ¹⁰The permittee may not allow VOC emission from S11 to exceed 42.2 pounds VOC per hour. [s. 285.65(7), Wis. Stats.]</p> <p>(2) ¹¹The permittee may not allow VOC emissions to exceed 4.61 pounds of VOC /ton of Blended Sludge Dry (BSD). [s. 285.65(7), Wis. Stats.]</p> <p>(3) ¹²8.975 tons of VOC per month, averaged over any 12 consecutive calendar months. [s. 285.65(7), Wis. Stats.]</p> <p>(CONTINUED TO NEXT PAGE)</p>	<p>(1) The permittee shall demonstrate compliance with I.A.5.a. (1), (2) and (3) by applying the following Latest Available Control Technology (LACT)¹³:</p> <p>(a) The dryer product discharge temperature range shall be maintained between 170°F and 210°F and the maximum dryer product discharge temperature may not exceed 210°F on an hourly averaged basis.</p> <p>(b) The amount of sludge processed may not be more than 221 tons BSD per day, averaged over any consecutive 30 days;</p> <p>(c) The following procedures shall be followed to maintain the temperature in the designated range:</p> <p>(i) Shut down heat to any dryer when the product discharge temperature exceeds 210 °F for 10 minutes or more.</p> <p>(ii) The heat to the dryer shall be shut off when a product discharge temperature of 210°F is exceeded for 10 minutes or more regardless of whether the temperature control system is operating automatically or manually.</p> <p>(CONTINUED)</p>	<p>(1) Whenever VOC content testing is required by the Department, U.S. EPA Method 18, 25, 25A, 25b, 24 or 24A in 40 CFR part 60, Appendix A, incorporated by reference in s. NR 484.04, or methods approved, in writing by the Department, shall be applied. [s. NR 439.06(3)(b), Wis. Adm. Code]</p> <p>(2) The compliance tests for volatile organic compounds shall be performed at least once every 24 months, according to s. NR 439.075(3)(b), Wis. Adm. Code. [s. 285.65(3), Wis. Stats. and s. NR 439.075(3)(b), Wis. Adm. Code]</p> <p>(3) The permittee shall keep the following daily records:</p> <p>(a) The amount of sludge processed;</p> <p>(b) The dryer product discharge temperature.</p> <p>[s. NR 407.09(1)(c)2., Wis. Adm. Code and s. 285.65(3), Wis. Stats.]</p> <p>(CONTINUED)</p>

¹⁰ The condition is carried over from Permit 96-RV-088-OP.
¹¹ The condition is carried over from Permit 96-RV-088-OP.
¹² The allowable hourly emission of VOC from the dryers is 42.2 lbs/hr. The facility selected to limit its VOC emissions from this D&D process to no more than 107.7 tons per year.
¹³ This condition is to limit VOC emissions from this process to not more than 107.7 tons per year. Please see the Preliminary Determination for 88-VAR-221 for details.
The LACT was determined in Permit 96-RV-088-OP.

A. S11, P01 – P12, C01: Rotary sludge dryers, installed in 1994

P16, C16: Dust collection system for dryer and cyclone area.

P30: 16 MW electricity generating turbine, installed in 1971 (please see B. S11 for limitations)

P31: 16 MW electricity generating turbine, installed in 1971 (please see B. S11 for limitations)

a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING REQUIREMENTS
<p>5. VOC</p> <p>(CONTINUED TO NEXT PAGE)</p>	<p>(CONT...)</p> <p>(iii) The permittee shall have a written verification on a monthly basis by MMSD personnel/or agents that the programmable logic controllers (PLCS) for all dryers are correctly operating, i.e., the code was operational to shut down the heat supply to each respective dryer if a dryer product discharge temperature of 210°F is maintained for 10 minutes or more.</p> <p>[ss. NR 424.03(2)(c) and NR 407.09(1)(c)1.b., Wis. Adm. Code and s. 285.65(3), Wis. Stats.]</p> <p>(2) Compliance with I.A.5.a.(1) and (2) shall be demonstrated through biennial stack testing and application of LACT. [s. NR 407.09(4)(a)1., Wis. Adm. Code, s. 285.65(3), Wis. Stats.]</p> <p>(3) The permittee shall keep monthly records of the amount of sludge processed in the D&D facility to demonstrate in compliance with I.A.5.a (3). The amount of sludge processed in D&D facility may not exceed 221 tons BSD per day averaged over any consecutive 30 days. [s. NR 407.09(1)(c)1.b., Wis. Adm. Code, s. 285.65(3), Wis. Stats.]</p> <p>(CONTINUED)</p>	<p>(CONT...)</p> <p>(4) The permittee shall demonstrate that the temperature control system is functioning through continuous dryer product discharge temperature monitoring and alarm log monitoring for each dryer. The date, beginning time, ending time and discharge product temperature during periods when the dryer product discharge temperature exceeds 210°F on an hourly average basis shall be reported the Department on a quarterly basis. If dryer product discharge temperature does not exceed 210°F on an hourly average basis during the prior quarter, no information is required to be reported to the DNR. [s. 285.65(3), Wis. Stats.]</p>

- A. S11, P01 - P12, C01: Rotary sludge dryers, installed in 1994
 P16, C16: Dust collection system for dryer and cyclone area.
 P30: 16 MW electricity generating turbine, installed in 1971 (please see B. S11 for limitations)
 P31: 16 MW electricity generating turbine, installed in 1971 (please see B. S11 for limitations)

a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING REQUIREMENTS
5. VOC	<p>(CONT...)</p> <p>(4) Compliance with I.A.5.a (3) shall be demonstrated through the application of LACT and the average emission factor of 2.67pounds VOC per ton BSD. [s. NR 407.09(1)(c)1.b., Wis. Adm. Code, s. 285.65(3), Wis. Stats.]</p>	

P31: 16 MW electricity generating turbine, installed in 1971 (please see B, S11 for limitations)

The Hazardous Air Pollutant BACT was determined in Permit 96-RV-088

A. S11, P01 - P12, C01: Rotary sludge dryers, installed in 1994
P16, C16: Dust collection system for dryer and cyclone area.
P30: 16 MW electricity generating turbine, installed in 1971 (please see B. S11 for limitations)
P31: 16 MW electricity generating turbine, installed in 1971 (please see B. S11 for limitations)

	a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING REQUIREMENTS
<p>6. HAPs</p> <p>(CONTINUED TO NEXT PAGE)</p>	<p>(CONT...)</p> <p>(7) Mercury</p> <p>(a) No person may cause, allow or permit emissions of mercury in such quantity and duration as to cause the ambient air concentration to exceed 1 ug/m3, averaged over a 30 - day period. [s. NR 446.025m Wis. Adm. Code]</p> <p>(b) (Combined emissions from the rotary sludge dryers and the dust handling system that exhausts through S17 shall meet the following emission limits): No person may cause, allow or permit emissions of mercury in quantity greater than 3,200 grams per 24 hour - period [s. NR 446.14(2), Wis. Adm. Code]</p>	<p>(CONT...)</p> <p>(iii) The permittee shall have a written verification on a monthly basis by MMSD personnel/or agents that the programmable logic controllers (PLCS) for all dryers are correctly operating, i.e., the code was operational to shut down the heat supply to each respective dryer if a dryer product discharge temperature of 210°F is maintained for 10 minutes or more.</p> <p>[s. NR 407.09(1)(c)1.b. and NR 445.04(3)(b), Wis. Adm. Code and s. 285.65(3), Wis. Stats.]</p> <p>(2) ¹⁵The permittee shall demonstrate compliance with I.A.6.a.(7) by using control devices C01, C16; limiting throughput to no more than 221 tons of BSD per day, averaged over any consecutive 30 days; maintain product discharge temperature no higher than 210°F on an hourly averaged basis and stack testing or sludge sampling. [s. NR 446.15(4), Wis. Adm. Code and s. 285.65(3)]</p> <p>(CONTINUED)</p>	<p>(CONT...)</p> <p>(4) Reference Test Method for Mercury Emissions: Whenever mercury emission testing is required by the Department, US EPA methods and plans approved, in writing, by the Department shall be used. If an owner or operator uses Method 105, the procedure described in s. NR 446.15(4)(f) shall be adhered to. [ss. NR 439.06(8) and NR 446.15(4)(f)1., 2., 3., 4., 5., 6. and 7., Wis. Adm. Code]</p> <p>(5) The permittee shall keep the following daily records:</p> <p>(a) The amount of sludge processed;</p> <p>(b) The dryer product discharge temperature; [s. NR 407.09(1)(c)2., Wis. Adm. Code and s. 285.65(3), Wis. Stats.]</p> <p>(CONTINUED)</p>

15 From the most recent stack test (2003), the emission factor for total mercury from S11 was 0.0014 lbs/ton of BSD. Based on this emission factor, mercury emissions from S11 are below the mercury requirements in I.A.6.(7). Therefore, using control devices of C01, C16; limiting daily throughput and operation temperature is a sufficient daily compliance demonstration method.

A. S11, P01 - P12, C01: Rotary sludge dryers, installed in 1994

P16, C16: Dust collection system for dryer and cyclone area.

