Placer County

AIR POLLUTION CONTROL DISTRICT

PLACER COUNTY AIR POLLUTION CONTROL DISTRICT

SierraPine, Rocklin Division

TITLE V OPERATING PERMIT

Permit Number: S-0001

Issued To:
SierraPine, Rocklin Division
4300 Dominguez Road
Rocklin, CA 95677

Plant Site Location:
SierraPine, Rocklin Division
4300 Dominguez Road
Rocklin, CA 95677

Issued By:

Thomas J. Christofk, APCO

7-24-09
Date

Effective Date: July 24, 2009

Expiration Date: June 17, 2013

Nature of Business: Medium Density Fiberboard Manufacturing

SIC Code: 2493

Responsible Official:
Guil Rivas
Plant Superintendent
Phone: (916) 624-2473

Facility Contact:
Pedro Gutierrez
Environmental Coordinator
Phone: (916) 624-2473

SierraPine Rocklin Division

Title V Operating Permit

Contents

Section 1: Facility Description and Equipment Lists

Section 2: Specific Emission Unit Conditions

Section 3: Facility-wide Conditions

Section 4: Standard Terms and Conditions

Section 5: Alternative Scenarios

Section 6: Monitoring, Testing, and Record Keeping

Section 7: Compliance Certification

1. FACILITY DESCRIPTION AND EQUIPMENT LISTS

1.A. Description

The SierraPine, Rocklin Division (SierraPine) manufactures pressed board products from recovered and recycled wood on two separate production lines. One line produces dimensional medium density fiberboard (MDF) in thickness varying from 1/4" to 2-1/2". A second line produces a continuous ribbon of thin MDF (TMDF) with a thickness of 1/10" to 1/4".

1.B. Equipment List

1. Combustion Units

Description	District Permit #
Wood or Sanderdust/Natural Gas Boiler	PTO-SPIN-84-11 [Issued 10/01/99]/AC-02-97
MDF Regenerative Oxidizer (RO)	PTO-SPIN-97-01 [Issued 10/01/99]/AC-02-64
TMDF Regenerative Oxidizer (RO)	AC-98-40/AC-01-98/AC-02-38/AC-02-95
MDF Dryer #1	AC-98-40
MDF Dryer #2	AC-98-40
MDF Dryer #3	AC-98-40
TMDF Hot Oil Heater #801	AC-98-40
TMDF Dryer #4	AC-98-40
Emergency Fire Pump (215 hp)	PTO-SPIN-93-04 [Issued 10/01/99]
Emergency Fire Pump (360 hp)	AC-03-73, PTO-SPIN-04-01 [Issued 06/01/05]
TMDF Emergency Generator	PTO-SPIN-00-43 [Issued 06/01/05]

2. General Emissions Units/Control Equipment

Description (District Permit #)	Control Equipment (District Permit #)
Wood or Sanderdust/Natural Gas Boiler (PTO-SPIN-84-11 [Issued 10/01/99]) (Identified Above)	Venturi Rod Scrubbers (PTO-SPIN-84-11 [Issued 10/01/99]) Wet Electrostatic Scrubbers (2) (PTO-SPIN-84-11 [Issued 10/01/99]/AC-93-08) Flue Gas Recirculating System (PTO-SPIN-84-11 [Issued 10/01/99])
Truck Dump System (PTO-SPIN-84-01 [Issued 10/01/99])	Truck Dump Baghouse (AC-01-70)
No. 1 Fiber Processing System (PTO-SPIN-84-02	Dryer No. 1 Baghouse (PTO-SPIN-84-02 [Issued

Description (District Permit #)	Control Equipment (District Permit #)
[Issued 10/01/99]/AC-05-47)	10/01/99]) Dryer No. 1 Venturi Rod/Marble Bed Scrubber (PTO-SPIN-84-02 [Issued 10/01/99]) Dryer No. 1 WESP s (2) (PTO-SPIN-84-02 [Issued 10/01/99]/AC-93-08) MDF RO (95-34/PTO-SPIN-97-01 [Issued 10/01/99]/AC-02-64)
No.1 Blender and Storage System (PTO-SPIN-84-03 [Issued 10/01/99])	None
No. 2 Fiber Processing System (PTO-SPIN-84-04 [Issued 10/01/99]/AC-05-47)	Dryer No. 2 Baghouse (PTO-SPIN-84-04 [Issued 10/01/99]) Dryer No. 2 Venturi Rod/Marble Bed Scrubber (PTO-SPIN-84-04 [Issued 10/01/99]) Dryer No. 2 WESP s (2) (PTO-SPIN-84-04 [Issued 10/01/99]/AC-93-08) MDF Regenerative Oxidizer (RO) (Identified Above)
No. 2 Blender and Storage System (PTO-SPIN-84-05 [Issued 10/01/99])	None
Mat Forming/Shaving and Reject System (PTO-SPIN-84-06 [Issued 10/01/99])	Mat Forming Shaving & Reject #1 Carothers (PTO-SPIN-84-06 [Issued 10/01/99]) Mat Forming Shaving & Reject #2 Carothers (PTO-SPIN-84-06 [Issued 10/01/99]) Mat Forming Shaving & Reject System Baghouse (PTO-SPIN-84-06 [Issued 10/01/99])
Board Press System (PTO-SPIN-84-07 [Issued 10/01/99])	Wet Scrubber No. 1 (PTO-SPIN-84-07 [Issued 10/01/99]/AC-93-08) Wet Scrubber No. 2 (PTO-SPIN-84-07 [Issued 10/01/99]/AC-93-08)
Primary Press Saw System (PTO-SPIN-84-08 [Issued 10/01/99])	Press Reclaim System Baghouse (PTO-SPIN-84-08 [Issued 10/01/99])
Sanding System (PTO-SPIN-84-09 [Issued 10/01/99])	Sanderdust Silo Baghouse (PTO-SPIN-84-09 [Issued 10/01/99]) Sanderdust Recovery Baghouse Wheeler (PTO-SPIN-84-09 [Issued 10/01/99]) Sanderdust Recovery Baghouse Carter-Day (PTO-SPIN-84-09 [Issued 10/01/99])
Secondary Saw System (PTO-SPIN-84-10 [Issued 10/01/99])	Secondary Saw System Baghouse (PTO-SPIN-84-10)
No. 3 Fiber Processing System (PTO-SPIN-84-12 [Issued 10/01/99])	Dryer No. 3 Baghouse (PTO-SPIN-84-12 [Issued 10/01/99]) Dryer No. 3 Venturi Rod/Marble Bed Scrubber (PTO-SPIN-84-12 [Issued 10/01/99]) Dryer No. 3 WESPs (2) (PTO-SPIN-84-12 [Issued 10/01/99]/AC-93-08) MDF RO (Identified Above)

Description (District Permit #)	Control Equipment (District Permit #)
Rotex Screen Fines Pick-up System (PTO-SPIN-93-01 [Issued 10/01/99])	None
Forming Heads and Belts System (PTO-SPIN-93-02 [Issued 10/01/99])	None
Press Reclaim Relay System (PTO-SPIN-93-03 [Issued 10/01/99])	None
TMDF Production Line (AC-98-40)	TMDF Line Baghouse # 752 (AC-98-40) TMDF Line Baghouse # 733 (AC-98-40) TMDF Line Baghouse # 756 (AC-98-40) TMDF Line Baghouse # 758A (AC-98-40) TMDF Line Baghouse # 758B (AC-98-40) TMDF Line Baghouse # 758C (AC-98-40) TMDF RO (identified above)
Resin Tank (PTO-SPIN-93-05 [Issued 10/01/99])	None
Scavenger Tank PTO-SPIN-93-05 [Issued 10/01/99]	None
Wax Storage Tank PTO-SPIN-93-05 [Issued 10/01/99]	None

1.C. Exempt Equipment

Pursuant to District Rule 501 the following equipment is exempt:

Description	Basis
Fixed tanks (300-20,000 gallons) Barrels and Totes (5-400 gallons) Hydraulic oil reservoirs (2-8500 gallon)	Rule 501.118, Storage and Transfer
Cooling towers and Air Conditioner Condensers (40-3,000 GPM)	Rule 501.116, Cooling Systems and Vacuum Cleaning

1.D. Insignificant Activities

The following types of activities are exempted from the Title V permit requirements based on EPA's guidelines of Trivial Activities.

1. Plant maintenance and upkeep activities, such as painting.
2. Combustion emissions from propulsion of mobile sources.
3. The repair and maintenance shop activities not related to the source's primary business

activities.

4. Portable generators, portable steam cleaners, and water heaters/steam cleaners, that are exempt from District and prohibitory or State portable equipment regulations.

5. Unheated cleaning equipment and office janitorial activities and equipment and consumer use of janitorial products and consumer use of office equipment and products.

2. SPECIFIC EMISSION UNIT CONDITIONS

2.A. Emission Limits

1. Boiler (84-11) NOx and CO Concentration Limits
NOx emissions shall not exceed 568 ppmv corrected to 12% CO2, on a three-hour average, dry basis.
CO emissions shall not exceed 400 ppmv @12% CO2, on a three-hour average, dry basis.

Origin: PTO [Issued 10/01/99] Condition 26E
Authority: Rule 504, Emission Reduction Credits § 301.4 [amended 11/03/94]; Rule 232,Biomass Suspension Boilers §301.2 (CO) §301.1(NOx) [amended 12/09/99]

2. Dryers; Boiler; and TMDF RO NOx Quarterly Limits
Maximum NOx emissions from boiler, dryer burners, and the TMDF RO stack, including the thin board line hot oil heater shall be limited to the following:

lbs/1st Qtr	lbs/2nd Qtr	lbs/3rd Qtr	lbs/4th Qtr
85962	77108	87396	79417

Origin: AC-98-40 Condition 35
Authority: Rule 501, General Permit Requirements § 303.4 [amended 11/03/94]

3. MDF Regenerative Oxidizer (RO) Emission Limits
a. Exhaust emissions from the MDF regenerative oxidizer operating in catalytic mode shall not exceed the following levels:

Pollutant	lbs/Qtr	lbs/hr
CO	24800	N/A
NOx	15080	6.83
VOC	4942	2.23
PM10	4181	N/A
SOx	128	N/A

Origin: AC-02-64 Condition 9; PM10 AC-03-52, Condition 1 NOx AC-03-67 Condition 1
Authority: Rule 502, New Source Review § 303 [amended 11/03/94]

b. Exhaust emissions from the MDF regenerative oxidizer operating in thermal mode shall not exceed the following levels:

Pollutant	lbs/Qtr	lbs/hr
CO	24800	N/A
NOx	15080	6.83
VOC	4942	2.23

PM10	4181	N/A
SOx	128	N/A

Origin: AC-02-64 Condition 10; PM10 AC-03-52, Condition 2
Authority: Rule 502, New Source Review § 303 [amended 11/03/94]

c. Control systems on the MDF press and tube dryers must comply with one of the following options:

1. Reduce emission of total HAP, measured as THC (as carbon), by 90 percent); or
2. Limit total HAP emissions, measured as THC (as carbon), to 20 ppmv, dry; or
3. Reduce methanol emissions by 90 percent; or
4. Limit methanol emissions to less than 1 ppmv if uncontrolled emissions are greater than 10 ppmvd; or
5. Reduce formaldehyde emissions by 90 percent; or
6. Limit formaldehyde emissions to less than 1 ppmvd if uncontrolled emissions are greater than 10 ppmvd

Origin: 40 CFR §63.2240
Authority: 40 CFR §63.2240

4. TMDF Regenerative Oxidizer (RO) Emission Limits

a. Hourly emissions from the TMDF RO stack shall not exceed the following levels:

NOx (lbs/hour)	VOC (lbs/hour)
7.33	1.48

Origin: AC-02-38 Condition 15 and 16
Authority: Rule 502, New Source Review § 301 [amended 11/03/94]

b. Quarterly emissions from the TMDF RO stack shall not exceed the following levels:

Pollutant	lbs/Qtr
VOC	3144
PM10	2344
NOx	13608
CO	17478
SOx	74

Origin: AC-02-95 Condition 9.E
Authority: Rule 502, New Source Review § 303 [amended 11/03/94]

c. Control systems on the TMDF Press and No. 4 tube dryer must comply with one of the following options:

1. Reduce emission of total HAP, measured as THC (as carbon), by 90 percent); or
2. Limit total HAP emissions, measured as THC (as carbon), to 20 ppmv, dry; or
3. Reduce methanol emissions by 90 percent; or

4. Limit methanol emissions to less than 1 ppmv if uncontrolled emissions are greater than 10 ppmvd; or
5. Reduce formaldehyde emissions by 90 percent; or
6. Limit formaldehyde emissions to less than 1 ppmvd if uncontrolled emissions are greater than 10 ppmvd

Origin: 40 CFR §63.2240
Authority: 40 CFR §63.2240

5. Boiler PM10 Emissions
PM10 Emissions from the Boiler exhaust shall not exceed the following levels:

lbs/day	lbs/Qtr	lbs/year
49.44	4509	18040

Origin: AC-02-97 Condition 7
Authority: 504, Rule Emission Reduction Credits § 301.4 [amended 11/03/94]

6. TMDF Baghouse PM10 Emissions
TMDF Baghouse PM10 emissions shall not exceed the following levels:

Equipment	lbs/Qtr
Baghouse 733	50
Baghouse 752	128
Baghouse 756	28

Origin: AC-98-40 Condition 34
Authority: Rule 502, New Source Review § 303 [amended 11/03/94]

7. Phase II (Torrit Day) Baghouse PM10 Emissions
Emissions from the Torrit Day Baghouse are not to exceed 0.215 pounds per hour or 482 pounds per quarter.
Origin: AC-97-23 Condition 9
Authority: Rule 502, New Source Review § 303 [amended 11/03/94]

8. Emergency Fire Pump (360 hp)
The emissions from the engine shall not exceed the following rates:

Pollutant	Limit (lbs/day)
Carbon Monoxide (CO)	5.5
Nitrogen Oxides (NOx)	107
Volatile Organic Compounds (VOCs)	2.1
Sulfur Oxides [SOx]	2.7
Particulate Matter [PM-10]	1.3