P30: 16 MW electricity generating turbine, installed in 1971 (please see B. S11 for limitations)

P31: 16 MW electricity generating turbine, installed in 1971 (please see B. S11 for limitations)

a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING REQUIREMENTS
6. HAPs	<p>(CONT...)</p> <p>(3) Compliance with I.A. 6.a.(2) shall be demonstrated through using control devices C01 and C16 and stack testing. [s. 285.65(3), Wis. Stats.]</p> <p>(4) Compliance with I.A. 6.a.(6) shall be demonstrated through stack testing. [s. 285.65(3), Wis. Stats.]</p> <p>(5) The compliance tests for mercury shall be performed at least once every 24 months, according to s. NR 439.075(3)(b), Wis. Adm. Code. If mercury emissions are greater than 1600 grams/day the facility shall monitor mercury emissions at least once per year according to s. NR 446.16(1), Wis. Adm. Code. [s. 285.65(3), Wis. Stats. and s. NR 439.075(3)(b), Wis. Adm. Code]</p> <p>(6) The permittee shall keep daily records of the amount of sludge processed and the dryer product discharge temperature in the D&D facility to demonstrate compliance with I.A. 6.a(3), (4), (5) and (7). [s. NR 407.09(1)(c)1.b., Wis. Adm. Code, s. 285.65(3), Wis. Stats.]</p> <p>(7) Same as I.A.1.b.(4) and (5).</p>	<p>(CONT...)</p> <p>(6) The permittee shall demonstrate that the temperature control system is functioning will be accomplished through continuous dryer product discharge temperature monitoring and alarm log monitoring for each dryer. The date, beginning time, ending time and discharge product temperature during periods when the dryer product discharge temperature exceeds 210°F on an hourly average basis shall be reported the Department on a quarterly basis. If dryer product discharge temperature does not exceed 210°F on an hourly average basis during the prior quarter, no information is required to be reported to the DNR. [s. 285.65(3), Wis. Stats.]</p> <p>(7) Same as I.A.1.c.(4), (5), (6) and (7).</p>

- A. S11, P01 – P12, C01: Rotary sludge dryers, installed in 1994
 P16, C16: Dust collection system for dryer and cyclone area.
 P30: 16 MW electricity generating turbine, installed in 1971 (please see B. S11 for limitations)
 P31: 16 MW electricity generating turbine, installed in 1971 (please see B. S11 for limitations)

	a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING REQUIREMENTS
7. Visible emissions	(1) 20% opacity or number 1 on the Ringlemann chart. [s. NR 431.05, Wis. Adm. Code]	(1) Same as I.A.1.b.(1) to (6). (2) The compliance tests for opacity shall be performed at least once every 24 months, according to s. NR 439.075(3)(b), Wis. Adm. Code. [s. 285.65(3), Wis. Stats. and s. NR 439.075(3)(b), Wis. Adm. Code]	(1) Whenever visible emission testing is required by the Department, U.S. EPA Method 9, in 40 CFR part 60, Appendix A, incorporated with s. NR 484.04, Wis. Adm. Code shall be applied. [s. NR 439.06(9)(a)(1), Wis. Adm. Code]

B. S11, P30 and P31: Two 16 MW electricity generating turbine, installed in 1971

	a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING REQUIREMENTS
<p>1. Particulate matter</p>	<p>(1) Installations located in or near an area identified in s. NR 415.035(2) whose aggregate particulate emissions, excluding fugitive dust, may cause an impact on the ambient air quality in the area equal to or greater than an annual concentration of 1 microgram per cubic meter or a maximum 24-hour concentration of 5 microgram per cubic meter shall meet the following RACT emission limit:</p> <p>(a) Installations of more than 100 million Btu per hour: maximum emission from any stack of 0.15 pounds of particulate matter per million Btu heat input. [s. NR 415.06(3)(b), Wis. Adm. Code]</p> <p>or,</p> <p>(CONTINUED)</p>	<p>(1) ¹⁶ The permittee shall only fire natural gas or #2 fuel oil in these two turbines. [s. NR 407.09(1)(c)1.b., Wis. Adm. Code, s. 285.65(3) and 285.65(7), Wis. Stats.]</p> <p>(2) ¹⁷ Stack Parameters</p> <p>(a) The stack height for stack S11 shall be at least 350 feet above ground level. [s. 285.65(3), Wis. Stats.]</p> <p>(b) The stack inside diameter for stack S11 at the outlet may not exceed 16 feet. [s. 285.65(3), Wis. Stats.]</p> <p>(c) The stack S11 may not be equipped with a rainhat or other device which impedes the upward flow of the exhaust gases. [s. 285.65(3), Wis. Stats.]</p> <p>(d) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code]</p>	<p>(1) <u>Reference Test Method for Particulate Matter Emissions</u>: Whenever compliance emission testing is required, US EPA Method 5 or Method 202 in 40 CFR Part 51, Appendix M, or methods and plans approved, in writing, by the Department shall be used. [s. NR 439.06(1), Wis. Adm. Code]</p> <p>(2) <u>Reference Test Method for PM₁₀ Emissions</u>: Whenever compliance emission testing is required, US EPA Method 201 or 201A, or methods and plans approved, in writing, by the Department shall be used. [s. NR 439.06(1m), Wis. Adm. Code]</p> <p>(3) ¹⁸ The permittee shall retain on site monthly records of the type of fuel(s) used in each of the turbines. [s. NR 439.04(1)(d), Wis. Adm. Code]</p>

¹⁶

Because the maximum theoretical emissions of particulate matter while firing natural gas, or #2 fuel oil are less than the allowable limit of 18.5536 pounds per hour, limiting the types of fuels used is adequate to demonstrate compliance with the particulate matter emission limit.

¹⁷

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.

¹⁸

The plans, specifications and using natural gas, or #2 fuel oil are sufficient because the emissions from burning natural gas or #2 fuel oil at the maximum capacity are below the PM emission limit.

B. S11, P30 and P31: Two 16 MW electricity generating turbine, installed in 1971

	a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING REQUIREMENTS
1. Particulate matter	<p>(CONT...)</p> <p>(2) Any fuel burning installation of 250 million Btu per hour or less on which construction or modification was commenced on or before April 1, 1972 may emit up to but not more than, an emission rate defined by the equation:</p> $E = 0.3 - 0.0006 I$ <p>Where I is the heat input in million of Btu per hour and E is the maximum allowable particulate matter emissions from any stack in pounds per million Btu heat input, if the installation has an emission rate based on original design or equipment performance test conditions, which ever is more restrictive, which is less than the limit set by the above equation, and the emission control system of the installation has not been allowed to degrade more than 0.05 pound per million Btu heat input from original design or acceptance performance test condition. [s. NR 415.06(4); Wis. Adm. Code]</p>		
2. SO ₂	<p>(1) No person may cause, allow or permit emission of sulfur or sulfur compounds into the ambient air which substantially contribute to the exceeding of an air standard or cause air pollution. [s. NR 417.03, Wis. Adm. Code]</p>	<p>(1) Same as I.B.1.b.(1) and (2).</p>	<p>(1) Whenever sulfur dioxide compliance emission testing is required by the Department, US EPA Method 6, 6A, 6B, 6C or 8 in 40 CFR part 60, Appendix A, incorporated by reference in s. NR 484.04(13), or methods and plans approved, in writing, by the Department shall be used. [s. NR 439.06(2)(a), Wis. Adm. Code]</p> <p>(2) Same as I.B.1.c.(3)</p>

B. S11, P30 and P31: Two 16 MW electricity generating turbine, installed in 1971

	a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING REQUIREMENTS
3. NO _x	(1) No person may cause, allow or permit nitrogen oxides or nitrogen compounds to be emitted to the ambient air which substantially contribute to the exceeding of an air standard or cause air pollution. [s. NR 428.03, Wis. Adm. Code]	(1) Same as I.B.1.b.(1) and (2).	(1) <u>Reference Test Method for Nitrogen Compounds Emissions</u> : Whenever compliance emission testing is required, US EPA Method 7.7A, 7B, 7C, 7D or 7E in 40 CFR part 60, Appendix A, incorporated by reference in s. NR 484.04(13), or methods and plans approved, in writing, by the Department shall be used. [s. NR 439.06(6)(a), Wis. Adm. Code] (2) Same as I.B.1.c.(3)
4. HAPs	(1) No person may cause, allow or permit emissions into the ambient air of any hazardous substance in a quantity, concentration or duration which is injurious to human health, plant or animal life unless the purpose of that emission is for the control of plant or animal life. Hazardous substances include but are not limited to hazardous air contaminants listed in Tables 1 to 5 of s. NR 445.04. [s. NR 445.03, Wisc. Adm. Code]	(1) Same as I.B.1.b.(1) and (2).	(1) Whenever HAPs emission testing is required by the Department, U.S. EPA Methods, or methods and plans approved, in writing, by the Department shall be used. [s. NR 439.06(8), Wis. Adm. Code] (2) Same as I.B.1.c.(3).

B. S11, P30 and P31: Two 16 MW electricity generating turbine, installed in 1971

	a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING REQUIREMENTS
5. CO	(1) No person may cause, allow or permit carbon monoxide to be emitted to the ambient air which substantially contribute to the exceeding of an air standard or cause air pollution. [s. NR 426.03, Wis. Adm. Code]	(1) Same as I.B.1.b.(1) and (2)	<p>(1) Reference Test Method for Carbon Monoxide Emissions: Whenever compliance emission testing is required, US EPA Method 10, 10A or 10B in 40 CFR part 60, Appendix A, incorporated by reference in s. NR 484.04(13), or methods and plans approved, in writing, by the Department shall be used. [s. NR 439.06(4)(a), Wis. Adm. Code]</p> <p>(2) Same as I.B.1.c.(3)</p>
6. Visible emissions	(1) 20% opacity or number 1 on the Ringelmann chart. [s. NR 431.04(2), Wis. Adm. Code]	(1) Same as I.B.1.b.(1) and (2)	<p>(3) Whenever visible emission testing is required by the Department, U.S. EPA Method 9, in 40 CFR part 60, Appendix A, incorporated with s. NR 484.04, Wis. Adm. Code shall be applied. [s. NR 439.06(9)(a)(1), Wis. Adm. Code]</p> <p>(4) Same as I.B.1.c.(3).</p>

C. S01, P30 and S02, P31: Two 16 MW (223 mmBtu/hr) electricity generating turbine, installed in 1971

a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING REQUIREMENTS
<p>1. Particulate matter</p> <p>(1) Installations located in or near an area identified in s. NR 415.035(2) whose aggregate particulate emissions, excluding fugitive dust, may cause an impact on the ambient air quality in the area equal to or greater than an annual concentration of one microgram per cubic meter or a maximum 24-hour concentration of 5 microgram per cubic meter shall meet the following RACT emission limit:</p> <p>(a) Installations of more than 100 million Btu per hour: maximum emission from any stack of 0.15 pounds of particulate matter per million Btu heat input.</p> <p>[s. NR 415.06(3)(b), Wis. Adm. Code]</p> <p>(CONTINUED)</p>	<p>(1) The permittee shall only fire natural gas or #2 fuel oil in these two turbines.¹⁹ [s. NR 407.09(1)(c)1.b., Wis. Adm. Code, s. 285.65(3) and 285.65(7), Wis. Stats.]</p> <p>(2) Stack Parameters</p> <p>(a) The stack heights for stack S01 and S02 shall be at least 65 feet above ground level. [s. 285.65(3), Wis. Stats.]</p> <p>(b) The stack inside diameters for stack S01 and S02 at the outlet may not exceed 6.9 feet. [s. 285.65(3), Wis. Stats.]</p> <p>(c) The stacks S01 and S02 may not be equipped with a rainhat or other device which impedes the upward flow of the exhaust gases. [s. 285.65(3), Wis. Stats.]</p> <p>(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]</p>	<p>(1) <u>Reference Test Method for Particulate Matter Emissions:</u> Whenever compliance emission testing is required, US EPA Method 5 or Method 202 in 40 CFR Part 51, Appendix M, or methods and plans approved, in writing, by the Department shall be used. [s. NR 439.06(1), Wis. Adm. Code]</p> <p>(2) <u>Reference Test Method for PM₁₀ Emissions:</u> Whenever compliance emission testing is required, US EPA Method 201 or 201A, or methods and plans approved, in writing, by the Department shall be used. [s. NR 439.06(1m), Wis. Adm. Code]</p> <p>(3)²¹The permittee shall retain on site monthly records of the type of fuel(s) and sulfur content of each fuel oil shipment used in each of the turbines. [s. NR 439.04(1)(d), Wis. Adm. Code]</p>

19

Because the maximum theoretical emissions of particulate matter while firing natural gas, propane or #2 fuel oil are less than the allowable limit of 18,5536 pounds per hour, limiting the types of fuels used is adequate to demonstrate compliance with the particulate matter emission limit.

20

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.

21

The plans, specifications and using natural gas, propane or #2 fuel oil are sufficient because the emissions from burning natural gas or #2 fuel oil at the maximum capacity are below the PM emission limit

C. S01, P30 and S02, P31: Two 16 MW (223 mmBtu/hr) electricity generating turbine, installed in 1971

a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING REQUIREMENTS
<p>1. Particulate matter</p> <p>(CONT...)</p> <p>(2) Any fuel burning installation of 250 million Btu per hour or less on which construction or modification was commenced on or before April 1, 1972 may emit up to but not more than, an emission rate defined by the equation:</p> $E = 0.3 - 0.0006 I$ <p>Where I is the heat input in million of Btu per hour and E is the maximum allowable particulate matter emissions from any stack in pounds per million Btu heat input, if the installation has an emission rate based on original design or equipment performance test conditions, which ever is more restrictive, which is less than the limit set by the above equation, and the emission control system of the installation has not been allowed to degrade more than 0.05 pound per million Btu heat input from original design or acceptance performance test condition. [s. NR 415.06(4), Wis. Adm. Code]</p>		

C. S01, P30 and S02, P31: Two 16 MW (223 mmBtu/hr) electricity generating turbine, installed in 1971

	a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING REQUIREMENTS
2. SO ₂	<p>(1) No person may cause, allow or permit emission of sulfur or sulfur compounds into the ambient air which substantially contribute to the exceeding of an air standard or cause air pollution. [s. NR 417.03, Wis. Adm. Code]</p> <p>(2) When 12 dryers and the two turbines operate at the same time and the exhaust from the two turbines goes through stacks S01 and S02, the facility shall maintain Sulfur content of the No.2 fuel oil used in these two turbines may not be more than 0.05 % by weight. [s. NR 407.09(4)(a)3.b., Wisc. Adm. Code]</p>	<p>(1) Same as I.C.1.b.(1) and (2)</p> <p>(2) When 12 dryers and the two turbines operate at the same time and the exhaust from the two turbines go through stacks S01 and S02, the facility shall maintain Sulfur content of the No.2 fuel oil used in these two turbines may not be more than 0.05 % by weight. Vendor's information for each shipment, source samples for each shipment, or other methods approved by the Department in writing, may be used to demonstrate compliance with the sulfur content limitation in I.C.2.a.(2). [s. NR 407.09(4)(a)3.b., Wisc. Adm. Code]</p>	<p>(1) Whenever sample test for sulfur content in fuel is required by the Department, methods defined in American Society for Testing and Materials in ASTM D396-78 shall be used. [s. 285.65(3), Wis. Stats.]</p> <p>(2) Whenever sulfur dioxide compliance emission testing is required by the Department, US EPA Method 6,6A, 6B, 6C or 8 in 40 CFR part 60, Appendix A, incorporated by reference in s. NR 484.04(13), or methods and plans approved, in writing, by the Department shall be used. [s. NR 439.06(2)(a), Wis. Adm. Code]</p> <p>(3) Same as I.C.1.c.(3).</p>
3. NO _x	<p>(1) No person may cause, allow or permit nitrogen oxides or nitrogen compounds to be emitted to the ambient air which substantially contribute to the exceeding of an air standard or cause air pollution. [s. NR 428.03, Wis. Adm. Code]</p>	<p>(1) Same as I.C.1.b.(1) and (2).</p>	<p>(1) <u>Reference Test Method for Nitrogen Compounds Emissions:</u> Whenever compliance emission testing is required, US EPA Method 7,7A, 7B, 7C, 7D or 7E in 40 CFR part 60, Appendix A, incorporated by reference in s. NR 484.04(13), or methods and plans approved, in writing, by the Department shall be used. [s. NR 439.06(6)(a), Wis. Adm. Code]</p> <p>(2) Same as I.C.1.c.(3).</p>

C. S01, P30 and S02, P31: Two 16 MW (223 mmBtu/hr) electricity generating turbine, installed in 1971

	a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING REQUIREMENTS
4. HAPs	(1) No person may cause, allow or permit emissions into the ambient air of any hazardous substance in a quantity, concentration or duration which is injurious to human health, plant or animal life unless the purpose of that emission is for the control of plant or animal life. Hazardous substances include but are not limited to hazardous air contaminants listed in Tables 1 to 5 of s. NR 445.04. [s. NR 445.03, Wisc. Adm. Code]	(1) Same as I.C.1.b.(1) and (2).	(1) Whenever HAPs emission testing is required by the Department, U.S. EPA Methods, or methods and plans approved, in writing, by the Department shall be used. [s. NR 439.06(8), Wis. Adm. Code] (2) Same as I.C.1.c.(3).
5. CO	(1) No person may cause, allow or permit carbon monoxide to be emitted to the ambient air which substantially contribute to the exceeding of an air standard or cause air pollution. [s. NR 426.03, Wis. Adm. Code]	(1) Same as I.C.1.b.(1) and (2).	(1) <u>Reference Test Method for Carbon Monoxide Emissions</u> : Whenever compliance emission testing is required, US EPA Method 10, 10A or 10B in 40 CFR part 60, Appendix A, incorporated by reference in s. NR 484.04(13), or methods and plans approved, in writing, by the Department shall be used. [s. NR 439.06(4)(a), Wis. Adm. Code] (2) Same as I.C.1.c.(3).
6. Visible emissions	(1) 20% opacity or number 1 on the Ringlemann chart. [s. NR 431.04(2), Wis. Adm. Code]	(1) Same as I.C.1.b.(1) and (2).	(1) Whenever visible emission testing is required by the Department, U.S. EPA Method 9, in 40 CFR part 60, Appendix A, incorporated with s. NR 484.04, Wis. Adm. Code shall be applied. [s. NR 439.06(9)(a)(1), Wis. Adm. Code] (2) Same as I.C.1.c. (3).