Origin AC-03-73, PTO-SPIN-04-01 [Issued 06/01/05] Condition 5E

Authority: Rule 501, General Permit Requirements [amended 11/03/94]

9. Emergency Generator
The emissions from the engine shall not exceed the following rates:

Pollutant	Limit (lbs/day)
Carbon Monoxide (CO)	21
Nitrogen Oxides (NOx)	60
Volatile Organic Compounds (VOCs)	1
Sulfur Oxides [SOx]	11
Particulate Matter [PM-10]	9

Authority: PTO-SPIN-00-43 (Issued 06/01/05)
Origin: Rule 501, General Permit Requirements [amended 11/03/94]

2.B. Operating Conditions

1. Boiler

a. The boiler shall not be operated unless all required control equipment for the boiler is operating properly.
Origin: AC-93-08R Condition 20diii
Authority: Rule 502, New Source Review § 301 [amended 11/03/94]

b. The biomass suspension boiler shall be fired using biomass fuel a minimum of 25% of the total annual heat input per Rule 232, Section 101.
Origin: AC-02-97 Condition 4
Authority: Rule 232, Biomass Suspension Boilers § 101 [adopted 10/06/94]

2. MDF Dryers
A dryer system shall not be operated unless one baghouse, one of the two wet electrostatic precipitators and the regenerative oxidizer (RO) are operating properly.
Origin: PTO [Issued 10/01/99] Condition 25l
Authority: Rule 501, General Permit Requirements § 303 [amended 11/03/94]

3. MDF Regenerative Oxidizer (RO)
a. The MDF regenerative oxidizer shall be operating within permit conditions whenever Dryers #1, #2, or #3 and/or the MDF press/scrubbers are operating.
Origin: AC-02-64 Condition 2
Authority: Rule 502, New Source Review § 303 [amended 11/03/94]

b. In the event of a breakdown of the MDF RO, SierraPine will vent emissions through the emergency bypass vent. If three (3) different/separate sources that are verifiable complaints are received during the breakdown period, one dryer system will be shutdown. If six (6) different/separate sources that are verifiable complaints are received during the breakdown period, the other two dryer systems will be shutdown until repairs are made or a Variance approved by the District Hearing Board.
Origin: PTO [Issued 10/01/99] Condition 20
Authority: Rule 205, Nuisance [amended 05/24/77]
District Only

c. For the MDF RO, the minimum operating temperature is determined from the average of the three (3) minimum 15-minute block average RO temperatures that are achieved during the three (3) source test runs from the most recent performance source test that is compliant with all permit emission limits. The

temperature limit is effective after District written approval of the most recent performance source test report.

For operation in catalytic and thermal modes, operating temperature limits must be separately determined.

As an alternative, the MDF RO may be operated at a minimum temperature of 1400 degrees F when operating in thermal mode, or operated in the range of 800-1,350 degrees F when operating in catalytic mode.

Origin: 40 CFR §63.2262(l); PTO-10-1-99 Condition 25L; 02-64 Condition 3
Authority: 40 CFR §63.2262(l); Rule 501, General Permit Requirements § 303 [amended 11/03/94]

4. TMDF Regenerative Oxidizer (RO)

a. The TMDF RO shall be operated whenever Dryer #4 and/or the TMDF press are/is operating.
Origin: AC-98-40 Condition 15
Authority: Rule 502, New Source Review § 303 [amended 11/03/94]

b. Exhaust air shall be circulated through the TMDF RO for 15 minutes after stoppage of production on the thin board line prior to venting to atmosphere. During this time the RO shall be maintained above the minimum operating temperature specified in conditions 2.B.4.d and 2.B.4.e.
Origin: AC-02-38 Condition 4
Authority: Rule 502, New Source Review § 303 [amended 11/03/94]

c. A low temperature and a high temperature alarm shall be operated on the TMDF RO.
Origin: AC-02-38 Condition 5
Authority: Rule 502, New Source Review § 303 [amended 11/03/94]

d. For the TMDF RO, the minimum operating temperature is the average of the three (3) minimum 15-minute block average RO temperatures that are achieved during the three (3) source test runs from the most recent performance source test that is compliant with all permit emission limits. The temperature limit is effective after District written approval of the most recent performance source test report.

For operation in catalytic and thermal modes, operating temperature limits must be separately determined.

As an alternative, the TMDF (RO) may be operated at a minimum temperature of 1400 degrees F when operating in thermal mode, or operated in the range of 860-1,050 degrees F when operating in catalytic mode.

Origin: 40 CFR §63.2262(l); AC-02-38 Condition 4; AC-02-38 Condition 14
Authority: 40 CFR §63.2262(l); Rule 501, General Permit Requirements § 303 [amended 11/03/94]

5. TMDF Line Baghouses

a. All baghouses shall be operated whenever the equipment controlled by the baghouses are operated.
Origin: AC-98-40 Condition 11
Authority: Rule 502, New Source Review § 303 [amended 11/03/94]

b. Spare bags shall be kept available for the replacement of torn or otherwise defective bags.
Origin: AC-98-40 Condition 13
Authority: Rule 501, General Permit Requirements § 303 [amended 11/03/94]
District Only

6. MDF Board Press

a. Board presses shall not be operated unless the MDF regenerative oxidizer and one of the two press vent scrubbers are operating properly.
Origin: PTO [Issued 10/01/99] Condition 25F
Authority: Rule 501, General Permit Requirements § 303 [amended 11/03/94]

b. For the MDF press vent enclosure, the fugitive gas emissions capture device must be demonstrated, upon physical modification to the enclosure, to show either:

1. Capture device has capture efficiency of greater than 90 percent; or
2. Meets the definition of wood products enclosure in 40 CFR Section 63.2292

Origin: 40 CFR §63.2240
Authority: 40 CFR §63.2240

7. MDF Board Press Emergency Fans

MDF Board press vent emergency fans are to be operated only during an emergency.
Origin: PTO [Issued 10/01/99] Condition 25H
Authority: Rule 501, General Permit Requirements § 303 [amended 11/03/94]

8. Fugitive Dust Rule 228 and 205

a. All woodwaste conveying, transferring, and storage operations shall be maintained in a manner that effectively controls fugitive dust and prevents the violations of the California Health and Safety Code Section 41700 and District Rule 205 and 228.
Origin: PTO [Issued 10/01/99] Condition 11
Authority: Rule 205, Nuisance [amended 05/24/77] and Rule 228, Fugitive Dust [amended 04/10/03]
District Only

b. All service roads and plant areas shall be maintained in a manner that effectively controls fugitive dust and prevents the violations of the California Health and Safety Code Section 41700 and District Rule 205.
Origin: PTO [Issued 10/01/99] Condition 12
Authority: Rule 205, Nuisance [amended 05/24/77] and Rule 228, Fugitive Dust [amended 04/10/03]
District Only

c. All trucks hauling woodwaste shall be filled and emptied in a manner that effectively controls fugitive dust and prevents the violations of the California Health and Safety Code Section 41700 and District Rule 205.
Origin: PTO [Issued 10/01/99] Condition 13
Authority: Rule 205, Nuisance [amended 05/24/77] and Rule 228, Fugitive Dust [amended 04/10/03]
District Only

d. Belly dump and sawdust bins are not to be emptied at times when wind or weather conditions will cause fugitive dust that will violate California Health and Safety Code Section 41700 and District Rule 205.
Origin: PTO [Issued 10/01/99] Condition 14
Authority: Rule 205, Nuisance [amended 05/24/77] and Rule 228, Fugitive Dust [amended 04/10/03]
District Only

e. Areas around sawdust bins are to be cleaned after transfer to materials to truck in a manner that effectively controls fugitive dust and prevents the violations of the California Health and Safety Code Section 41700 and District Rule 205.
Origin: PTO [Issued 10/01/99] Condition 15
Authority: Rule 205, Nuisance [amended 05/24/77] and Rule 228, Fugitive Dust [amended 04/10/03]
District Only

f. Collected particulate matter shall be handled in a manner that effectively controls fugitive dust and prevents the violations of the California Health and Safety Code Section 41700 and District Rule 205.
Origin: AC-98-40 Condition 14
Authority: Rule 205, Nuisance [amended 05/24/77] and Rule 228, Fugitive Dust [amended 04/10/03]
District Only

g. Fugitive dust shall not be generated by active operations such that the dust opacity is visible in the atmosphere beyond the property boundary; and that the fugitive dust have opacity greater than 40% at any time.

Origin: Rule 228, Fugitive Dust [amended 04/10/03]
Authority: Rule 228, Fugitive Dust [amended 04/10/03]
District Only

h. Visible roadway dust as a result of active operations, spillage from transport trucks, and the track-out of bulk material onto public paved roadways shall be minimized and removed.
Origin: Rule 228, Fugitive Dust [amended 04/10/03]
Authority: Rule 228, Fugitive Dust [amended 04/10/03]
District Only

9. Metering Bin Baghouses
A filter differential pressure indicator shall be required, installed, and calibrated, maintained, and operated in accordance with manufacturers' recommendations and good practices.
Origin: AC-87-16 Condition 11
Authority: Rule 501, General Permit Requirements § 303 [amended 11/03/94]

10. Sanderdust Metering Bin Baghouse
The sanderdust metering bin baghouse will be gated to the closed system except for a maximum of 20 hours per month when the sanders are operating and boiler is not operating.
Origin: AC-97-23R Condition 8
Authority: Rule 501, General Permit Requirements § 303 [amended 11/03/94]

11. TMDF Board Press
a. For the TMDF press vent enclosure, the fugitive gas emissions capture device must be demonstrated, upon physical modification to the enclosure, to show either:

1. Capture device has capture efficiency of greater than 90 percent; or
2. Meets the definition of wood products enclosure in 40 CFR Section 63.2292

Origin: 40 CFR §63.2240
Authority: 40 CFR §63.2240

2.C. Process Limits

1. Boiler
The boiler shall produce no more than 1,320,000 pounds of steam in any one day.
Origin: AC-93-08R Condition 20dii
Authority: Rule 502, New Source Review § 301 [amended 11/03/94]

2. MDF Dryers Process Limits
The combined wood fiber throughput of Dryer #1, Dryer #2, and Dryer #3 shall not exceed 60,000 lbs./hour.
Origin: PTO [Issued 10/01/99] Conditions 25G, 25J1, J2, and J3
Authority: Rule 504 Emission Reduction Credits § 301.4 [amended 11/03/94], AC-05-47

3. TMDF Process Limit
The quarterly production of the thin board line shall not exceed 75,000,000 square feet on a 1/8 inch basis.
Origin: AC-02-95 Condition 2
Authority: Rule 501, General Permit Requirements § 303 [amended 11/03/94]

4. No. 1 Fiber Processing System Metering Bins
The process weight per metering bin is limited to less than 200 dry tons per hour.
Origin: AC-87-16 Condition 12
Authority: Rule 207, Particulate Matter [amended 10-19-93]

5. Emergency Fire Pump (215 hp)
SierraPine shall:

a. Limit Fire pump operation for maintenance purposes to 20 hours per year.

b. Limit Fire pump operation, for other than maintenance purposes, to actual fire emergencies.
c. Not exceed 24 hours of Fire Pump operation without prior authorization by the Air Pollution Control Officer.
d. A non-resettable hour meter shall be installed on the engine/generator set to record the hours of operation

Origin: Rule 502, New Source Review § 110 [amended 11/03/94]
Authority: Rule 502, New Source Review § 110 [amended 11/03/94], PTO-SPIN-93-04 [Issued 06/01/05], California Code of Regulations, Title 17, §93115

6. Emergency Generator

For the emergency generator:

a. A non-resettable hour meter shall be installed on the engine/generator set to record the hours of operation.
b. Operation for maintenance and testing of the emergency diesel engine and generator shall be limited to 20 hours per year.
c. Operation for other than maintenance purposes shall be limited to involuntary interruptions of electrical power. Operation shall not exceed 24 hours without prior authorization by the Air Pollution Control Officer

Origin: PTO-SPIN-00-43 [Issued 06/01/05]
Authority: Rule 501, General Permit Requirements [amended 11/03/94] and Health and Safety Code Section 41753, California Code of Regulations, Title 17, §93115

7. Emergency Fire Pump (360 hp)

For the emergency fire pump:

a. A non-resettable hour meter shall be installed on the engine/pump set to record the hours of operation.
b. Operation for maintenance and testing of the emergency diesel engine and fire pump shall be limited to 30 hours per year (Tier 1 engine).
c. Operation for other than maintenance purposes shall be limited to involuntary interruptions of electrical power. Operation shall not exceed 24 hours without prior authorization by the Air Pollution Control Officer.