D. S17, P17 and C17: Dust collection system for recycle bins and classification area, installed in 1994

a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING REQUIREMENTS
<p>1. Particulate matter</p> <p>(1) The allowable emissions of particulate matter from the dust collection system for recycle bins and classification area are calculated by the use of the following equations: $E = 3.59 P^{0.62}$ For process weight rates up to 60,000 pounds per hour and by the equation: $E = 17.31 P^{0.16}$ For process weight rates of 60,000 pounds per hour or more. Where, E is the allowable emissions in pounds per hour; P is process weight rate, in tons per hour. [s. NR 415.05(2), Wis. Adm. Code] or, (2) 0.010 grain per dscf (w/o P15); [s. 285.65(7), Wis. Stats.] or, (3) 22 3.49 pounds of particulate matter per hour. [s. 285.65(7), Wis. Stats.] Whichever is more restrictive.</p> <p>(CONTINUED TO NEXT PAGE)</p>	<p>(1) During the operation of the dust handling system and fines handling system, the permittee shall demonstrate in compliance with I.D.1.a.(1), (2) or (3) by operating all associated TSP/PM₁₀ pollution control equipment. [s. 285.65(7), Wis. Stats., s. NR 439.11(4), Wis. Adm. Code]</p> <p>(2) Stack Parameters²³</p> <p>(3) Stack 17 shall be at least 156 feet above ground level. [s. 285.65(3), Wis. Stats.]</p> <p>(4) Stack diameter for stack S17 at the outlet may not exceed 4.8 feet. [s. 285.65(3), Wis. Stats.]</p> <p>(5) The stack S17 may not be equipped with a rainhat or other device which impedes the upward flow of the exhaust gases. [s. 285.65(3), Wis. Stats.]</p> <p>(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]</p> <p>(CONTINUED)</p>	<p>(1) <u>Reference Test Method for Particulate Matter Emissions</u>: Whenever compliance emission testing is required, US EPA Method 5 or Method 202 in 40 CFR Part 51, Appendix M, or methods and plans approved, in writing, by the Department shall be used. [s. NR 439.06(1), Wis. Adm. Code]</p> <p>(2) <u>Reference Test Method for PM₁₀ Emissions</u>: Whenever compliance emission testing is required, US EPA Method 201 or 201A, or methods and plans approved, in writing, by the Department shall be used. [s. NR 439.06(1m), Wis. Adm. Code]</p> <p>(3) For each baghouse, the following operational variables shall be monitored and recorded once for every 8 hours of source operation or once per day, whichever yields the greater number of measurements: (a) Pressure drop across baghouse; (b) Inlet and outlet temperature; (c) Broken bag condition (with to Redundant Electronic Particle Sensors). [s. NR 439.055(2)(b) 2 and NR 407.09(1)(c)1.b., Wis. Adm. Code]</p> <p>(CONTINUED)</p>

²²

In order to ensure that the particulate matter emission limitations are not subject to LAER the allowable particulate matter emissions from the process is set 0.010 grains per dscf (w/o P15), or, 3.49 pounds per hour. This condition is carried over from Permit 96-RV-088-OP

²³

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.

D. S17, P17 and C17: Dust collection system for recycle bins and classification area, installed in 1994

a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING REQUIREMENTS
	<p>(CONT...)</p> <p>(3) Unless otherwise required by statute, rule or permit condition, the facility shall perform the compliance emission tests for TSP and PM10 every 24 months as long as the permit remains valid. Each biennial test shall be performed within 90 days of the anniversary date of the issuance of the permit or within 90 days of an alternative date specified by the Department. [s. NR 439.075(3)(b), Wis. Adm. Code]</p> <p>(4) The permittee shall reduce particulate matter emissions from S17 through operation of control systems. If baghouses are used as a control system, the permittee shall operate and maintain the baghouses according to manufacturer's specification and directions, and good engineering practice as established by operating experience any time when the dust collecting system is in operation. The parameters established in I.D.1.c.(3) shall be monitored and recorded [s. NR 439.11(4) and NR 407.09(4)3.b., Wis. Adm. Code]</p>	<p>(CONT...)</p> <p>(4) When the department requires instrumentation to monitor the operation of air pollution control equipment, or to monitor source performance, the instrument shall measure operational variables with the following accuracy:</p> <p>(a) The pressure drop monitoring device shall be accurate to within 5% of the pressure drop being measured or within 1 inch of water column, whichever is greater.</p> <p>[s. NR 439.055(3)(b), Wis. Adm. Code]</p>

D. S17, P17 and C17: Dust collection system for recycle bins and classification area, installed in 1994

	a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING REQUIREMENTS
2. HAPs	<p>(1) No person may cause, allow or permit lead or lead compounds to be emitted to the ambient air in amount greater than 0.0017 lb/hr. [s. NR 427.03, Wis. Adm. Code]</p> <p>(2) Mercury (Combined emissions from the rotary sludge dryers and the dust collection system that exhausts through S17) may not exceed the following emission limits:</p> <p>(a) In such quantity and duration as to cause the ambient air concentration to exceed 1ug/m3, averaged over a 30-day period.</p> <p>(b) In quantity greater than 3,200 grams of mercury per 24-hour period from sludge drying plants. [s. NR 446.03(1) and (3), Wis. Adm. Code]</p>	<p>(1) Same as I.D.1.b.(1) to (4).</p>	<p>(1) Whenever HAPs emission testing is required by the Department, related USEPA method, or methods and plans approved, in writing, by the Department shall be applied. [s. NR 439.06(8), Wis. Adm. Code]</p> <p>(2) Same as I.D.1.c.(3).</p>
3. Visible emissions	<p>(1) 20% opacity or number 1 on the Ringlemann chart. [s. NR 431.05, Wis. Adm. Code]</p>	<p>(1) Same as I.D.1.b.(1) to (4).</p>	<p>(1) Whenever visible emission testing is required by the Department, U.S. EPA Method 9, in 40 CFR part 60, Appendix A, incorporated with s. NR 484.04, Wis. Adm. Code shall be applied. [s. NR 439.06(9)(a)(1), Wis. Adm. Code]</p> <p>(2) Same as I.D.1.c.(3).</p>

E. S20, B20 and S21, B21: Two natural gas fired Cleaver Brooks four-pass firetube, hot water boilers with heat input ratings of 11.7 mmBtu/hr each, #2 fuel oil is the backup fuels. Installed in 1997.

	a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING REQUIREMENTS
1. Particulate matter	(1) For installations of 250 mm Btu per hour or less, maximum emission from any stack of 0.15 pounds of particulate matter per million Btu heat input. [s. NR 415.06(2)(a), Wis. Adm. Code]	(1) The permittee shall only fire natural gas or fuel oil in these boilers. ²⁴ [s. NR 407.09(1)(c)1.b., Wis. Adm. Code, s. 285.65(3) and 285.65(7), Wis. Stats.] (2) Stack Parameters: (a) Stacks S20 and S21 shall be at least 53 feet above ground level. [s. 285.65(3), Wis. Stats.] (b) Stack diameter for stacks S20 and S21 at the outlet may not exceed 1.66 feet. [s. 285.65(3), Wis. Stats.] (c) 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]	(1) Reference Test Method for Particulate Matter Emissions: Whenever compliance emission testing is required, US EPA Method 5 or Method 202 in 40 CFR Part 51, Appendix M, or methods and plans approved, in writing, by the Department shall be used. [s. NR 439.06(1), Wis. Adm. Code] (2) Reference Test Method for PM ₁₀ Emissions: Whenever compliance emission testing is required, US EPA Method 201 or 201A, or methods and plans approved, in writing, by the Department shall be used. [s. NR 439.06(1m), Wis. Adm. Code]

Because the maximum theoretical emissions of particulate matter while firing natural gas or #2 fuel oil are less than the allowable limit of 18.5536 pounds per hour, limiting the types of fuels used is adequate to demonstrate compliance with the particulate matter emission limit.