Origin: PTO-SPIN-04-01 [Issued 06/01/05]
Authority: Rule 501, General Permit Requirements [amended 11/03/94] and Health and Safety Code Section 41753, California Code of Regulations, Title 17, §93115

3. FACILITY-WIDE CONDITIONS

3.A. Opacity Rule 202

An emission opacity as dark or darker than Ringelmann No. 1 (20% opacity) for a period or periods aggregating more than three (3) minutes in any one hour is prohibited and is in violation of District Rule 202, Visible Emissions.
Origin: PTO [Issued 10/01/99] Condition 26A
Authority: Rule 202, Visible Emissions [amended 05/20/85]

3.B. Nuisance Rule 205

1. General
No emissions are permitted, from any source, which are a nuisance per District Rule 205, Nuisance.
Origin: PTO [Issued 10/01/99] Condition 26C
Authority: Rule 205, Nuisance [amended 05/24/77]
District Only

2. Odor
SierraPine shall respond to all odor complaints immediately to determine the type of odor and the severity of the odor. Such odor, if found to be emanating from SierraPine's manufacturing site, shall be mitigated by operational changes to the extent reasonably possible.
Origin: PTO [Issued 10/01/99] Condition 19
Authority: Rule 205, Nuisance [amended 05/24/77]
District Only

3. Fugitive Dust Rule 228 and 205
All service roads and plant areas shall be maintained in a manner that effectively controls fugitive dust, and prevents the violations of the California Health and Safety Code Section 41700 and District Rule 205, Nuisance and District Rule 228, Fugitive Dust.
Origin: PTO [Issued 10/01/99] Condition 12
Authority: Rule 205, Nuisance [amended 05/24/77], Rule 228, Fugitive Dust [amended 04/10/03]
District Only

3.C. PM Limit Rule 207

In accordance with District Rule 207, SierraPine shall not release or discharge from any source or single processing unit, exclusive of sources emitting combustion contaminants only, particulate matter in excess of 0.1 gr/dscf at standard conditions.
Origin: PTO [Issued 10/01/99] Condition 26B
Authority: Rule 207, Particulate Matter [amended 10/19/93]
District Only

3.D. Specific Contaminant Limit Rule 210

1. In accordance with District Rule 210, Specific Contaminants, particulate matter shall not exceed 0.1 gr/dscf at 12 percent carbon dioxide (CO2) at standard conditions.
Origin: District Rule 210, Specific Contaminants [amended 10/19/93]
Authority: District Rule 210, Specific Contaminants [amended 10/19/93]

2. The emission of sulfur compounds, calculated as sulfur dioxide, shall not exceed 0.2 percent by volume, per Rule 210, Specific Contaminants.
Origin: AC-93-08R Condition 19d
Authority: Rule 210, Specific Contaminants [amended 10/19/93]

3.E. Process PM Limit Rule 211

SierraPine shall not discharge in any one hour from any source solid particulate matter in excess of the amount calculated using the following equations:

For Process rates less than 30 tons per hour;
E = 3.59 P**(0.62)
For Process weight > 30 tons per hour;
E = 17.31 P**(0.16)
Where:
E = Emission limit in pounds per hour
P = Process weight rate in tons per hour

Origin: Rule 211, Process Weight [amended 10/19/93]
Authority: Rule 211, Process Weight [amended 10/19/93]

3.F. Report Upsets Rule 404

1. The plant manager or designee shall notify the District (per Rule 404) of any upset conditions, breakdown or scheduled maintenance which cause emissions in excess of limits established by District Rules and Regulations.
Origin: PTO [Issued 10/01/99] Condition 2
Authority: Rule 404, Upset Conditions, Breakdown, or Scheduled Maintenance § B.1 [amended 06/19/79]
District Only

2. SierraPine shall notify the District as soon as reasonablv possible but no later than two (2) normal District business hours after it's detection of any upset conditions, breakdown or scheduled maintenance that cause emissions in excess of limits established by District Rules and Regulations. (Rule 404)
Origin: AC-02-64 Condition 16
Authority: Rule 404, Upset Conditions, Breakdown, or Scheduled Maintenance § B.1 [amended 06/19/79]
District Only

3. In the event of any violation of District Rules and Regulations, the plant manager shall cease operation of violating equipment and take action to end such violation except as provided for by District Rule 404.
Origin: PTO [Issued 10/01/99] Condition 1
Authority: District Rule 404, Upset Conditions, Breakdown, or Scheduled Maintenance § B.1 [last amended 06/19/79]
District Only

3.G Source Record Keeping and Reporting Rule 408

Upon notification from the District, SierraPine shall maintain records of the nature and amounts of emissions from any source and/or any other information as may be deemed necessary by the District to determine whether such source is in compliance with applicable emission limitations or other control measures. The Air Pollution Control Officer may require that such records be certified by a professional engineer, registered in the State of California. Such studies shall be at the expense of the person causing the emissions. The information recorded shall be summarized and reported to the District, on forms or formats as furnished by the District, and shall be submitted within 45 days after the end of the reporting period. Reporting periods are January 1 - June 30 and July 1 - December 31, except that the initial report period shall commence on the date the District issues notification of the record keeping requirements. Information reported by SierraPine and copies of the summarizing reports submitted to the District shall be retained by SierraPine for 5 years after the date on which the pertinent report is submitted
Origin: Rule 408, Source Record Keeping and Reporting [amended 05/24/77]
Authority: Rule 408, Source Record Keeping and Reporting [amended 05/24/77]

3.H. General District Permit Requirements Rule 501

1. ATC Required Rule 501
a. With the exception of functionally identical replacement, as defined in Rule 504 § 222.1, an Authority to

Construct application shall be filed with the District before the modification or replacement of any equipment for which a Permit to Operate has been granted, and before the installation and operation of any equipment for which an Authority to Construct is required pursuant to Health and Safety Code, Section 42300, and District Rule 501, General Permit Requirements, Section 300.
Origin: PTO [Issued 10/01/99] Condition 6
Authority: Rule 501, General Permit Requirements § 300 [amended 11/03/94]

b. Any alteration of the subject equipment, including a change in the method of operation, shall be reported to the District. Such alterations may require an Authority to Construct Permit
Origin: AC-02-64 Condition 17
Authority: Rule 502, New Source Review § 303 [amended 11/03/94]

2. Limit Exceedance Prohibited Rule 501
a. Exceeding any of the emission limitation established by the Rules and Regulations of the District is prohibited unless specifically allowed by a granted Variance, or due to an upset, breakdown, or scheduled maintenance per District Rule 404.
Origin: PTO [Issued 10/01/99] Condition 9
Authority: Rule 501, General Permit Requirements § 303 [amended 11/03/94]

b. Exceeding any limiting condition is prohibited without prior application for, and the subsequent granting of a permit modification pursuant to District Rule 501, General Permit Requirements, Section 400 and District Rule 507, Title V Permit to Operate, Sections 302.6 and 302.7.
Origin: PTO [Issued 10/01/99] Condition 5
Authority: Rule 501, General Permit Requirements § 400 [amended 11/03/94] and Rule 507 § 302.6 and § 302.7 [amended 04/17/01]

3. Maintain Equipment in Good Working Condition Rule 501
a. All equipment, facilities and systems installed or used to achieve compliance with the terms and conditions of this Permit to Operate shall be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions.
Origin: PTO [Issued 10/01/99] Condition 8
Authority: Rule 501, General Permit Requirements § 304.3 [amended 11/03/94]

b. SierraPine shall maintain an Operating Compliance Plan which will assure that the air pollution control design characteristics or equipment will be properly maintained (or that the operational conditions will be properly performed) so as to continuously achieve the required minimum degree of PM10 and VOC control:

1. The Operating Compliance Plan shall include process limitations, corresponding to emissions limits enforceable by continuous process monitoring devices, and a description of the process monitoring program and indicators to be provided. Such limitations shall be expressed in a manner consistent with the emission testing and monitoring procedures used, such as process rates, material specifications, or exhaust concentration limitations.
2. The plan shall include the frequency and methods of calibrating the process monitoring system and verifying the emission factors.
3. The plan shall identify the methods by which Sierra Pine Ltd. will verify that the ESPs, Wet Scrubber, ducting, and the fluid media of the ESPs and scrubber do not produce fugitive losses of VOCs or PM10 during normal operation.

Origin: PTO [Issued 10/01/99] Condition 21
Authority: Rule 501, General Permit Requirements § 304.3 [amended 11/03/94]

4. Toxics Hot Spots Compliance Rule 501
Compliance of the permitted facility is required with the provisions of the "Air Toxics 'Hot Spots' Information and Assessment Act" of 1987 (Health and Safety Code Sections 44300 et seq.).
Origin: PTO [Issued 10/01/99] Condition 18
Authority: California Health and Safety Code Sections 44300 et seq.
District Only

5. Change of Ownership Rule 501

a. In the event of a change of ownership, an application must be submitted to the District. Upon any change in control or ownership of facilities constructed, operated, or modified under authority of this permit, the requirements contained in this Authority to Construct shall be binding on all subsequent owners and operators.(Rule 501)
Origin: AC-98-40 Condition 6
Authority: Rule 501, General Permit Requirements § 303 [amended 11/03/94]

b. Upon any change in control or ownership of facilities constructed, operate, or modified under authority of this permit, the requirements contained in this Permit to Operate shall be binding on all subsequent owners and operators.
Origin: PTO [Issued 10/01/99] Condition 7
Authority: Rule 501, General Permit Requirements § 303.1 [amended 11/03/94]

6. Permit Revision Rules 501 and 507
Revisions to this permit may be requested pursuant to District Rule 501, General Permit Requirements, Section 400 and District Rule 507, Title V Permit to Operate, Sections 302.6 and 302.7.
Origin: PTO [Issued 10/01/99] Condition 4
Authority: Rule 501, General Permit Requirements § 400 [amended 11/03/94]; Rule 507 § 302.6 and § 302.7 [amended 04/17/01]

7. Definition Rule 501
For the purposes of determining compliance with emission limitations:

a. Hourly limitations shall be based on a three-hour average.
Origin: AC-93-08R Condition 19e
Authority: Rule 501, General Permit Requirements § 303 [amended 11/03/94]

b. Daily limitations shall be based on any 24 contiguous hours.
Origin: AC-93-08R Condition 24
Authority: Rule 501, General Permit Requirements § 303 [amended 11/03/94]
c. Quarterly limitations shall be based on calendar quarters beginning in January, April, July, and October.
Origin: Rule 504, Emission Reduction Credits § 218 [amended 11/03/94]
Authority: Rule 504, Emission Reduction Credits § 218 [amended 11/03/94]

8. Permit Posting
This permit shall be maintained on the premises of the subject equipment. (Rule 501)
Origin: AC-02-64 Condition 13
Authority: Rule 501, General Permit Requirements [amended 11/03/94]

9. Permit Not Permission to Violate Laws
The permit does not authorize the emission of air contaminants in excess of those allowed by Division 26, Part 4, of the Health and Safety Code of the State of California or the Rules and Regulations of the Air Pollution Control District. The permit(s) cannot be considered as permission to violate existing laws, ordinances, regulations or statutes of other governmental agencies.
Origin: Rule 501, General Permit Requirements § 303.6 [last amended 11/03/94]
Authority: Rule 501, General Permit Requirements § 303.6 [last amended 11/03/94]

10. Equipment Must Operate as Specified
Operation of this equipment must be conducted in compliance with all data and specifications submitted with the application under which this permit is issued.
Origin: Rule 501, General Permit Requirements § 303.6 [last amended 11/03/94]
Authority: Rule 501, General Permit Requirements § 303.6 [last amended 11/03/94]

3.I. End Violations Rule 502

1. In the event of any violation of the District Rules and Regulations, SierraPine shall take action to end such violation.

Origin: AC-02-64 Condition 15
Authority: Rule 502, New Source Review [amended 08/09/01]

2. Pursuant to District Rule 502, New Source Review, Section 227, the plant manager, or designee, shall report to the District immediately any changes in production rates or operation schedules, changes in operation methods or fuel characteristics, the addition to or removal of permitted equipment, and changes of any facilities or systems installed or used to achieve compliance with the District Rules and Regulations in addition to the terms and conditions of this Permit to Operate.
Origin: PTO [Issued 10/01/99] Condition 3
Authority: Rule 502, New Source Review [amended 08/09/01]

3.J. Emission Statement Rule 503

SierraPine shall provide the District with a written emission statement showing actual emissions of volatile organic compounds and oxides of nitrogen. Pursuant to District Rule 503 SierraPine shall submit this emission statement on a form or in a format specified by the Air Pollution Control Officer. The statement shall contain the following information:

1. Information contained in the California Air Resources Board's Emission Inventory Turn Around Document as described in Instructions for the Emission Data System Review and Update Report; and
2. Actual emissions of volatile organic compounds and oxides of nitrogen, in tons per year, for the calendar year prior to the preparation of the emission statement; and
3. Information regarding seasonal or diurnal peaks in the emission of affected pollutants; and
4. Certification by a responsible official of the company that the information contained in the emission statement is accurate to the best knowledge of the individual certifying the emission statement.

Origin: Rule 503, Emission Statement [amended 9/21/93]
Authority: Rule 503, Emission Statement [amended 9/21/93]
District Only

3.K. ERC Certificate Not Evidence of Rule 504 Compliance

a. The registration and issuance of an ERC Certificate shall not constitute evidence of compliance with the rules and regulations of the District, or a representation or assurance to the recipient upon which reliance is authorized or intended that the ERC represented by the ERC Certificate are available from the District ERC bank.
Origin: AC-93-08R Condition 31
Authority: Rule 504, Emission Reduction Credits [amended 11/03/94]

b. The District may require a user within the District of offsets which are dependent upon compliance with the emission limit(s) for permanency, to obtain valid offsets or curtail operations to the extent that the credited reductions used as offsets are deemed to be no longer valid, pursuant to Rule 502, New Source Review.
Origin: AC-93-08R Condition 29
Authority: Rule 504, Emission Reduction Credits § 301.4 [amended 11/03/94]

c. Prior to the registration and issuance of ERC Certificates and prior to any deposit, withdrawal, or the transfer of Emission Reduction Credits, a report shall be made to the District detailing the amount of emissions for offsets purchased, by pollutant; the year the offset transaction occurred; and the total cost, by pollutant, of the offsets purchased, and other such information as may be required to perform the cost analysis required by Section 40709.5(e) of the California Health and Safety Code. This information shall be part of the public record.
Origin: AC-93-08R Condition 36
Authority: Rule 504, Emission Reduction Credits § 501.1 [amended 11/03/94]

3.L. Federal Operating Permit Program Rule 507

Prior to the transfers of ownership or operational control of a stationary source, the Air Pollution Control Officer must receives a written agreement which specifies a date for the transfer of permit responsibility, coverage, and liability from the current to the prospective owner.
Origin: District Rule 507, Federal Operating Permit Program § 202.4 305 Transfer [amended 04/17/01]
Authority: District Rule 507, Federal Operating Permit Program § 202.4 Transfer [amended 04/17/01]

3.M. Miscellaneous Federal Requirements

1. Protection of Stratospheric Ozone Maintenance, service, repair or disposal of appliances containing ozone depleting compounds as defined in Appendix A and Appendix B to Subpart A of 40 CFR Part 82 shall be performed by persons certified by a technician certification program approved pursuant to 40 CFR Part 82.161.
Origin: 40 CFR Part 82, Protection of Stratospheric Ozone
Authority: 40 CFR Part 82, Protection of Stratospheric Ozone