E. S20, B20 and S21, B21: Two natural gas fired Cleaver Brooks four-pass firetube, hot water boilers with heat input ratings of 11.7 mmBtu/hr each, #2 fuel oil is the backup fuels. Installed in 1997.

	a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING REQUIREMENTS
2. SO ₂	<p>(1) No person may cause, allow or permit emission of sulfur or sulfur compounds into the ambient air which substantially contribute to the exceeding of an air standard or cause air pollution. [s. NR 417.03, Wis. Adm. Code]</p> <p>(2) SO₂ emissions from each of the two stacks may not exceed 3.0 lbs/hr. [s. 285.65(7), Wis. Stats.]</p>	<p>(1) Same as I.E.1.b.(1).</p> <p>(2) Compliance with I.E.2.(3) shall be determined by emission factor for SO₂ emissions from each fuel oils used in these two boilers, or other methods approved by the Department. [s. 285.65(3), Wis. Stats.]</p>	<p>(1) Whenever sample test for sulfur content in fuel is required by the Department, methods defined in American Society for Testing and Materials in ASTM D396-78 shall be used. [s. 285.65(3), Wis. Stats.]</p> <p>(2) Whenever sulfur dioxide compliance emission testing is required by the Department, US EPA Method 6.6A, 6B, 6C or 8 in 40 CFR part 60, Appendix A, incorporated by reference in s. NR 484.04(13), or methods and plans approved, in writing, by the Department shall be used. [s. NR 439.06(2)(a), Wis. Adm. Code]</p> <p>(3) The permittee shall retain on site daily records of the type of fuel (s) and sulfur content of each fuel oil shipment used by each of the boilers. [s. NR 439.04(1)(d), Wis. Adm. Code]</p>
3. NO _x	<p>(1) No person may cause, allow or permit nitrogen oxides or nitrogen compounds to be emitted to the ambient air which substantially contribute to the exceeding of an air standard or cause air pollution. [s. NR 428.03, Wis. Adm. Code]</p>	<p>(1) Same as I.E.1.b.(1).</p>	<p>(1) Reference Test Method for Nitrogen Compounds Emissions: Whenever compliance emission testing is required, US EPA Method 7.7A, 7B, 7C, 7D or 7E in 40 CFR part 60, Appendix A, incorporated by reference in s. NR 484.04(13), or methods and plans approved, in writing, by the Department shall be used. [s. NR 439.06(6)(a), Wis. Adm. Code]</p>

E. S20, B20 and S21, B21: Two natural gas fired Cleaver Brooks four-pass firetube, hot water boilers with heat input ratings of 11.7 mmBtu/hr each, #2 fuel oil is the backup fuels. Installed in 1997.

	a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING REQUIREMENTS
4. CO	(1) No person may cause, allow or permit carbon monoxide to be emitted to the ambient air which substantially contribute to the exceeding of an air standard or cause air pollution. [s. NR 426.03, Wis. Adm. Code]	(1) Same as I.E.1.b.(1).	(1) <u>Reference Test Method for Carbon Monoxide Emissions</u> : Whenever compliance emission testing is required, US EPA Method 10, 10A or 10B in 40 CFR part 60, Appendix A, incorporated by reference in s. NR 484.04(13), or methods and plans approved, in writing, by the Department shall be used. [s. NR 439.06(4)(a), Wis. Adm. Code]
5. Visible emissions	(1) 20% opacity or number 1 on the Ringelmann chart. [s. NR 431.05(1), Wis. Adm. Code]	(1) Same as I.E.1.b.(1).	(1) Whenever visible emission testing is required by the Department, U.S. EPA Method 9, in 40 CFR part 60, Appendix A, incorporated with s. NR 484.04, Wis. Adm. Code shall be applied. [s. NR 439.06(9)(a)(1), Wis. Adm. Code]

F. S70 (including S18, S40 and S60), P70 (including P18, C18 (Sludge thickening and dewatering units), P19, C19 (Equalization and blending units), P20 (Belt filter presses, uncontrolled), S40, P40 (aerated wastewater channels), S60, P60 (Chlorine contact basins) and all other wastewater treatment facilities)

	a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING REQUIREMENTS
1. VOC	(1) No person may cause, allow or permit organic compounds to be emitted into the ambient air which substantially contribute to the exceeding of an air standard or cause air pollution. [s. NR 419.03, Wis. Adm. Code]	(1) Measure concentrations of pollutants in influent wastewater, and use emission factors developed through the use of the TOXCHEM model plus wastewater treatment facility operational parameters to demonstrate compliance with the VOC limitation. [s. . NR 407.09(1)(c)1.b., Wis. Adm. Code and s. 285.65(3)]	(1) Whenever VOC content testing is required by the Department, related USEPA methods, or methods and plans approved, in writing, by the Department shall be applied. [s. NR 439.06(8), Wis. Adm. Code]
2. HAPs	(1) No person may cause, allow or permit emissions into the ambient air of any hazardous substance in a quantity, concentration or duration which is injurious to human health, plant or animal life unless the purpose of that emission is for the control of plant or animal life. Hazardous substances include but are not limited to hazardous air contaminants listed in Tables 1 to 5 of s. NR 445.04. [s. NR 445.03, Wis. Adm. Code]	(1) Same as I.F.1.b.(1).	(1) Whenever HAPs emission testing is required by the Department, related USEPA method, or methods and plans approved, in writing, by the Department shall be applied. [s. NR 439.06(8), Wis. Adm. Code]

G. S99 (including S30, S31, S32, S33, S34, S35, S36, S37, S38 and S39), P99: Milorganite rail load-out area.

	a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING REQUIREMENTS
1. Particulate matter	<p>(1) The allowable emissions of particulate matter from each stack are calculated by the use of the following equations: $E = 3.59 P^{0.62}$ For process weight rates up to 60,000 pounds per hour and by the equation: $E = 17.31 P^{0.16}$ For process weight rates of 60,000 pounds per hour or more. Where, E is the allowable emissions in pounds per hour; P is process weight rate, in tons per hour.</p> <p>or,</p> <p>(2) 0.40 pounds of particulate matter per 1000 pounds of gas.</p> <p>Whichever is more restrictive. [ss. NR 415.05(1) and NR 415(2), Wis. Adm. Code]</p>	<p>(1) During the operation of milorganite rail load-out, the permittee shall demonstrate in compliance with I.G.1.a.(1) or (2), by operating all associated particulate emission control equipment (C30 to C39). [s. 285.65(7), Wis. Stats., s. NR 439.11(4), Wis. Adm. Code]</p> <p>(2) Stack Parameters²⁵</p> <p>(a) The height of Stack 99. [s. 285.65(3), Wis. Stats.]</p> <p>(b) The diameter of S99. [s. 285.65(3), Wis. Stats.]</p> <p>(c) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(3) The permittee shall reduce particulate matter emissions from milorganite rail load-out operation. If baghouses are used as a control system, the permittee shall operate and maintain the baghouses according to manufacturer's specification and directions, and good engineering practice as established by operating experience any time when the dust collecting system is in operation. [s. NR 439.11(4) and NR 407.09(4)3.b., Wis. Adm. Code]</p>	<p>(1) Reference Test Method for Particulate Matter Emissions: Whenever compliance emission testing is required, US EPA Method 5 or Method 202 in 40 CFR Part 51, Appendix M, or methods and plans approved, in writing, by the Department shall be used. [s. NR 439.06(1), Wis. Adm. Code]</p>

²⁵ 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. S99 covers 10 stacks. Please see the Preliminary Determination for the parameters of each stack.

	a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING REQUIREMENTS
2. Visible emissions	(1) 20% opacity or number 1 on the Ringelmann chart. [s. NR 431.05(1), Wis. Adm. Code]	(1) Same as I.H.1.b.(1) to (3).	(1) Whenever visible emission testing is required by the Department, U.S. EPA Method 9, in 40 CFR part 60, Appendix A, incorporated with s. NR 484.04, Wis. Adm. Code shall be applied. [s. NR 439.06(9)(a)(1), Wis. Adm. Code]

I. OTHER CONDITIONS APPLICABLE TO THE ENTIRE FACILITY

CONDITION TYPE	a. CONDITIONS	b. COMPLIANCE DEMONSTRATION
<p>1. Emission Compliance Testing</p>	<p>1. Emission Compliance Testing</p> <p>(1) Whenever emission testing is required by the Department, the following methods (listed in column b) shall be employed. [s. NR 439.06, Wis. Adm. Code]</p> <p>(2) The pressure drop monitoring device shall be accurate to within 5% of the pressure drop being measured or within 1 inch of water column, whichever is greater. [s. NR 439.055(3)(b), Wis. Adm. Code]</p> <p>(3) Whenever compliance emission testing is required, testing shall be performed while equipment is operating at 100% capacity. If operation at 100% capacity is not possible, the permittee may request in writing and the Department may grant approval to operate at a rate less than 100% capacity. [s. NR 439.07(1), Wis. Adm. Code]</p> <p>(4) The Department shall be informed at least 20 working days prior to any tests, so a Department representative can witness the testing. At the time of notification, a compliance emission test plan following the provisions set forth in section NR 439.07, Wis. Adm. Code, 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. Two copies of the report on all tests shall be submitted to the Department for evaluation within 60 days after the tests. [ss. NR 439.07(2) and 439.07(9), Wis. Adm. Code]</p>	<p>(1) Whenever particulate matter testing is required by the Department, U.S. EPA Methods 5, 5A, 5B, 5D, 5E, 5F, 5G, 5H or 17 in 40 CFR part 60, Appendix A, incorporated by reference in s. NR 484.04, or Method 202 in 40 CFR part 51, Appendix M, incorporated by reference in s. NR 484.04, or methods and plans approved, in writing, by the Department shall be used. [s. NR 439.06(1), Wis. Adm. Code and s.285.65(14), Wis. Stats.]</p> <p>(2) Whenever VOC emission testing is required by the Department, U.S. EPA Methods 18, 25, 25A or 25B and 24 or 24A in 40 CFR part 60, Appendix A, incorporated by reference in s. NR 484.04, or methods and plans approved, in writing, by the Department shall be applied. [s. NR 439.06(3)(a) and (b), Wis. Adm. Code and s.285.65(14), Wis. Stats.]</p> <p>(3) Whenever visible emission testing is required by the Department, U.S. EPA Method 9, in 40 CFR part 60, Appendix A, incorporated with s. NR 484.04, Wis. Adm. Code, or methods and plans approved, in writing, by the Department shall be applied. [s. NR 439.06(9)(a)(1), Wis. Adm. Code and s.285.65(14), Wis. Stats.]</p> <p>(4) Whenever Sulfur dioxide compliance emission testing is required by the Department, US EPA Method 6,6A, 6B, 6C or 8 in 40 CFR part 60, Appendix A, incorporated by reference in s. NR 484.04(13), or methods and plans approved, in writing, by the Department shall be used. [s. NR 439.06(2)(a), Wis. Adm. Code]</p> <p>(5) The permittee shall submit an updated malfunction prevention and abatement plan for Department approval within 90 days of permit issuance. [s. NR 439.11(2), Wisc. Adm. Code and s. 285.65(3), Wis. Stats.]</p>