2. Chemical Accident Prevention Provisions If, as defined in 40 CFR Part 68.3, SierraPine becomes subject to 40 CFR Part 68, then SierraPine shall submit a risk management plan (RMP) by the date specified in 40 CFR Part 68.10. A certification of compliance with this condition shall be included as part of the annual certification required by this Title V permit to operate.
Origin: 40 CFR Part 68, Chemical Accident Prevention Provisions
Authority: 40 CFR Part 68, Chemical Accident Prevention Provisions

3. National Emission Standards for Hazardous Air Pollutants, Asbestos
For demolition and renovation projects involving material containing Asbestos, SierraPine shall comply with the requirements of 40 CFR 61, National Emission Standards for Hazardous Pollutants, Sections 60.145 through 61.147.
Origin: 40 CFR Part 61, National Emission Standards for Hazardous Air Pollutants, Subpart M
Authority: 40 CFR Part 61, National Emission Standards for Hazardous Air Pollutants, Subpart M

4. Startup, Shutdown, and Malfunction Plan
a. SierraPine must develop and comply with a written Startup, Shutdown, and Malfunction Plan, according to 40 CFR Section 63.6(e)(3)
b. Equipment subject to the NESHAPs must be operated and maintained, including air pollution control and monitoring equipment, according to 40 CFR Section 63.6(e)(3).
Origin: 40 CFR §63.2250(b) and §63.2250(c)
Authority: 40 CFR §63.2250(b) and §63.2250(c)

5. Operating and Maintenance
a. SierraPine must be operated and maintained, including air pollution control and monitoring equipment, according to 40 CFR Section 63.6(e)(3).
Origin: 40 CFR §63.2250(b)
Authority: 40 CFR §63.2250(b)

3.N. Portable Equipment
a. Any equipment, including portable equipment, shall comply with all applicable requirements while operating at the facility, including District Permit and Prohibitory Regulations, or be State-registered portable equipment. State-registered portable equipment shall comply with State registration requirements. A copy of the State registration shall be readily available whenever the State-registered portable equipment is at the facility.
Origin: Rule 501, General Permit Requirements [amended 11/03/94] and Health and Safety Code Section 41753
Authority: Rule 501, General Permit Requirements [amended 11/03/94] and Health and Safety Code Section 41753

4. STANDARD TERMS AND CONDITIONS

4.A. Permit Life/Term

This permit to operate shall expire five years from the time of issuance. Permit expiration terminates SierraPine's right to operate unless a timely renewal application is submitted.
Origin: Rule 507, Federal Operating Permit Program § 402.2.p [amended 04/17/01]
Authority: Rule 507, Federal Operating Permit Program § 402.2.p [amended 04/17/01]

4.B. Payment of Fees

SierraPine shall pay all District fees including any supplemental annual fee, as calculated the procedures specified in Section 403 of District Rule 507, on a timely basis. Failure to remit fees on a timely basis shall result in the forfeiture of this permit to operate. Operation without a permit subjects the source to potential enforcement action by the District and the U.S. EPA pursuant to § 502(a) of the Clean Air Act.
Origin: Rule 507, Federal Operating Permit Program § 402.2.o [amended 04/17/01]
Authority: Rule 507, Federal Operating Permit Program § 402.2.o [amended 04/17/01]

4.C. Right of Entry

The Regional Administrator, the Executive Officer of the California Air Resources Board, the APCO, or their authorized representatives, upon the presentation of credentials, shall be permitted:

1. To enter upon the premises where the source is located or in which any records are required to be kept under the terms and conditions of this Permit to Operate; and
2. At reasonable times to have access to, inspect and copy any records required to be kept under the terms and conditions of this Permit to Operate; and
3. To inspect any equipment at the stationary source, operation, work practices, emission-related activities or method required in this Permit to Operate; and
4. To sample emissions from the source or other monitoring activities.

Origin: Rule 507, Federal Operating Permit Program § 402.2.j [amended 04/17/01]
Authority: Rule 507, Federal Operating Permit Program § 402.2.j [amended 04/17/01]

4.D. Severability

The provisions of this Permit to Operate are serverable, and, if any provision of this Permit to Operate is held invalid, the remainder of this Permit to Operate shall not be affected thereby.
Origin: Rule 507, Federal Operating Permit Program § 402.2.m [amended 04/17/01]
Authority: Rule 507, Federal Operating Permit Program § 402.2.m [amended 04/17/01]

4.E. Need to Halt or Reduce Activity Not a Defense

SierraPine shall not use the "need to halt or reduce a permitted activity in order to maintain compliance" as a defense for non-compliance with any permit condition.
Origin: Rule 507, Federal Operating Permit Program § 402.2.k.4 [amended 04/17/01]
Authority: Rule 507, Federal Operating Permit Program § 402.2.k.4 [amended 04/17/01]

4.F. Modification, Revocation, Reopening for Cause

This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by SierraPine for a permit modification, revocation and re-issuance, or termination, or of a notification of planned changes or anticipated non-compliance does not stay any permit condition.
Origin: Rule 507, Federal Operating Permit Program § 402.2 k.5 [amended 04/17/01]
Authority: Rule 507, Federal Operating Permit Program § 402.2 k.5 [amended 04/17/01]

4.G. Submit Information and Records

Within a reasonable time period, SierraPine shall furnish any information requested by the air pollution control officer (APCO) of Placer County Air Pollution Control District, in writing, for the purpose of determining:

1. Compliance with the permit, or
2. Whether or not cause exists for a permit or enforcement action.

For information claimed to be confidential, SierraPine may furnish such information directly to the APCO along with a claim of confidentiality.
Origin: Rule 507, Federal Operating Permit Program § 402.2.k.6 [amended 04/17/01]
Authority: Rule 507, Federal Operating Permit Program § 402.2.k.6 [amended 04/17/01]

4.H. Duty to Comply

SierraPine shall comply with provisions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and re-issuance, or modification; or for denial for a permit renewal application.
Origin: Rule 507, Federal Operating Permit Program § 402.2 k.1 and 402.2.k.3 [amended 04/17/01]
Authority: Rule 507, Federal Operating Permit Program § 402.2 k.1 and 402.2.k.3 [amended 04/17/01]

4.I. Property Rights

This permit does not convey property rights or exclusive privilege of any sort.
Origin: Rule 507, Federal Operating Permit Program § 402.2.k.2 [amended 04/17/01]
Authority: Rule 507, Federal Operating Permit Program § 402.2.k.2 [amended 04/17/01]

4.J. Duty to Apply for Renewal

SierraPine shall apply for renewal of this permit no earlier than 18 months before the date of expiration nor later than 6 months before the date of expiration.
Origin: Rule 507, Federal Operating Permit Program § 302.4 [amended 04/17/01]
Authority: Rule 507, Federal Operating Permit Program § 302.4 [amended 04/17/01]

4.K. Emergency Provisions

1. Emergency Definition
An "emergency" is any situation arising from a sudden and reasonably unforeseeable event beyond the control of a permittee (e.g., an act of God) which causes the exceedance of a technology-based emission limitation under a permit and requires immediate corrective action to restore compliance. An "emergency" shall not include noncompliance as a result of improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
Origin: Rule 507, Federal Operating Permit Program §212 [amended 04/17/01]
Authority: Rule 507, Federal Operating Permit Program §212[amended 04/17/01]

2. Effect of an Emergency
An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the reporting requirements.
Origin: 40 CFR 70.6(g)(2)
Authority: 40 CFR 70.6(g)(2)

3. Affirmative Defense
The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
a. SierraPine complied with the requirements of Rule 404, Upset conditions, Breakdown and Scheduled Maintenance, and the emergency provisions contained in all applicable federal requirements; and
b. That within two weeks of an emergency event, the responsible official submitted to the District a properly signed, contemporaneous log or other relevant evidence which demonstrates that:

i. An emergency occurred;
ii. SierraPine can identify the cause(s) of the emergency;

iii. The facility was being properly operated at the time of the emergency;
iv. All steps were taken to minimize the emissions resulting from the emergency; and
v. Within two working days of the emergency event, SierraPine provided the District with a description of the emergency and any mitigating or corrective actions taken.

Origin: District Rule 507, Federal Operating Permit Program §402.2.I [amended 04/17/01]
Authority: District Rule 507, Federal Operating Permit Program §402.2.I [amended 04/17/01]

4. Burden of Proof

In any enforcement proceeding, SierraPine has the burden of proof for establishing that an emergency occurred.

Origin: Rule 507, Federal Operating Permit Program § 402.2.I.3 [amended 04/17/01]
Authority: Rule 507, Federal Operating Permit Program § 402.2.I.3 [amended 04/17/01]

4.L. Voluntary Emissions Caps

To the extent applicable federal requirements provide for averaging emissions increases and decreases within a stationary source without case-by-case approval, a responsible official may request, subject to approval by the Air Pollution Control Officer, to permit one or more emissions unit(s) under a voluntary emissions cap. The permit for each emissions unit shall include federally enforceable conditions requiring that:

1. All applicable federal requirements, including those authorizing emissions averaging, are complied with;
2. No individual emissions unit shall exceed any emissions limitation, standard, or other requirement;
3. Any emissions limitation, standard, or other requirement shall be enforced through continuous emission monitoring, where applicable; and
4. All affected emissions units under a voluntary emissions cap shall be considered to be operating in violation of the permit, if the voluntary emissions cap is exceeded.

Origin: Rule 507, Federal Operating Permit Program § 402.2.r [amended 04/17/01]
Authority: Rule 507, Federal Operating Permit Program § 402.2.r [amended 04/17/01]

4.M. Agency Addresses

Notifications or correspondence as required by this Title V Permit To Operate shall be forwarded to the following addresses:

1. Director, Air and Toxics Division (Attn.: Air-5)
   U.S. Environmental Protection Agency
   75 Hawthorne Street
   San Francisco, CA 94105

2. Air Pollution Control Officer
   Placer County Air Pollution Control District
   3091 County Center Drive, Suite 240
   Auburn, CA 95603

Origin: General Information
Authority: General Information

4.N. Reopening Permit for Cause

1. Circumstances

This permit shall be reopened and revised under any of the following circumstances including, but are not limited to, the following:

a. The need to correct a material mistake or inaccurate statement;
b. The need to revise or revoke a permit to operate to assure compliance with applicable federal requirements;

c. The need to incorporate any new, revised, or additional applicable federal requirements, if the remaining authorized life of the permit is 3 years or greater, no later than 18 months after the promulgation of such requirement (where less than 3 years remain in the authorized life of the permit, the Air Pollution Control Officer shall incorporate these requirements into the permit to operate upon renewal).

Origin: Rule 507, Federal Operating Permit Program § 401.8 [amended 04/17/01]
Authority: Rule 507, Federal Operating Permit Program § 402.1.8 [amended 04/17/01]

2. Process

In processing a permit reopening, the Air Pollution Control Officer shall use the same procedures as for an initial permit and additionally:

a. Provide written notice to a responsible official and the US Environmental Protection Agency at least 30 days, or a shorter period in the case of an emergency, prior to reopening a permit; and
b. Complete action to revise the permit as specified in the notice of reopening within 60 days after the written notice to the US Environmental Protection Agency pursuant to Subsection 401.4(b)(5), if the US Environmental Protection Agency does not object, or after the Air Pollution Control Officer has responded to US Environmental Protection Agency objection pursuant to Subsection 401.5(b).

Origin: Rule 507, Federal Operating Permit Program § 401.8 [amended 04/17/01]
Authority: Rule 507, Federal Operating Permit Program § 402.1.8 [amended 04/17/01]

4.O. Permit Revision Exemption

No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.
Origin: Rule 507, Federal Operating Permit Program § 402.2.u [amended 04/17/01]
Authority: Rule 507, Federal Operating Permit Program § 402.2.u [amended 04/17/01]

4.P. Permit Shield

A 40 CFR Part 70.6(f) Permit Shield exists. The Permit Shield shall comply with the limitations of 40 CFR Part 70.
Origin: 40 CFR Part 70.6(f)
Authority: 40 CFR Part 70.6(f)

4Q. Requirement for an Indemnification Agreement

SierraPine has an obligation to defend and indemnify the District against third party challenges in accordance with District Rule 411.
Origin: Rule 411, Idemnification of District [Issued 2/14/08]
Authority: Rule 411, Idemnification of District [Issued 2/14/08]
District Only

5. ALTERNATIVE SCENARIOS

5.A. Upset Conditions

The following alternative operating scenario is for equipment experiencing an unforeseen breakdown that may result in excess emissions for a sort period of time (i.e. less than 48 hours).

There may be periods when SierraPine facility will be operated pursuant to the requirements of the District Rule 404 (Upset Conditions, Breakdown or Scheduled Maintenance) and/or the Emergency Provisions under 40 CFR 70.6(g). During these times, SierraPine will comply with all the relevant notification, monitoring, reporting and record keeping requirements contained in PCAPCD Rule 404 and 40 CFR 70.6(g).

Origin: Rule 507, Federal Operating Permit Program § 402.2.q [amended 04/17/01]
Authority: Rule 507, Federal Operating Permit Program § 402.2.q [amended 04/17/01]

5.B. MDF Regenerative Oxidizer Mode of Operation

SierraPine may operate the MDF regenerative oxidizer in two modes. The oxidizer will operate as a catalytic oxidizer or as a regenerative thermal oxidizer.

1. SierraPine shall comply with all applicable requirements at all times with the MDF regenerative oxidizer operating in either mode.
2. SierraPine shall maintain a contemporaneous log to record each change from one operating mode to the other.

Origin: Rule 507, Federal Operating Permit Program § 402.2.q [amended 04/17/01]
Authority: Rule 507, Federal Operating Permit Program § 402.2.q [amended 04/17/01]

5.C. TMDF Regenerative Oxidizer Mode of Operation

SierraPine may operate the TMDF regenerative oxidizer in two modes. The oxidizer will operate as a catalytic oxidizer or a regenerative thermal oxidizer.

1. SierraPine shall comply with all applicable requirements at all times with the TMDF regenerative oxidizer operating in either mode.
2. SierraPine shall maintain a contemporaneous log to record each change from one operating mode to the other.

Origin: Rule 507, Federal Operating Permit Program § 402.2.q [amended 04/17/01]
Authority: Rule 507, Federal Operating Permit Program § 402.2.q [amended 04/17/01]

6. MONITORING, TESTING, AND RECORD KEEPING

6.A. General Monitoring Frequency, Record Keeping and Reporting and Testing Requirements

All monitoring, analytical methods, compliance certification, test methods, equipment management, and statistical procedures shall be consistent with any applicable federal requirement, including those pursuant to Sections 114(a)(3) and 504(b) of the Federal Clean Air Act, and 40 CFR Part 64.

1. Monitoring Frequency
Monitoring (sampling, testing, recording) shall be performed at a frequency sufficient to yield accurate, reliable and representative data with which the source's compliance with applicable limits or conditions can be demonstrated.

2. Record Keeping
a. SierraPine shall:

i. Maintain records of all required monitoring data and support information associated with any applicable federal requirement in a permanent form suitable for inspection including:

a. Date, place, and time of sampling;
b. Operating conditions at the time of sampling;
c. Date, place, and method of analysis; and
d. The company or entity that performed the analyses;
e. Results of the analysis;
f. Copies of all reports as required by applicable federal requirements.

Note that support information includes information on Continuous Monitoring Equipment operations including:

- All calibration and maintenance records
- All original recordings for continuous monitoring instrumentation, and
- Performance and all other information required by 40 CFR 60.

ii. Comply with all record keeping requirements deemed necessary by the Air Pollution Control Officer to ensure compliance with all applicable federal requirements.; and

iii. Retain these records for a period of at least five years from the date of sample collection, measurement, analysis, report, or application.

Origin: Rule 507, Federal Operating Permit Program § 402.2.g [amended 04/17/01]
Authority: Rule 507, Federal Operating Permit Program § 402.2.g [amended 04/17/01]

b. All required monitoring data and support information shall be retained for a period of at least 5 years from the date of the sample collection, measurement, report, or application.
Origin: Rule 507, Federal Operating Permit Program § 402.2.f.3 [amended 04/17/01]
Authority: Rule 507, Federal Operating Permit Program § 402.2.f.3 [amended 04/17/01]

c. All records shall be made available to District inspectors upon request.
Origin: Rule 503, General Permit Requirements § 503.1 [amended 11/03/94]
Authority: Rule 503, General Permit Requirements § 503.1 [amended 11/03/94]

3. Reporting
SierraPine shall:
a. Report any deviation from permit requirements, including that attributable to upset conditions (as defined in District Rule 404), shall be promptly reported to the Air Pollution Control Officer. All reports of a deviation from permit requirements shall include the probable cause of the deviation and any preventative or corrective action taken.

b. Submit monitoring reports at least every six months. Monitoring reports shall identify any deviation from permit requirements, including those previously reported to the Air Pollution Control Officer in accordance with Subsection 6.A.3.a. Monitoring reports shall be submitted within 45 days of the end of the reporting period (Reporting periods are January 1-June 30 and July 1-December 31) and each monitoring report shall be accompanied by a written statement from the responsible official which certifies the truth, accuracy, and completeness of the report.

c. Submit compliance schedule progress reports on any compliance schedule at least semi-annually. Progress reports shall containing:

1. The date when compliance will be achieved;
2. An explanation of why compliance was not, or will not be, achieved by the scheduled date; and
3. A log of any preventative or corrective actions taken.

Origin: Rule 507, Federal Operating Permit Program § 402.2.g [amended 04/17/01]
Authority: Rule 507, Federal Operating Permit Program § 402.2.g [amended 04/17/01]

d. For MDF and TMDF ROs, if operating in catalytic mode, records must be kept of results of the annual catalyst activity check, and corrective actions taken.
Origin: 40 CFR §63.2282(e)
Authority: 40 CFR §63.2282(e)

4. Testing

a. The District may require the conduct of emissions testing or analysis deemed necessary to demonstrate compliance with applicable requirements. If the District determines that tests are required, a written notice will be provided to SierraPine.
Origin: Rule 501, General Permit Requirements § 304 [amended 11/03/94]
Authority: Rule 501, General Permit Requirements § 304 [amended 11/03/94]

b. Except as otherwise specified in District rules, regulations, or permit conditions the test methods used for determining compliance with emission limits shall be the appropriate method:

i. Adopted by the California Air Resources Board and cited in Title 17, California Code of Regulations, Division 3, Subchapter 8, Compliance with Non-vehicular Emission Standards; or
ii. Identified in 40 CFR part 50, Appendix M, Recommended Test Methods for State Implementation Plans; or
iii. Identified in 40 CFR part 60, Appendix A, Test Methods; or
iv. Any alternative method approved by the Air Pollution Control Officer.

Note: The Air Pollution Control Officer shall request the review of the alternate test methods by the U.S. Environmental Protection Agency and the California Air Resources Board.
Origin: PTO [Issued 10/01/99] Condition 23
Authority: Rule 501, General Permit Requirements § 501.1 [amended 11/03/94]

c. All required testing shall be subject to the following:

i. A written test plan shall be submitted to the Air Pollution Control Officer detailing the sampling methods, analytical methods or detection principles to be used, at least thirty (30) days prior to the actual testing.
ii. Independent testing contractors and analytical laboratories shall be Air Resources Board certified to perform the test or analysis conducted.
iii. Testing shall be conducted as close as achievable to the maximum process rates or the permitted rates resulting in maximized air pollutant emission rates.
iv. The conditions and equipment in operation during testing shall be recorded.
v. Installed instrumentation readings for parameters affecting emission character or extent shall be recorded.
vi. The test evaluation results shall be reported to the District within sixty (60) days of testing.

Origin: AC-98-40 Condition 25
Authority: Rule 232 § 504 [amended 10/6/94]

d. Biennial performance testing for compliance with the requirements identified 40 CFR §63 Table 1B Subpart DDDD shall be conducted using methods in 40 CFR §63 Table 4 Subpart DDDD.
Origin: 40 CFR 63 §63.2262 and Table 4
Authority: 40 CFR 63 §63.2262 and Table 4

e. Performance testing for compliance with the capture efficiency limit shall be conducted within 180 days of any physical modification to the enclosure using EPA Method 204 or the tracer gas method contained in Appendix B to 40 CFR §63 Subpart DDDD.
Origin: 40 CFR 63 §63.2262 and Table 4
Authority: 40 CFR §63.2262 and Table 4

6.B. Specific Unit Monitoring

1. Boiler
a. The Continuous Emissions Monitoring System (CEMS) shall be calibrated, operated, and maintained in accordance with applicable requirements of Appendices B and F of Title 40 Code of Federal Regulations Part 60 (40 CFR 60).
Origin: PTO [Issued 10/01/99] Condition 25B and 25C
Authority: Rule 232, Biomass Suspension Boilers § 502.2 [amended 10/6/94]

b. The CEMS shall include equipment that measures and records the following:
i. Continuous exhaust gas NOx and CO concentrations corrected to 12% by volume stack gas CO2 dry basis.
ii. Average NOx and CO concentrations calculated on a three-hour average basis.
Origin: PTO [Issued 10/01/99] Condition 25B and 25C
Authority: Rule 232, Biomass Suspension Boilers § 502.2 [amended 10/6/94]

c. Steam production shall be monitored continuously.
Origin: AC-93-08R Condition 20div
Authority: Rule 502, New Source Review § 303 [amended 11/03/94]

2. MDF Dryer
The process rate shall be monitored in real time in such a way that the rate of wood fiber processed can be determined continuously.
Origin: AC-93-08R Condition 20b
Authority: Rule 504, Emission Reduction Credits § 301.4 [amended 11/03/94]

3. TMDF RO
a. The TMDF RO internal operating temperature, and an indicator that the board production is operating, shall be recorded electronically at least every 15 minutes. SierraPine may use the operational status of dryer number 4 as the indicator or other indicator(s) approved by the District.
Origin: AC-02-38 Condition 6
Authority: Rule 502, New Source Review § 303 [amended 11/03/94]

b. For MDF and TMDF RO temperatures, 3 hour block averages shall be determined as the average of evenly spaced readings in the previous 3 operating hours.
Origin: 40 CFR §63.2270(d)
Authority: 40 CFR §63.2270(d)

c. The data shall be available to the District upon request in a format which may be imported into Microsoft Excel or other readily available spreadsheet format.
Origin: AC-02-38 Condition 7
Authority: Rule 501, General Permit Requirements § 503.1.a [amended 11/03/94]

4. Emergency Fire Pumps and Generator

A log shall be kept for a period of three (3) years, and shall be made available to the District's inspector upon request. Information required to be kept in the log includes:

a. The hours of operation the engine was run for maintenance and testing.
b. The hours of operation the engine was run during interruption of electrical power.
c. The hour meter reading at the start of each calendar year.
d. Fuel records including fuel type, amount purchased, and date purchased.

Origin: PTO-SPIN-04-01 [Issued 06/01/05], PTO-SPIN-00-43 [Issued 06/01/05]
Authority: Rule 501, General Permit Requirements [amended 11/03/94] and Health and Safety Code Section 41753, California Code of Regulations, Title 17, §93115

6.C. Logs

1. SierraPine shall establish and maintain a logbook or other record detailing the performance and date of preventive maintenance, corrective maintenance, and inspections, as well as reporting breakdowns (per District Rule 404, Upset, Breakdown and Scheduled Maintenance). This log or record shall be made available to the District's inspector upon request.
Origin: PTO [Issued 10/01/99] Condition 10
Authority: Rule 501, General Permit Requirements § 503.1.a [amended 11/03/94]

2. SierraPine shall maintain the following process logs:

Equipment	Process logged	Origin (Authority)
MDF Press	Sqft @3/4" processed /day	PTO [Issued 10/01/99] Condition 24 (Rule 501)
Boiler	Lbs. steam produced/day	PTO [Issued 10/01/99] Condition 24 (Rule 501)
Dryers 1-4	Tons fiber dried /day Mmcf natural gas used/qtr	AC-93-08R Condition 20ciii (Rule 504)
MDF RO	RCO/RTO mode changes Hours of operation	AC-95-34R Condition 7 (Rule 501)
TMDF Line	Sq.ft@1/8" produced/day Mcf natural gas used/day	AC-98-40 Condition 26 (Rule 501)
TMDF RO	RCO/RTO mode changes Hours of operation	AC-02-38 Condition 8 (Rule 502)
Sanderdust Baghouse Gate	Hours gate open	AC-97-23R Condition 8 (Rule 501)

6.D. Compliance Assurance

1. Emission Reduction Credits
Annually SierraPine shall demonstrate compliance with emission reduction credits (ERCs), permit conditions, and District Rules. Means of compliance demonstration, which may include, but is not limited to, source testing, shall be agreed upon with District staff.
Origin: PTO [Issued 10/01/99] Condition 22
Authority: Rule 504, Emission Reduction Credits § 301.4 [amended 11/03/94]

2. Resin Compliance
SierraPine shall demonstrate compliance with permit conditions and all District rules and regulations whenever resins are used which contain a concentration of free formaldehyde greater than 0.20%.
Origin: AC-93-08 Condition 23
Authority: Rule 504, Emission Reduction Credits § 301.4 [amended 11/03/94]

3. MDF RO Operations
a. Compliance tests shall be conducted on the MDF line Regenerative Catalytic Oxidizer exhaust annually for VOCs, and biennially for the MACT HAP limitations of 40 CFR §63.2240; and for NOx at least once every three (3) years.

b. Testing for VOCs shall be conducted in accordance with 40 CFR 60, Appendix A, Method 25A (option to include EPA Method 18), or South Coast AQMD Test Methods 25.1 and 25.3, or equivalent methods as required by the District.

c. Particulate matter testing, if requested, shall include both filterable and condensed particulate matter.
Origin: AC-02-64 Condition 6, 7, and 8
Authority: Rule 502, New Source Review § 303 [amended 11/03/94]

4. TMDF RO Operations
a. Compliance tests shall be conducted on the TMDF regenerative catalytic oxidizer exhaust annually for VOCs and biennially for the MACT HAP limitations of 40 CFR §63.2240; and for NOx at least once every three (3) years.

b. Testing for VOCs shall be conducted in accordance with 40 CFR 60, Appendix A, Method 25A (option to include EPA Method 18), or South Coast AQMD Test Methods 25.1 and 25.3, or equivalent methods as required by the District. The District must approve the test plan prior to the test.

c. Particulate matter testing, if requested, shall include both filterable and condensed particulate matter.
Origin: AC-02-38 Condition 10, 11, 12 and 13
Authority: Rule 502, New Source Review § 303 [amended 11/03/94]

5. MDF and TMDF RO MACT Operating Requirements

a. For the MDF and TMDF ROs, the 3 hour block average RO temperature must be maintained above the minimum temperature established during the most recent performance test; or within the alternative temperature limits specified in this permit. When operating in catalytic mode, the activity level of a representative sample of the catalyst must be checked at least every 12 months, and necessary corrective action taken to ensure that the catalyst is performing within its design range.
Origin: 40 CFR §63 Table 2, to Subpart DDDD of Part 63 – operating requirement
Authority: 40 CFR §63 Table 2, to Subpart DDDD of Part 63 – operating requirement

b. For the MDF and TMDF RO temperature monitors: (1) Electronic calibration must be conducted on semi-annually according to procedures in the manufacturer's owners manual; (2) After the electronic calibration, validation check must be conducted using a second temperature sensor placed nearby the process sensor, which must read within 30F of the process sensor; (3) Monitors must have a minimum accuracy of 4F or 0.75 percent of the temperature value, which ever is larger; (4) Calibration and verification checks must be conducted any time the sensor exceeds the manufacturer's specified maximum

operating temperature range; (5) Inspection must be conducted, on a quarterly basis, of all components for integrity and all electrical connections for continuity, oxidation, and galvanic corrosion.
Origin: 40 CFR §63.2269(b)
Authority: 40 CFR §63.2269(b)

6. Compliance Assurance Monitoring Plan
SierraPine shall comply with the monitoring provisions contained in the Compliance Assurance Monitoring Plan approved in writing by the District. Once approved, the most recent Compliance Assurance Monitoring Plan shall be affixed to this permit.
Origin: 40 CFR Part 64
Authority: 40 CFR 70.6(c)(5)(iii)(C); 40 CFR Part 64

7. Boiler
a. Compliance tests shall be conducted on the Boiler exhaust annually for PM10, NOx, and CO.
Origin: Rule 501, General Permit Requirements § 304 [amended 11/03/94]
Authority: Rule 501, General Permit Requirements § 304 [amended 11/03/94]

6.E. Quarterly CEM Excess Emissions and Performance Reports
SierraPine shall submit an excess emissions and monitoring systems performance report to the Air Pollution Control Officer within 30 days after the end of each calendar quarter in accordance with 40 CFR 60, Section 60.7(c) and (d) and Section 60.13.
Origin: PTO [Issued 10/01/99] Condition 25D
Authority: Rule 232, Biomass Suspension Boilers § 504 [amended 10/6/94]

7. COMPLIANCE PLAN AND CERTIFICATION

7.A. Compliance Plan

SierraPine shall follow the compliance plan (Forms 507-J1 and 507-J2) as submitted with the Title V Permit application. A copy of this compliance plan shall be attached and posted along with this permit.
Origin: Rule 507, Federal Operating Permit Program § 402.2.h [amended 04/17/01]
Authority: Rule 507, Federal Operating Permit Program § 402.2.h [amended 04/17/01]

7.B. Compliance Certification

SierraPine shall submit compliance certification reports to the U.S. EPA and the APCO every twelve (12) months. The certification report shall:

1. Identify all permit terms or conditions and the means of monitoring each term or condition.
2. Include the compliance status and method(s) used to determine compliance for the current time period and over the entire reporting period of each term or condition.
3. Include any additional inspection, monitoring, or entry requirement that may be promulgated pursuant to Sections 114(a) and 504(b) of the Federal Clean Air Act between reports.
4. Be submitted on District approved forms for the compliance certification.
5. Be submitted within 45 days after the end of the reporting period of January 1-December 31.