I. OTHER CONDITIONS APPLICABLE TO THE ENTIRE FACILITY

CONDITION TYPE	a. CONDITIONS	b. COMPLIANCE DEMONSTRATION
2. Emission limit applied to the whole facility	(1) The secondary standard for particulate matter measured as total suspended particulate is 150 micrograms per cubic meter – maximum 24-hour average concentration, not to be exceeded more than once per year. [s. NR 404.04(3), Wis. Adm. Code]	(1) Particulate control devices shall be operated on the exhaust stream of D&D process (S11), dust collecting system (S17) and Milorganite load-out operation lines (S30 to S39) and maintained according to manufacturer's specifications and directions, and shall be used at all times when these processes are in operation. [s. NR 439.11(4), Wis. Adm. Code]

I. OTHER CONDITIONS APPLICABLE TO THE ENTIRE FACILITY

CONDITION TYPE	a. CONDITIONS	b. COMPLIANCE DEMONSTRATION
3. Reporting	(1) The permittee shall periodically submit monitoring and compliance reports. [s. NR 407.09(1)(c)3., Wis. Adm. Code]	<p>(1). Monitoring Reports</p> <p>a) The permittee shall submit the results of monitoring or a summary of monitoring results required by this permit to the Department every 6 months.</p> <p>b) The time periods to be addressed by the submittal are: January 1 to June 30 and July 1 to December 31.</p> <p>c) The report shall be submitted to the Wisconsin Department of Natural Resources, Southeast Region Air Management Program, Milwaukee Service Center, 2300 N. Dr. Martin Luther King Jr. Drive, Milwaukee, WI 53212, phone (414)263-8500, within 30 days after the end of each reporting period.</p> <p>d) All deviations from an exceedence of applicable requirements shall be clearly identified in the submittal.</p> <p>e) Each submittal shall be certified by a responsible official as to the truth, accuracy and completeness of the report. [s. NR 439.03(1)(b), Wis. Adm. Code]</p> <p>(2). Compliance Certification</p> <p>a) The permittee shall submit an annual certification of compliance with the requirements of this permit to the Wisconsin Department of Natural Resources, Southeast Region Air Program, Milwaukee Service Center, 2300 N. Dr. Martin Luther King Jr. Drive, Milwaukee, WI 53212, phone (414)263-8500, and to Compliance Data - Wisconsin, Air and Radiation Division, U.S. EPA, 77 W. Jackson, Chicago, IL 60604 within 30 days after the end of each reporting period.</p> <p>b) The time period to be addressed by the report is the January 1 to December 31 period which precedes the report</p> <p>c) The information included in the report shall comply with the requirements of Part II Section N of this permit</p> <p>d) Each report shall be certified by a responsible official as to the truth, accuracy and completeness of the report. [s. NR 439.03(1)(c), Wis. Adm. Code]</p>

PART II
General Permit Conditions
For Direct Stationary Sources

A. Scope

This permit is valid only for the structure, building, facility, equipment or operation specifically identified herein. All emissions authorized hereby shall be in compliance with the terms and conditions of Parts I and II of this permit. [s. 285.60(7), Wis. Stats.]

B. Emissions Prohibited

Unless the Department has approved an exception under s. NR 436.03(2), no person may cause, allow, or permit emissions of any air contaminant into the ambient air in excess of the limits set in chs. NR 400 to 499, Wis. Adm. Code. [s. NR 436.03(1), Wis. Adm. Code]

C. General Emission Limits

1. No person may cause, allow, or permit particulate matter to be emitted into the ambient air which substantially contributes to exceeding of an air standard, or creates air pollution. [s. NR 415.03, Wis. Adm. Code]
2. 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. Such precautions shall include, but not be limited to the following [s. NR 415.04, Wis. Adm. Code]:
 - a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, or construction operations.
 - b. Application of asphalt, oil, 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.
 - c. Installation and use of hoods, fans and air cleaning devices to enclose and vent the areas where dusty materials are handled.
 - d. Covering or securing of materials likely to become airborne while being moved on public roads, railroads, or navigable waters.
 - e. Conduct of agricultural practices such as tilling of land or application of fertilizers in such manner as not to create air pollution.
 - f. The paving or maintenance of roadway areas so as not to create air pollution.
3. No person may cause, allow or permit emission of sulfur or sulfur compounds into the ambient air which substantially contribute to the exceeding of an air standard or cause air pollution. [s. NR 417.03, Wis. Adm. Code]
4. No person may cause, allow or permit organic compound emissions into the ambient air which substantially contribute to the exceeding of an air standard or cause air pollution. No person may cause, allow or permit organic compounds to be used or handled without using good operating practices and taking reasonable precautions to prevent the spillage, escape or emission of organic compounds, solvents or mixtures. [s. NR 419.03, Wis. Adm. Code]
5. No person may cause, allow or permit the disposal of more than 5.7 liters (1.5 gallons) of any liquid Volatile Organic Compound (VOC) waste, or of any liquid, semisolid or solid waste materials containing more than 5.7 liters (1.5 gallons) of any VOC, in any one day from a facility in a manner that would permit their evaporation into the ambient air during the ozone season. This includes, but is not limited to, the disposal of VOC which must be removed from VOC control devices so as to maintain the control devices at their required operating efficiency. Disposal during the ozone season shall be by methods approved by

- the Department, such as incineration, recovery for reuse, or transfer in closed containers to an acceptable disposal facility, such that the quantity of VOC which evaporates into the ambient air does not exceed 15% (by weight) or 5.7 liters (1.5 gallons) in any one day, whichever is larger. [s. NR 419.04, Wis. Adm. Code]
6. No person may cause, allow or permit emissions of carbon monoxide to the ambient air which substantially contribute to the exceeding of an air standard or cause air pollution. [s. NR 426.03, Wis. Adm. Code]
 7. No person may cause, allow or permit emissions into the ambient air of lead or lead compounds which substantially contribute to the exceeding of an air standard or air increment, or which create air pollution. [s. NR 427.025, Wis. Adm. Code]
 8. No person may cause, allow, or permit nitrogen oxides or nitrogen compounds to be emitted to the ambient air which substantially contribute to the exceeding of an air standard or cause air pollution. [s. NR 428.03, Wis. Adm. Code]
 9. No person may cause, allow or permit emission into the ambient air of any substance or combination of substances in such quantities that an objectionable odor is determined to result unless preventive measures satisfactory to the Department are taken to abate or control such emission. [s. NR 429.03(1), Wis. Adm. Code*]
 10. Open burning is prohibited except as provided in s. NR 429.04, Wis. Adm. Code. [s. NR 429.04, Wis. Adm. Code*]
 11. No person may cause, allow or permit emissions into the ambient air from any direct or portable source in excess of one of the limits specified in ch. NR 431, Wis. Adm. Code. Where the presence of uncombined water is the only reason for failure to meet the requirements of ch. NR 431, Wis. Adm. Code, such failure is not a violation of the chapter. [s. NR 431.03, Wis. Adm. Code]
 12. When the department requires instrumentation to monitor the operation of air pollution control equipment, or to monitor source performance, the instrument shall measure operational variables with the following accuracy: [s. NR 439.055(3), Wis. Adm. Code]
 - a. The temperature monitoring device shall have an accuracy of 0.5% of the temperature being measured in degrees Fahrenheit or $\pm 5^{\circ}\text{F}$ of the temperature being measured, or the equivalent in degrees Celsius (centigrade), whichever is greater.
 - b. The pressure drop monitoring device shall be accurate to within 5% of the pressure drop being measured or within ± 1 inch of water column, whichever is greater.
 - c. The current, voltage, flow or pH monitoring device shall be accurate to within 5% of the specific variable being measured.
 13. All instruments used for measuring source or air pollution control equipment operational variables shall be calibrated yearly or at a frequency based on good engineering practice as established by operational history, whichever is more frequent. [s. NR 439.055(4), Wis. Adm. Code]
 14. No person may cause, allow, or permit emissions into the ambient air of any hazardous substance in such quantity, concentration, or duration as to be injurious to human health, plant or animal life unless the purpose of that emission is for the control of plant or animal life. Hazardous substances include, but are not limited to, hazardous air contaminants listed in Tables 1 to 5 of s. NR 445.04, Wis. Adm. Code. [s. NR 445.03, Wis. Adm. Code*]
 15. Chapter NR 447, Wis. Adm. Code, applies to all air contaminant sources which may emit asbestos, to their owners and operators and to any person whose action causes the emission of asbestos to the ambient air, including demolition and renovation activities. Chapter NR 447, Wis. Adm. Code, establishes emission limitations for asbestos air contaminant sources, establishes procedures to be followed when working with asbestos materials and contains additional reporting and record keeping requirements for owners or operators of asbestos air contaminant sources in order to protect air quality. [ch. NR 447, Wis. Adm. Code]