The responsible official will certify in writing the truth, accuracy, and completeness of the certification report.
Origin: Rule 507, Federal Operating Permit Program § 402.2.n [amended 04/17/01]
Authority: Rule 507, Federal Operating Permit Program § 402.2.n [amended 04/17/01]

7.C. Compliance Schedules

1. Should any emissions unit in compliance with applicable federal requirements become non-compliant during the certification period, SierraPine shall develop and submit to the District a compliance schedule. The compliance schedule shall:
    a. Resemble and be at least as stringent as that contained in any judicial consent decree, administrative order, or schedule approved by the District hearing board.
    b. Include:
        i. A statement that the emissions unit will continue to comply with those federal requirements with which it is still in compliance;
        ii. A statement that the emissions unit will comply, on a timely basis, with any applicable federal requirement that may become effective during the remaining term of this permit.
        iii. A list of all preventative or corrective actions or activities taken or proposed to be taken, and the dates when these activities have or will be performed and completed.

    The compliance schedule, once approved by the District, shall be incorporated into the compliance certification plan and the revised plan affixed to this permit.

2. SierraPine shall submit progress reports consistent with the applicable compliance schedule at least semiannually, or more frequently if specified in the applicable schedule requirements or requested by the District. Progress reports shall include:
    a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and; and The date when compliance will be achieved;
    b. A log or record of dates when such activities, milestones or compliance were achieved; and
    c . An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted or taken.

Origin: Rule 507, Federal Operating Permit Program § 402.2.i [last amended 04/17/01]
Authority: Rule 507, Federal Operating Permit Program § 402.2.i [last amended 04/17/01]

SierraPine – Rocklin Division

COMPLIANCE ASSURANCE MONITORING (CAM) PLAN

RECEIVED
JUL 01 2009
PLACER COUNTY AIR POLLUTION CONTROL DISTRICT

FOR INFORMATION ABOUT THE CAM RULE AND THIS FORM, PLEASE REFER TO 40 CFR PART 64. ADDITIONAL INFORMATION (INCLUDING GUIDANCE DOCUMENTS) MAY ALSO BE FOUND AT http://www.epa.gov/ttn/emc/cam.html

SOURCE INFORMATION

1) SOURCE NAME:
SierraPine – Rocklin Division

2) DATE FORM PREPARED: 06/30/2009	3) Permit NUMBER: S-0001

BASIS OF CAM SUBMITTAL

4) MARK THE APPROPRIATE BOX BELOW AS TO WHY THIS CAM PLAN IS BEING SUBMITTED AS PART OF AN APPLICATION FOR A TITLE V PERMIT:

☒ RENEWAL APPLICATION. ALL PSEUs (POLLUTANT-SPECIFIC EMISSIONS UNITS CONSIDERED SEPARATELY WITH RESPECT TO EACH REGULATED AIR POLLUTANT) FOR WHICH A CAM PLAN HAS NOT YET BEEN APPROVED NEED TO BE ADDRESSED IN THIS CAM PLAN SUBMITTAL.

☐ INITIAL APPLICATION (SUBMITTED AFTER 4/20/98). ONLY LARGE PSEUs (PSEUs WITH POTENTIAL POST-CONTROL DEVICE EMISSIONS OF AN APPLICABLE REGULATED AIR POLLUTANT THAT ARE EQUAL TO OR GREATER THAN MAJOR SOURCE THRESHOLD LEVELS) NEED TO BE ADDRESSED IN THIS CAM PLAN SUBMITTAL.

☐ SIGNIFICANT MODIFICATION TO LARGE PSEUs. ONLY LARGE PSEUs BEING MODIFIED AFTER 4/20/98 NEED TO BE ADDRESSED IN THIS CAM PLAN SUBMITTAL. FOR LARGE PSEUs WITH AN APPROVED CAM PLAN, ONLY ADDRESS THE APPROPRIATE MONITORING REQUIREMENTS AFFECTED BY THE SIGNIFICANT MODIFICATION.

CAM APPLICABILITY DETERMINATION

5) DOES THE SOURCE HAVE A PSEU THAT IS SUBJECT TO CAM, 40 CFR PART 64, WHICH MUST BE ADDRESSED IN THIS CAM PLAN SUBMITTAL? TO DETERMINE APPLICABILITY, A PSEU MUST MEET ALL OF THE FOLLOWING CRITERIA (IF NO, THEN THE REMAINDER OF THIS FORM NEED NOT BE COMPLETED): ☒ YES ☐ NO

a. THE PSEU IS LOCATED AT A MAJOR SOURCE THAT IS REQUIRED TO OBTAIN A TITLE V PERMIT;

b. THE PSEU IS SUBJECT TO AN EMISSION LIMITATION OR STANDARD FOR THE APPLICABLE REGULATED AIR POLLUTANT THAT IS NOT EXEMPT;

LIST OF EXEMPT EMISSION LIMITATIONS OR STANDARDS:

- NSPS (40 CFR PART 60) OR NESHAP (40 CFR PARTS 61 AND 63) PROPOSED AFTER 11/15/1990.
- STRATOSPHERIC OZONE PROTECTION REQUIREMENTS.
- ACID RAIN PROGRAM REQUIREMENTS.
- AN EMISSION CAP THAT MEETS THE REQUIREMENTS SPECIFIED IN 40 CFR 70.4(b)(12).

c. THE PSEU USES AN ADD-ON CONTROL DEVICE (AS DEFINED IN 40 CFR 64.1) TO ACHIEVE COMPLIANCE WITH AN EMISSION LIMITATION OR STANDARD;

d. THE PSEU HAS POTENTIAL PRE-CONTROL DEVICE EMISSIONS OF THE APPLICABLE REGULATED AIR POLLUTANT THAT ARE EQUAL TO OR GREATER THAN THE PART 70 MAJOR SOURCE THRESHOLD LEVELS; AND

e. THE PSEU IS NOT AN EXEMPT BACKUP UTILITY POWER EMISSIONS UNIT THAT IS MUNICIPALLY-OWNED.

6) [a] BACKGROUND DATA AND INFORMATION

COMPLETE THE FOLLOWING TABLE FOR ALL EUs THAT NEED TO BE ADDRESSED IN THIS CAM PLAN SUBMITTAL. THIS SECTION IS TO BE USED TO PROVIDE BACKGROUND DATA AND INFORMATION FOR EACH EU IN ORDER TO SUPPLEMENT THE SUBMITTAL REQUIREMENTS SPECIFIED IN 40 CFR 64.4. IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL ACCORDINGLY.

EMISSION UNIT	DESCRIPTION	POLLUTANT	CONTROL DEVICE	[b] EMISSION LIMITATION OR STANDARD	[c] MONITORING REQUIREMENT
Kipper Boiler	Wood or Sanderdust/Natural Gas Boiler	PM	WESP	Condition No. 2.A.5	Condition No. 6.D.1. – Annual source test to demonstrate compliance with emission reduction credits. Proposed additional monitoring attached.
MDF Press/Dryers	Reconstituted composite wood product press and three (3) flash tube dryers.	VOC	MDF RO	Condition No. 2.A.3	Condition No. 6.D.3 – Annual source test. Proposed additional monitoring attached.
MDF Press/Dryers	Reconstituted composite wood product press and three (3) flash tube dryers.	PM	MDF	Condition No. 2.A.3	Proposed monitoring attached.
TMDF Press/Dryer	Reconstituted composite wood product press and one (1) flash tube dryer.	VOC	TMDF RO	Condition No. 2.A.4	Condition No. 6.D.4 – Annual source test. Proposed additional monitoring attached.
TMDF Press/Dryer	Reconstituted composite wood product press and one (1) flash tube dryer.	PM	TMDF BH 758 A/B/C	Condition No. 2.A.4	Proposed monitoring attached.
TMDF Press Line	Production line/mat reject clean-up.	PM	TMDF BH 733	Condition No. 2.A.6	Proposed monitoring attached.
TMDF Press Line	Production line/shave off/pre-press clean-up & recycle.	PM	TMDF BH 752	Condition No. 2.A.6	Proposed monitoring attached.
TMDF Press Line	Production line shaver/side trim & line dedusting.	PM	TMDF BH 756	Condition No. 2.A.6	Proposed monitoring attached.
Phase II	Finish end saw kerf/press reclaim/fiber recycling	PM	Phase II	Condition No. 2.A. 7	Proposed monitoring attached.

APPLICATION PAGE _____

CAM MONITORING APPROACH CRITERIA

COMPLETE THIS SECTION FOR **EACH** EU THAT NEEDS TO BE ADDRESSED IN THIS CAM PLAN SUBMITTAL. THIS SECTION MAY BE COPIED AS NEEDED FOR EACH EU. THIS SECTION IS TO BE USED TO PROVIDE MONITORING DATA AND INFORMATION FOR EACH INDICATOR SELECTED FOR EACH EU IN ORDER TO MEET THE MONITORING DESIGN CRITERIA SPECIFIED IN 40 CFR 64.3 AND 64.4. IF MORE THAN TWO INDICATORS ARE BEING SELECTED FOR A EU OR IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL ACCORDINGLY WITH THE APPROPRIATE PSEU DESIGNATION, POLLUTANT, AND INDICATOR NOs.

7a) EU DESIGNATION: TMDF BH 733	**7b) POLLUTANT:** PM	**7c) [a]INDICATOR NO. 1:** Parameter Emissions Monitoring System – Pressure Differential	**7d) [a]INDICATOR NO. 2:** Visible Emissions Monitoring
8a) GENERAL CRITERIA DESCRIBE THE MONITORING APPROACH USED TO MEASURE THE INDICATORS:		Install, calibrate, maintain and operate monitoring device to record air stream pressure drop across the baghouse.	Modified EPA Method 22
[b]ESTABLISH THE APPROPRIATE INDICATOR RANGE OR THE PROCEDURES FOR ESTABLISHING THE INDICATOR RANGE WHICH PROVIDES A REASONABLE ASSURANCE OF COMPLIANCE:		Increase in pressure differential is an indicator of blinding or malfunction of cleaning cycle.	No visible emissions.
8b) PERFORMANCE CRITERIA PROVIDE THE SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA, SUCH AS DETECTOR LOCATION, INSTALLATION SPECIFICATIONS, AND MINIMUM ACCEPTABLE ACCURACY:		The sensors are located across inlet and outlet compartments of the baghouse.	N/A
[c]FOR NEW OR MODIFIED MONITORING EQUIPMENT, PROVIDE VERIFICATION PROCEDURES, INCLUDING MANUFACTURER'S RECOMMENDATIONS, TO CONFIRM THE OPERATIONAL STATUS OF THE MONITORING:		N/A	N/A
PROVIDE QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES THAT ARE ADEQUATE TO ENSURE THE CONTINUING VALIDITY OF THE DATA, (i.e., DAILY CALIBRATIONS, VISUAL INSPECTIONS, ROUTINE MAINTENANCE, CGA, RATA, ETC.):		Calibrate, maintain and operate instrumentation using procedures that take into account manufacturer's specifications.	N/A
[d]PROVIDE THE MONITORING FREQUENCY:		The differential pressure is monitored at least once per operating day.	Daily when operating.
PROVIDE THE DATA COLLECTION PROCEDURES THAT WILL BE USED:		The differential pressure (inches of water column) is logged at least once per operating day . Data is reviewed once per operating week.	Inspection is logged pursuant to requirements of the Operational Maintenance and Compliance Plan.
PROVIDE THE DATA AVERAGING PERIOD FOR THE PURPOSE OF DETERMINING WHETHER AN EXCURSION OR EXCEEDANCE HAS OCCURRED:		Daily (once every 24 hrs)	N/A

[a]DESCRIBE ALL INDICATORS TO BE MONITORED WHICH SATISFIES 40 CFR 64.3(a). INDICATORS OF EMISSION CONTROL PERFORMANCE FOR THE CONTROL DEVICE AND ASSOCIATED CAPTURE SYSTEM MAY INCLUDE MEASURED OR PREDICTED EMISSIONS (INCLUDING VISIBLE EMISSIONS OR OPACITY), PROCESS AND CONTROL DEVICE OPERATING PARAMETERS THAT AFFECT CONTROL DEVICE (AND CAPTURE SYSTEM) EFFICIENCY OR EMISSION RATES, OR RECORDED FINDINGS OF INSPECTION AND MAINTENANCE ACTIVITIES.

[b]INDICATOR RANGES MAY BE BASED ON A SINGLE MAXIMUM OR MINIMUM VALUE OR AT MULTIPLE LEVELS THAT ARE RELEVANT TO DISTINCTLY DIFFERENT OPERATING CONDITIONS, EXPRESSED AS A FUNCTION OF PROCESS VARIABLES, EXPRESSED AS MAINTAINING THE APPLICABLE INDICATOR IN A PARTICULAR OPERATIONAL STATUS OR DESIGNATED CONDITION, OR ESTABLISHED AS INTERDEPENDENT BETWEEN MORE THAN ONE INDICATOR. FOR CEMS, COMS, OR PEMS, INCLUDE THE MOST RECENT CERTIFICATION TEST FOR THE MONTIOR.

[c]THE VERIFICATION FOR OPERATIONAL STATUS SHOULD INCLUDE PROCEDURES FOR INSTALLATION, CALIBRATION, AND OPERATION OF THE MONITORING EQUIPMENT, CONDUCTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, NECESSARY TO CONFIRM THE MONITORING EQUIPMENT IS OPERATIONAL PRIOR TO THE COMMENCEMENT OF THE REQUIRED MONITORING.

[d]EMISSION UNITS WITH POSTCONTROL PTE ≥ 100 PERCENT OF THE AMOUNT CLASSIFYING THE SOURCE AS A MAJOR SOURCE MUST COLLECT FOUR OR MORE VALUES PER HOUR TO BE AVERAGED. A REDUCED DATA COLLECTION FREQUENCY MAY BE APPROVED IN LIMITED CIRCUMSTANCES. OTHER EMISSION UNITS MUST COLLECT DATA AT LEAST ONCE PER 24 HOUR PERIOD.

RATIONALE AND JUSTIFICATION

COMPLETE THIS SECTION FOR **EACH** PSEU THAT NEEDS TO BE ADDRESSED IN THIS CAM PLAN SUBMITTAL. THIS SECTION MAY BE COPIED AS NEEDED FOR EACH PSEU. THIS SECTION IS TO BE USED TO PROVIDE RATIONALE AND JUSTIFICATION FOR THE SELECTION OF EACH INDICATOR AND MONITORING APPROACH AND EACH INDICATOR RANGE IN ORDER TO MEET THE SUBMITTAL REQUIREMENTS SPECIFIED IN 40 CFR 64.4.

9a) EU DESIGNATION:	9b) REGULATED AIR POLLUTANT:
TMDF BH 733	PM

10) INDICATORS AND THE MONITORING APPROACH: PROVIDE THE RATIONALE AND JUSTIFICATION FOR THE SELECTION OF THE INDICATORS AND THE MONITORING APPROACH USED TO MEASURE THE INDICATORS. ALSO PROVIDE ANY DATA SUPPORTING THE RATIONALE AND JUSTIFICATION. EXPLAIN THE REASONS FOR ANY DIFFERENCES BETWEEN THE VERIFICATION OF OPERATIONAL STATUS OR THE QUALITY ASSURANCE AND CONTROL PRACTICES PROPOSED AND THE MANUFACTURER'S RECOMMENDATIONS. (IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL ACCORDINGLY WITH THE APPROPRIATE PSEU DESIGNATION AND POLLUTANT):

Changes in differential pressure are indicative of process changes, changes in baghouse efficiency, or leaks.

11) INDICATOR RANGES: PROVIDE THE RATIONALE AND JUSTIFICATION FOR THE SELECTION OF THE INDICATOR RANGES. THE RATIONALE AND JUSTIFICATION SHALL INDICATE HOW **EACH** INDICATOR RANGE WAS SELECTED BY EITHER A COMPLIANCE OR PERFORMANCE TEST, A TEST PLAN AND SCHEDULE, OR BY ENGINEERING ASSESSMENTS. DEPENDING ON WHICH METHOD IS BEING USED FOR EACH INDICATOR RANGE, INCLUDE THE SPECIFIC INFORMATION REQUIRED BELOW FOR THAT SPECIFIC INDICATOR RANGE. (IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL ACCORDINGLY WITH THE APPROPRIATE EU DESIGNATION AND POLLUTANT):

- COMPLIANCE OR PERFORMANCE TEST (INDICATOR RANGES DETERMINED FROM CONTROL DEVICE OPERATING PARAMETER DATA OBTAINED DURING A COMPLIANCE OR PERFORMANCE TEST CONDUCTED UNDER REGULATORY SPECIFIED CONDITIONS OR UNDER CONDITIONS REPRESENTATIVE OF MAXIMUM POTENTIAL EMISSIONS UNDER ANTICIPATED OPERATING CONDITIONS. SUCH DATA MAY BE SUPPLEMENTED BY ENGINEERING ASSESSMENTS AND MANUFACTURER'S RECOMMENDATIONS). THE RATIONALE AND JUSTIFICATION SHALL INCLUDE A SUMMARY OF THE COMPLIANCE OR PERFORMANCE TEST RESULTS THAT WAS USED TO DETERMINE THE INDICATOR RANGE AND DOCUMENTATION INDICATING THAT NO CHANGES HAVE TAKEN PLACE THAT COULD RESULT IN A SIGNIFICANT CHANGE IN THE CONTROL SYSTEM PERFORMANCE OR THE SELECTED INDICATOR RANGES SINCE THE COMPLIANCE OR PERFORMANCE TEST WAS CONDUCTED.
- TEST PLAN AND SCHEDULE (INDICATOR RANGES WILL BE DETERMINED FROM A PROPOSED IMPLEMENTATION PLAN AND SCHEDULE FOR INSTALLING, TESTING, AND PERFORMING ANY OTHER APPROPRIATE ACTIVITIES PRIOR TO USE OF THE MONITORING). THE RATIONALE AND JUSTIFICATION SHALL INCLUDE THE PROPOSED IMPLEMENTATION PLAN AND SCHEDULE THAT WILL PROVIDE FOR USE OF THE MONITORING AS EXPEDITIOUSLY AS PRACTICABLE AFTER APPROVAL OF THIS CAM PLAN, BUT IN NO CASE SHALL THE SCHEDULE FOR COMPLETING INSTALLATION AND BEGINNING OPERATION OF THE MONITORING EXCEED 180 DAYS AFTER APPROVAL.
- ENGINEERING ASSESSMENTS (INDICATOR RANGES OR THE PROCEDURES FOR ESTABLISHING INDICATOR RANGES ARE DETERMINED FROM ENGINEERING ASSESSMENTS AND OTHER DATA, SUCH AS MANUFACTURERS' DESIGN CRITERIA AND HISTORICAL MONITORING DATA, BECAUSE FACTORS SPECIFIC TO THE TYPE OF MONITORING, CONTROL DEVICE, OR PSEU MAKE COMPLIANCE OR PERFORMANCE TESTING UNNECESSARY). THE RATIONALE AND JUSTIFICATION SHALL INCLUDE DOCUMENTATION DEMONSTRATING THAT COMPLIANCE TESTING IS NOT REQUIRED TO ESTABLISH THE INDICATOR RANGE.

RATIONALE AND JUSTIFICATION:

Changes in differential pressure are indicative of process changes, changes in baghouse efficiency, or leaks.

CAM MONITORING APPROACH CRITERIA

COMPLETE THIS SECTION FOR **EACH** EU THAT NEEDS TO BE ADDRESSED IN THIS CAM PLAN SUBMITTAL. THIS SECTION MAY BE COPIED AS NEEDED FOR EACH EU. THIS SECTION IS TO BE USED TO PROVIDE MONITORING DATA AND INFORMATION FOR EACH INDICATOR SELECTED FOR EACH EU IN ORDER TO MEET THE MONITORING DESIGN CRITERIA SPECIFIED IN 40 CFR 64.3 AND 64.4. IF MORE THAN TWO INDICATORS ARE BEING SELECTED FOR A EU OR IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL ACCORDINGLY WITH THE APPROPRIATE PSEU DESIGNATION, POLLUTANT, AND INDICATOR NOs.

7a) EU DESIGNATION: Phase II baghouse	**7b) POLLUTANT:** PM	**7c) [a]INDICATOR NO. 1:** Parameter Emissions Monitoring System – Pressure Differential	**7d) [a]INDICATOR NO. 2:** Visible Emission Monitoring
8a) GENERAL CRITERIA DESCRIBE THE MONITORING APPROACH USED TO MEASURE THE INDICATORS:		Install, calibrate, maintain and operate monitoring device to record air stream pressure drop across the baghouse.	Modified EPA Method 22
[b]ESTABLISH THE APPROPRIATE INDICATOR RANGE OR THE PROCEDURES FOR ESTABLISHING THE INDICATOR RANGE WHICH PROVIDES A REASONABLE ASSURANCE OF COMPLIANCE:		Increase in pressure differential is an indicator of blinding or malfunction of cleaning cycle.	No visible emissions.
8b) PERFORMANCE CRITERIA PROVIDE THE SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA, SUCH AS DETECTOR LOCATION, INSTALLATION SPECIFICATIONS, AND MINIMUM ACCEPTABLE ACCURACY:		The sensors are located across inlet and outlet compartments of the baghouse.	N/A
[c]FOR NEW OR MODIFIED MONITORING EQUIPMENT, PROVIDE VERIFICATION PROCEDURES, INCLUDING MANUFACTURER'S RECOMMENDATIONS, TO CONFIRM THE OPERATIONAL STATUS OF THE MONITORING:		N/A	N/A
PROVIDE QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES THAT ARE ADEQUATE TO ENSURE THE CONTINUING VALIDITY OF THE DATA, (i.e., DAILY CALIBRATIONS, VISUAL INSPECTIONS, ROUTINE MAINTENANCE, CGA, RATA, ETC.):		Calibrate, maintain and operate instrumentation using procedures that take into account manufacturer's specifications.	N/A
[d]PROVIDE THE MONITORING FREQUENCY:		The differential pressure is monitored at least once per operating day.	Daily when operating.
PROVIDE THE DATA COLLECTION PROCEDURES THAT WILL BE USED:		The differential pressure (inches of water column) is logged at least once per operating day . Data is reviewed once per operating week.	Inspection is logged pursuant to requirements of the Operational Maintenance and Compliance Plan.
PROVIDE THE DATA AVERAGING PERIOD FOR THE PURPOSE OF DETERMINING WHETHER AN EXCURSION OR EXCEEDANCE HAS OCCURRED:		Daily – once every 24 hours	N/A

[a]DESCRIBE ALL INDICATORS TO BE MONITORED WHICH SATISFIES 40 CFR 64.3(a). INDICATORS OF EMISSION CONTROL PERFORMANCE FOR THE CONTROL DEVICE AND ASSOCIATED CAPTURE SYSTEM MAY INCLUDE MEASURED OR PREDICTED EMISSIONS (INCLUDING VISIBLE EMISSIONS OR OPACITY), PROCESS AND CONTROL DEVICE OPERATING PARAMETERS THAT AFFECT CONTROL DEVICE (AND CAPTURE SYSTEM) EFFICIENCY OR EMISSION RATES, OR RECORDED FINDINGS OF INSPECTION AND MAINTENANCE ACTIVITIES.

[b]INDICATOR RANGES MAY BE BASED ON A SINGLE MAXIMUM OR MINIMUM VALUE OR AT MULTIPLE LEVELS THAT ARE RELEVANT TO DISTINCTLY DIFFERENT OPERATING CONDITIONS, EXPRESSED AS A FUNCTION OF PROCESS VARIABLES, EXPRESSED AS MAINTAINING THE APPLICABLE INDICATOR IN A PARTICULAR OPERATIONAL STATUS OR DESIGNATED CONDITION, OR ESTABLISHED AS INTERDEPENDENT BETWEEN MORE THAN ONE INDICATOR. FOR CEMS, COMS, OR PEMS, INCLUDE THE MOST RECENT CERTIFICATION TEST FOR THE MONTIOR.

[c]THE VERIFICATION FOR OPERATIONAL STATUS SHOULD INCLUDE PROCEDURES FOR INSTALLATION, CALIBRATION, AND OPERATION OF THE MONITORING EQUIPMENT, CONDUCTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, NECESSARY TO CONFIRM THE MONITORING EQUIPMENT IS OPERATIONAL PRIOR TO THE COMMENCEMENT OF THE REQUIRED MONITORING.

[d]EMISSION UNITS WITH POSTCONTROL PTE ≥ 100 PERCENT OF THE AMOUNT CLASSIFYING THE SOURCE AS A MAJOR SOURCE MUST COLLECT FOUR OR MORE VALUES PER HOUR TO BE AVERAGED. A REDUCED DATA COLLECTION FREQUENCY MAY BE APPROVED IN LIMITED CIRCUMSTANCES. OTHER EMISSION UNITS MUST COLLECT DATA AT LEAST ONCE PER 24 HOUR PERIOD.

RATIONALE AND JUSTIFICATION

COMPLETE THIS SECTION FOR **EACH** PSEU THAT NEEDS TO BE ADDRESSED IN THIS CAM PLAN SUBMITTAL. THIS SECTION MAY BE COPIED AS NEEDED FOR EACH PSEU. THIS SECTION IS TO BE USED TO PROVIDE RATIONALE AND JUSTIFICATION FOR THE SELECTION OF EACH INDICATOR AND MONITORING APPROACH AND EACH INDICATOR RANGE IN ORDER TO MEET THE SUBMITTAL REQUIREMENTS SPECIFIED IN 40 CFR 64.4.

9a) EU DESIGNATION:	9b) REGULATED AIR POLLUTANT:
Phase II baghouse	PM

10) INDICATORS AND THE MONITORING APPROACH: PROVIDE THE RATIONALE AND JUSTIFICATION FOR THE SELECTION OF THE INDICATORS AND THE MONITORING APPROACH USED TO MEASURE THE INDICATORS. ALSO PROVIDE ANY DATA SUPPORTING THE RATIONALE AND JUSTIFICATION. EXPLAIN THE REASONS FOR ANY DIFFERENCES BETWEEN THE VERIFICATION OF OPERATIONAL STATUS OR THE QUALITY ASSURANCE AND CONTROL PRACTICES PROPOSED AND THE MANUFACTURER'S RECOMMENDATIONS. (IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL ACCORDINGLY WITH THE APPROPRIATE PSEU DESIGNATION AND POLLUTANT):

Changes in differential pressure are indicative of process changes, changes in baghouse efficiency, or leaks.