16. Accidental Release Prevention Requirements

An owner or operator of a stationary source that has more than a threshold quantity of a regulated substance in a process, as determined under 40 CFR 68.115, shall comply with the requirements of 40 CFR Part 68, no later than the latest of the following dates:

- a. June 21, 1999;
- b. Three years after the date on which a regulated substance is first listed under 40 CFR 68.130; or
- c. The date on which a regulated substance is first present above a threshold quantity in a process.

[40 CFR 68.10]

D. Reporting Requirements

1. The Department shall be notified of the following events:

<u>Event</u>	<u>Timing</u>
a. Hazardous substance air spill	Immediate call: 1-800-943-0003
b. Malfunction or other unscheduled event which causes or may cause any emission limitation to be exceeded (except certain visible emission limit exceedences - see s. NR 439.03(4), Wis. Adm. Code.)	Notification by next business day of any such event at the source which is not reported in advance to the Department. Report the cause and duration of the exceedence, the period of time considered necessary for correction, and measures taken to minimize emissions during the period
c. Deviation from any other condition specified in this permit.	Notification by next business day identifying the deviation, cause, duration and steps taken to prevent recurrence.

[ss. 292.11(2) and 285.65(9), Wis. Stats., and ss. NR 439.03(4) and NR 445.08, Wis. Adm. Code]

2. The permittee shall report to the Department, in advance, schedules for planned shutdown and startup of air pollution control equipment and the measures to be taken to minimize the down time of the control equipment while the source is operating. Scheduled maintenance or any other scheduled event, including startup, shutdown or soot blowing procedures which have been approved by the Department under s. NR 436.03(2)(b), which causes an emission limit to be exceeded shall also be reported in advance to the Department. Advance reporting pursuant to this permit condition does not relieve any person from the duty to comply with any applicable emission limitations. Emissions in excess of the limits set in chs. NR 400-499, Wis. Adm. Code, may be allowed when the emissions are temporary and due to scheduled maintenance, startup or shutdown of operations carried out in accord with a plan and schedule approved by the Department. [ss. NR 439.03(2)(b) and (6), Wis. Adm. Code]
3. The permittee shall furnish to the Department, within a reasonable time specified by the Department, any information that the Department may request in writing to determine whether cause exists to revise, revoke or suspend this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Department copies of records required to be kept pursuant to this permit. [s. NR 407.09(1)(f)5., Wis. Adm. Code]
4. The permittee shall submit the results of monitoring required by the permit to the Department according to the schedule established in Part I of this permit. Any such report shall clearly identify all instances of deviations from permit requirements. All such reports shall be signed by the responsible official for the source. In addition, the responsible official shall certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. [s. 285.17(2), Wis. Stats., and s. NR 439.03(1)(b) and (10), Wis. Adm. Code]
5. Any document required under this permit and any document submitted to the Department, including reports, shall contain a certification by a responsible corporate official that meets the requirements of s. NR 407.05(4)(j), Wis. Adm. Code. [ss. NR 439.03(10) and (11), and NR 407.09(4)(a)1., Wis. Adm. Code]

6. Except for information determined to be confidential under s. 285.70(2), Wis. Stats., any information or reports obtained by the Department in the administration of ss. 285.01 to 285.87 and 299.15, Wis. Stats., will be available for public inspection at the offices of the Department. [s. 285.70(1), Wis. Stats.]

E. Right of Entry and Inspection

The permittee shall allow authorized representatives of the Department to enter upon the permittee's premises, to have access to and examine any record relating to emissions or required to be kept, and to make any inspection necessary to ascertain compliance with air pollution control laws and the terms of this permit. The Department may, for the purpose of determining a source's compliance with applicable requirements, sample or monitor at reasonable times production materials or other substances or operational parameters. [ss. 285.13 and 285.19, Wis. Stats., and s. NR 439.05, Wis. Adm. Code]

F. Malfunction Prevention and Abatement Plans

The owner or operator of any direct or portable source which may emit hazardous substances or emits more than 15 pounds in any day or 3 pounds in any hour of any air contaminant for which emission limits have been adopted shall prepare a written malfunction prevention and abatement plan to prevent, detect, and correct malfunctions or equipment failures which may cause any applicable emission limitation to be violated or which may cause air pollution. Any such plan shall be carried out by the owner or operator. The plan shall be updated at least every 5 years. The Department may require the plan to be submitted for review and approval. [s. NR 439.11, Wis. Adm. Code]

G. Emission Control Action Plan

For source(s) covered by this permit which emit 0.25 tons or more per day of any air contaminant for which air standards have been adopted, the permittee shall prepare an emission control action program, consistent with good industrial practice and safe operating procedures, for reducing the emission of air contaminants into the outdoor atmosphere during periods of an air pollution alert, air pollution warning or air pollution emergency declared under s. NR 493.03(2), Wis. Adm. Code. The emission control action program shall be in writing, available on the premises and is subject to review and approval by the Department on request. [s. NR 493.04, Wis. Adm. Code*]

H. Change in Ownership or Control

In the event of a change in ownership or operational control of a source, the permittee shall file a written request for an administrative permit revision in accordance with s. NR 407.11, Wis. Adm. Code. The request should include a written agreement between the current and new owner or operator which sets forth a specific date for transfer of permit responsibility, coverage and liability. If the Department determines that no other change in this permit is necessary, this permit may be revised according to the administrative revision procedures in s. NR 407.11, Wis. Adm. Code. [s. NR 407.11(3)(a), Wis. Adm. Code]

I. Permit Flexibility, Revision, Suspension, and Revocation

1. Changes to the source which are not modifications and changes in permit content are regulated under the permit flexibility provisions of s. 285.60(4m), Wis. Stats., and s. NR 407.025, Wis. Adm. Code, and the permit revision provisions in ss. NR 407.11, NR 407.12, NR 407.13, NR 407.14, and NR 407.16, Wis. Adm. Code.
2. An operation permit may be suspended or revoked, in whole or in part, for cause. [ss. NR 407.09(1)(f)3. and NR 407.15, Wis. Adm. Code.]

J. Construction, Reconstruction, Replacement, Relocation or Modification

1. Unless the replacement is authorized by a permit or is exempt under s. NR 406.04, Wis. Adm. Code, replacement of the source(s) covered by this permit is prohibited. [s. 285.60(1)(a), Wis. Stats.]
2. No person may commence construction, reconstruction, replacement, relocation or modification of a stationary source unless the person has a construction permit for the source or unless the source is exempt from the requirement to obtain a permit under s. 285.60(5), Wis. Stats., or under ch. NR 406, Wis. Adm.

Code. Applications for the construction permit shall be submitted on forms which are available from the Department at its Madison headquarters and district offices. [s. 285.60(1)(a), Wis. Stats.]

Note: The address of the Madison headquarters is: Wisconsin Department of Natural Resources, Bureau of Air Management, P. O. Box 7921, Madison, WI 53707, Attention: Permit Application Forms

3. For new or modified sources for which no construction permit is required, the application for an operation permit shall be filed before the source commences construction or modification. [s. NR 407.04, Wis. Adm. Code]

K. Circumvention

1. The installation or use of any article, machine, equipment, process, or method which conceals an emission which would otherwise constitute a violation of an applicable rule is prohibited unless written approval has been obtained from the Department. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance and the unnecessary separation of an operation into parts to avoid coverage by a rule that applies only to operations larger than a specified size. [s. NR 439.10, Wis. Adm. Code]
2. No one may render inaccurate any monitoring device or method required under ch. NR 439, Wis. Adm. Code, or in this permit. [s. NR 439.03(12), Wis. Adm. Code]

L. Civil/Criminal Liability

1. Nothing in this permit shall be construed to relieve the permit holder from civil and/or criminal penalties under ss. 285.87 and 299.15, Wis. Stats., for violation of the terms or conditions of this permit, or for violation of ss. 285.01 to 285.87, 292.11(2) and 299.15, Wis. Stats., or of any rule or any special order issued under those sections except where the operation permit shield provisions of s. 285.62(9)(b), Wis. Stats., are applicable. [s. 285.62(9)(a), Wis. Stats.]
2. The permittee has the duty to comply with all conditions of the permit. Any noncompliance with this permit constitutes a violation of the Wisconsin statutes, the federal clean air act, or both, and is grounds for enforcement action; for permit suspension, revocation or revision; or, if allowed under s. 285.62(6), Wis. Stats., for denial of a permit renewal application. [ss. NR 407.14, NR 407.15, and NR 407.09(1)(f)1., Wis. Adm. Code, s. 285.60(7), Wis. Stats. and 42 USC 7661a]
3. The following items are provided per s. NR 407.09(1)(d) and (f), Wis. Adm. Code:
 - a. It is not a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with this permit. [s. NR 407.09(1)(f)2., Wis. Adm. Code]
 - b. The filing of a request by the permittee for a permit revision or revocation, or the filing of a notification of planned changes under s. NR 407.025, Wis. Adm. Code, or of anticipated noncompliance, does not stay any permit condition. [s. NR 407.09(1)(f)3., Wis. Adm. Code]
 - c. The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege, nor does it authorize any injury to private property or any invasion of personal rights. [s. NR 407.09(1)(f)4., Wis. Adm. Code]
 - d. The provisions of this permit are severable. In the event of a successful challenge to any portion of the permit, all other portions of the permit remain valid and effective. [s. NR 407.09(1)(d), Wis. Adm. Code]

M. Recordkeeping Requirements

1. The permittee shall maintain the following records, per s. NR 439.04, Wis. Adm. Code:
 - a. Records of all sampling, testing and monitoring conducted or required under chs. NR 400 to 499 or under this permit. Records of sampling, testing or monitoring shall include the following:
 - 1) The date, monitoring site and time and duration of sampling, testing, monitoring or measurements.

- 2) The dates the analyses were performed.
 - 3) The company or entity that performed the analysis.
 - 4) The analytical techniques or methods used, including supporting information such as calibration and maintenance records of all original recording charts for continuous monitoring instrumentation including emissions or equipment monitors.
 - 5) The results of the analyses.
 - 6) The relevant operating conditions that existed at the time of sampling, testing, monitoring or measurement.
- b. Records detailing all malfunctions which cause any applicable emission limitation to be exceeded, including logs to document the implementation of the plan required under s. NR 439.11, Wis. Adm. Code;
 - c. Records detailing all activities specified in any compliance schedule approved by the Department under chs. NR 400 to 499, Wis. Adm. Code; and
 - d. Any other records relating to the emission of air contaminants which may be requested in writing by the Department.
2. The owner or operator of a source not subject to s. NR 445.05(6), Wis. Adm. Code, shall maintain the following records in writing at the source, as appropriate:
 - a. The hazardous air contaminants in Table 5 of s. NR 445.04 the source is capable of emitting.
 - b. The allowable emissions for each hazardous air contaminant identified in a. above for each emissions unit.
 - c. The methods used to calculate allowable emissions under b. above, including:
 - 1) All calculations which show the dimensional units for all values used.
 - 2) Emission factors used and references to stack tests, mass balance calculations or EPA documents that each emission factor is based on.
 - 3) Information to support exemption claims including fuels used, laboratory status or downwash minimization stack height calculations as appropriate. [s. NR 445.05(4r)(c), Wis. Adm. Code*]
 3. Owners and operators of facilities required to file emission inventory reports shall keep accurate and reliable records sufficient to enable verification of the reports by the department. [s. NR 438.03(4), Wis. Adm. Code]
 4. Copies of all records and reports required under this permit shall be retained by the permittee for a period of 5 years. [s. NR 439.04(2), Wis. Adm. Code]

N. Compliance Certification

1. The permittee shall submit compliance certifications to the Department, and part 70 sources shall also submit this compliance certification to the United States Environmental Protection Agency. [s. NR 439.03(1)(c) and (9), Wis. Adm. Code]
 - a. The certification shall be submitted according to the schedule established in Part I of the permit. [s. NR 439.03(1)(c), Wis. Adm. Code]
 - b. The certification shall include the following:
 - 1) Identification of each permit term or condition that is the basis of the certification;
 - 2) The compliance status of the source with respect to each term or condition identified in 1);
 - 3) Whether compliance was continuous or intermittent;

- 4) Method(s) used for determining the compliance status, currently and over the previous 12 month period;
 - 5) Compliance status with respect to 40 CFR 68 (Accidental Release Prevention) including registration and submission of the risk management plan, as specified in 40 CFR 68.160 and 68.150, respectively, if applicable.
 - 6) Other information required to determine the compliance status of the source, as specified in this permit. [s. NR 439.03(8), Wis. Adm. Code]
2. Compliance certifications shall be signed by a responsible official of the source. The responsible official shall certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. [s. NR 439.03(10), Wis. Adm. Code]

O. Required Air Emission Inventory Reports

The permittee shall annually submit to the Department an emission inventory report of annual, actual emissions or throughput information in accordance with ch. NR 438, Wis. Adm. Code. [s. NR 438.03, Wis. Adm. Code]

P. Annual Emission Fees

The permittee shall pay an annual emissions fee to the Department at the rate specified in s. 285.69(2), Wis. Stats. [ss. NR 410.04 and NR 407.09(1)(e), Wis. Adm. Code]

Q. General Provisions for Hazardous Air Pollutant MACT Standards

The general provisions in ch. NR 460, Wis. Adm. Code, apply to any permittee that is affected or becomes affected by a standard promulgated by EPA under section 112 of the act (42 USC 7412). [s. NR 460.01, Wis. Adm. Code]

R. Stratospheric Ozone Protection

1. Federal Requirements. (Call 1-800-296-1996 for information)

- a. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - 1) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to section 82.106.
 - 2) The placement of the required warning statement must comply with the requirements pursuant to section 82.108.
 - 3) The form of the label bearing the required warning statement must comply with the requirements pursuant to section 82.110.
 - 4) No person may modify, remove or interfere with the required warning statement except as described in section 82.112.
- b. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in 40 CFR Part 82, Subpart B:
 - 1) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to section 82.156.
 - 2) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to section 82.158.
 - 3) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to section 82.161.

- 4) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to section 82.166. (The term, "MVAC-like appliance", is defined in section 82.152)
- 5) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to section 82.156.
- 6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to section 82.166.
- c. If the permittee manufactures, transforms, imports or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
- d. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo or system used on passenger buses using HCFC-22 refrigerant.
- e. The permittee may be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program.

[s. 285.65(12), Wis. Stats.]

2. State Requirements (Call 1-608-264-6049 for information).

- a. During the salvaging, dismantling or transporting of refrigeration equipment, no person may knowingly or negligently release ozone-depleting refrigerant to the environment, except for minimal releases that occur as a result of efforts to transfer ozone-depleting refrigerant into storage tanks. [s. 285.59(2r)(a), Wis. Stats.*]
- b. No person may knowingly or negligently release from a storage tank to the environment ozone-depleting refrigerant that was removed during the salvaging, dismantling or transporting of refrigeration equipment, except for minimal releases that occur as a result of efforts to transfer ozone-depleting refrigerant into refrigeration equipment or other storage tanks. [s. 285.59(2r)(am), Wis. Stats.*]
- c. No person may salvage or dismantle any refrigeration equipment unless:
 - 1) That person holds and prominently displays an annual registration of certification obtained from the Department under s. NR 488.04, Wis. Adm. Code;
 - 2) That person uses refrigerant recovery equipment approved by the Department under s. NR 488.07, Wis. Adm. Code, to transfer remaining ozone-depleting refrigerant from each piece of refrigeration equipment into storage tanks; and
 - 3) Individuals who use the approved refrigerant recovery equipment have, or are working under the direct supervision of individuals who have, the qualifications required under s. NR 488.08, Wis. Adm. Code. [s. NR 488.03(3), Wis. Adm. Code*]
- d. Any person who sells, gives or transports refrigeration equipment to a scrap metal processor shall:
 - 1) Transfer ozone-depleting refrigerant from the refrigeration equipment into a storage tank using approved refrigerant recovery equipment or obtain and possess documentation that another person performed the transfer; and
 - 2) Provide documentation to the scrap metal processor that he or she has complied with 1).

Note: Sample forms for the documentation of compliance with 1) are available from the Bureau of Air Management CFC Program.

EXEMPTION: 1) and 2) do not apply to a person who sells, gives or transports refrigeration equipment to a scrap metal processor when that processor has agreed in writing to transfer the ozone-depleting refrigerant into a storage tank using approved refrigerant recovery equipment and that the processor is registered with the Department under s. NR 488.04. [s. NR 488.05, Wis. Adm. Code*]

- e. Any person who transports, for the purposes of salvaging or dismantling, refrigeration equipment that contains ozone-depleting refrigerant shall certify to the Department that person will not knowingly or negligently release ozone-depleting refrigerant to the environment, except for minimal releases that occur as a result of refrigerant recovery efforts. This certification shall be submitted annually, along with a description of the safe transport methods to be used, and the fees required under s. NR 488.11, Wis. Adm. Code. [s. NR 488.10, Wis. Adm. Code*]