11) INDICATOR RANGES: PROVIDE THE RATIONALE AND JUSTIFICATION FOR THE SELECTION OF THE INDICATOR RANGES. THE RATIONALE AND JUSTIFICATION SHALL INDICATE HOW **EACH** INDICATOR RANGE WAS SELECTED BY EITHER A COMPLIANCE OR PERFORMANCE TEST, A TEST PLAN AND SCHEDULE, OR BY ENGINEERING ASSESSMENTS. DEPENDING ON WHICH METHOD IS BEING USED FOR EACH INDICATOR RANGE, INCLUDE THE SPECIFIC INFORMATION REQUIRED BELOW FOR THAT SPECIFIC INDICATOR RANGE. (IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL ACCORDINGLY WITH THE APPROPRIATE EU DESIGNATION AND POLLUTANT):

- COMPLIANCE OR PERFORMANCE TEST (INDICATOR RANGES DETERMINED FROM CONTROL DEVICE OPERATING PARAMETER DATA OBTAINED DURING A COMPLIANCE OR PERFORMANCE TEST CONDUCTED UNDER REGULATORY SPECIFIED CONDITIONS OR UNDER CONDITIONS REPRESENTATIVE OF MAXIMUM POTENTIAL EMISSIONS UNDER ANTICIPATED OPERATING CONDITIONS. SUCH DATA MAY BE SUPPLEMENTED BY ENGINEERING ASSESSMENTS AND MANUFACTURER'S RECOMMENDATIONS). THE RATIONALE AND JUSTIFICATION SHALL INCLUDE A SUMMARY OF THE COMPLIANCE OR PERFORMANCE TEST RESULTS THAT WAS USED TO DETERMINE THE INDICATOR RANGE AND DOCUMENTATION INDICATING THAT NO CHANGES HAVE TAKEN PLACE THAT COULD RESULT IN A SIGNIFICANT CHANGE IN THE CONTROL SYSTEM PERFORMANCE OR THE SELECTED INDICATOR RANGES SINCE THE COMPLIANCE OR PERFORMANCE TEST WAS CONDUCTED.
- TEST PLAN AND SCHEDULE (INDICATOR RANGES WILL BE DETERMINED FROM A PROPOSED IMPLEMENTATION PLAN AND SCHEDULE FOR INSTALLING, TESTING, AND PERFORMING ANY OTHER APPROPRIATE ACTIVITIES PRIOR TO USE OF THE MONITORING). THE RATIONALE AND JUSTIFICATION SHALL INCLUDE THE PROPOSED IMPLEMENTATION PLAN AND SCHEDULE THAT WILL PROVIDE FOR USE OF THE MONITORING AS EXPEDITIOUSLY AS PRACTICABLE AFTER APPROVAL OF THIS CAM PLAN, BUT IN NO CASE SHALL THE SCHEDULE FOR COMPLETING INSTALLATION AND BEGINNING OPERATION OF THE MONITORING EXCEED 180 DAYS AFTER APPROVAL.
- ENGINEERING ASSESSMENTS (INDICATOR RANGES OR THE PROCEDURES FOR ESTABLISHING INDICATOR RANGES ARE DETERMINED FROM ENGINEERING ASSESSMENTS AND OTHER DATA, SUCH AS MANUFACTURERS' DESIGN CRITERIA AND HISTORICAL MONITORING DATA, BECAUSE FACTORS SPECIFIC TO THE TYPE OF MONITORING, CONTROL DEVICE, OR PSEU MAKE COMPLIANCE OR PERFORMANCE TESTING UNNECESSARY). THE RATIONALE AND JUSTIFICATION SHALL INCLUDE DOCUMENTATION DEMONSTRATING THAT COMPLIANCE TESTING IS NOT REQUIRED TO ESTABLISH THE INDICATOR RANGE.

RATIONALE AND JUSTIFICATION:

Changes in differential pressure are indicative of process changes, changes in baghouse efficiency, or leaks.

CAM MONITORING APPROACH CRITERIA

COMPLETE THIS SECTION FOR **EACH** EMISSIONS UNIT (EU) THAT NEEDS TO BE ADDRESSED IN THIS CAM PLAN SUBMITTAL. THIS SECTION MAY BE COPIED AS NEEDED FOR EACH PSEU. THIS SECTION IS TO BE USED TO PROVIDE MONITORING DATA AND INFORMATION FOR EACH INDICATOR SELECTED FOR EACH EU IN ORDER TO MEET THE MONITORING DESIGN CRITERIA SPECIFIED IN 40 CFR 64.3 AND 64.4. IF MORE THAN TWO INDICATORS ARE BEING SELECTED FOR A EU OR IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL ACCORDINGLY WITH THE APPROPRIATE EU DESIGNATION, POLLUTANT, AND INDICATOR NOs.

7a) EU DESIGNATION: MDF RO	7b) POLLUTANT: VOC	7c) [a]INDICATOR NO. 1: Parameter Emissions Monitoring System – Temperature	7d) [a]INDICATOR NO. 2:
8a) GENERAL CRITERIA DESCRIBE THE MONITORING APPROACH USED TO MEASURE THE INDICATORS:		Install, calibrate, maintain and operate a system to continuously monitor and record the average temperature across the RO.	
[b]ESTABLISH THE APPROPRIATE INDICATOR RANGE OR THE PROCEDURES FOR ESTABLISHING THE INDICATOR RANGE WHICH PROVIDES A REASONABLE ASSURANCE OF COMPLIANCE:		A source test is conducted annually to determine if the unit is operating in compliance with VOC limit. The 3-hr block average temperature across the unit established during testing becomes the minimum operating temperature until the next successful test is conducted.	
8b) PERFORMANCE CRITERIA PROVIDE THE SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA, SUCH AS DETECTOR LOCATION, INSTALLATION SPECIFICATIONS, AND MINIMUM ACCEPTABLE ACCURACY:		Positioning of the thermocouples was establish during the installation of the RO. Data collected during the annual source test correlates directly with that collected for continuous compliance assurance.	
[c]FOR NEW OR MODIFIED MONITORING EQUIPMENT, PROVIDE VERIFICATION PROCEDURES, INCLUDING MANUFACTURER'S RECOMMENDATIONS, TO CONFIRM THE OPERATIONAL STATUS OF THE MONITORING:		N/A	
PROVIDE QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES THAT ARE ADEQUATE TO ENSURE THE CONTINUING VALIDITY OF THE DATA, (i.e., DAILY CALIBRATIONS, VISUAL INSPECTIONS, ROUTINE MAINTENANCE, CGA, RATA, ETC.):		Annual source tests.	
[d]PROVIDE THE MONITORING FREQUENCY:		The 3-hr block average of all recorded temperature readings, calculated after every 3 hours of operation as the average of the evenly spaced recorded reading in the previous 3 operating hours (excluding periods identified in 40 CFR 63.2270 (b) & (c).	
PROVIDE THE DATA COLLECTION PROCEDURES THAT WILL BE USED:		The temperature is logged at least once every 15-minutes into a data acquisition system.	
PROVIDE THE DATA AVERAGING PERIOD FOR THE PURPOSE OF DETERMINING WHETHER AN EXCURSION OR EXCEEDANCE HAS OCCURRED:		An exceedence occurs if the 3- hr block average temperature across the RO is less than the temperature established during the most recent successful source test.	

[a]DESCRIBE ALL INDICATORS TO BE MONITORED WHICH SATISFIES 40 CFR 64.3(a). INDICATORS OF EMISSION CONTROL PERFORMANCE FOR THE CONTROL DEVICE AND ASSOCIATED CAPTURE SYSTEM MAY INCLUDE MEASURED OR PREDICTED EMISSIONS (INCLUDING VISIBLE EMISSIONS OR OPACITY), PROCESS AND CONTROL DEVICE OPERATING PARAMETERS THAT AFFECT CONTROL DEVICE (AND CAPTURE SYSTEM) EFFICIENCY OR EMISSION RATES, OR RECORDED FINDINGS OF INSPECTION AND MAINTENANCE ACTIVITIES.

[b]INDICATOR RANGES MAY BE BASED ON A SINGLE MAXIMUM OR MINIMUM VALUE OR AT MULTIPLE LEVELS THAT ARE RELEVANT TO DISTINCTLY DIFFERENT OPERATING CONDITIONS, EXPRESSED AS A FUNCTION OF PROCESS VARIABLES, EXPRESSED AS MAINTAINING THE APPLICABLE INDICATOR IN A PARTICULAR OPERATIONAL STATUS OR DESIGNATED CONDITION, OR ESTABLISHED AS INTERDEPENDENT BETWEEN MORE THAN ONE INDICATOR. FOR CEMS, COMS, OR PEMS, INCLUDE THE MOST RECENT CERTIFICATION TEST FOR THE MONTIOR.

[c]THE VERIFICATION FOR OPERATIONAL STATUS SHOULD INCLUDE PROCEDURES FOR INSTALLATION, CALIBRATION, AND OPERATION OF THE MONITORING EQUIPMENT, CONDUCTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, NECESSARY TO CONFIRM THE MONITORING EQUIPMENT IS OPERATIONAL PRIOR TO THE COMMENCEMENT OF THE REQUIRED MONITORING.

[d]EMISSION UNITS WITH POSTCONTROL PTE ≥ 100 PERCENT OF THE AMOUNT CLASSIFYING THE SOURCE AS A MAJOR SOURCE MUST COLLECT FOUR OR MORE VALUES PER HOUR TO BE AVERAGED. A REDUCED DATA COLLECTION FREQUENCY MAY BE APPROVED IN LIMITED CIRCUMSTANCES. OTHER EMISSION UNITS MUST COLLECT DATA AT LEAST ONCE PER 24 HOUR PERIOD.

RATIONALE AND JUSTIFICATION

COMPLETE THIS SECTION FOR **EACH** PSEU THAT NEEDS TO BE ADDRESSED IN THIS CAM PLAN SUBMITTAL. THIS SECTION MAY BE COPIED AS NEEDED FOR EACH EU. THIS SECTION IS TO BE USED TO PROVIDE RATIONALE AND JUSTIFICATION FOR THE SELECTION OF EACH INDICATOR AND MONITORING APPROACH AND EACH INDICATOR RANGE IN ORDER TO MEET THE SUBMITTAL REQUIREMENTS SPECIFIED IN 40 CFR 64.4.

9a) PSEU DESIGNATION:	9b) REGULATED AIR POLLUTANT:
MDF RO	VOC

10) INDICATORS AND THE MONITORING APPROACH: PROVIDE THE RATIONALE AND JUSTIFICATION FOR THE SELECTION OF THE INDICATORS AND THE MONITORING APPROACH USED TO MEASURE THE INDICATORS. ALSO PROVIDE ANY DATA SUPPORTING THE RATIONALE AND JUSTIFICATION. EXPLAIN THE REASONS FOR ANY DIFFERENCES BETWEEN THE VERIFICATION OF OPERATIONAL STATUS OR THE QUALITY ASSURANCE AND CONTROL PRACTICES PROPOSED AND THE MANUFACTURER'S RECOMMENDATIONS. (IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL ACCORDINGLY WITH THE APPROPRIATE PSEU DESIGNATION AND POLLUTANT):

EPA Method 25A, a method approved by EPA to quantify VOCs, is employed annually to ensure compliance with the VOC limit.

11) INDICATOR RANGES: PROVIDE THE RATIONALE AND JUSTIFICATION FOR THE SELECTION OF THE INDICATOR RANGES. THE RATIONALE AND JUSTIFICATION SHALL INDICATE HOW **EACH** INDICATOR RANGE WAS SELECTED BY EITHER A COMPLIANCE OR PERFORMANCE TEST, A TEST PLAN AND SCHEDULE, OR BY ENGINEERING ASSESSMENTS. DEPENDING ON WHICH METHOD IS BEING USED FOR EACH INDICATOR RANGE, INCLUDE THE SPECIFIC INFORMATION REQUIRED BELOW FOR THAT SPECIFIC INDICATOR RANGE. (IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL ACCORDINGLY WITH THE APPROPRIATE PSEU DESIGNATION AND POLLUTANT):

- COMPLIANCE OR PERFORMANCE TEST (INDICATOR RANGES DETERMINED FROM CONTROL DEVICE OPERATING PARAMETER DATA OBTAINED DURING A COMPLIANCE OR PERFORMANCE TEST CONDUCTED UNDER REGULATORY SPECIFIED CONDITIONS OR UNDER CONDITIONS REPRESENTATIVE OF MAXIMUM POTENTIAL EMISSIONS UNDER ANTICIPATED OPERATING CONDITIONS. SUCH DATA MAY BE SUPPLEMENTED BY ENGINEERING ASSESSMENTS AND MANUFACTURER'S RECOMMENDATIONS). THE RATIONALE AND JUSTIFICATION SHALL INCLUDE A SUMMARY OF THE COMPLIANCE OR PERFORMANCE TEST RESULTS THAT WAS USED TO DETERMINE THE INDICATOR RANGE AND DOCUMENTATION INDICATING THAT NO CHANGES HAVE TAKEN PLACE THAT COULD RESULT IN A SIGNIFICANT CHANGE IN THE CONTROL SYSTEM PERFORMANCE OR THE SELECTED INDICATOR RANGES SINCE THE COMPLIANCE OR PERFORMANCE TEST WAS CONDUCTED.
- TEST PLAN AND SCHEDULE (INDICATOR RANGES WILL BE DETERMINED FROM A PROPOSED IMPLEMENTATION PLAN AND SCHEDULE FOR INSTALLING, TESTING, AND PERFORMING ANY OTHER APPROPRIATE ACTIVITIES PRIOR TO USE OF THE MONITORING). THE RATIONALE AND JUSTIFICATION SHALL INCLUDE THE PROPOSED IMPLEMENTATION PLAN AND SCHEDULE THAT WILL PROVIDE FOR USE OF THE MONITORING AS EXPEDITIOUSLY AS PRACTICABLE AFTER APPROVAL OF THIS CAM PLAN, BUT IN NO CASE SHALL THE SCHEDULE FOR COMPLETING INSTALLATION AND BEGINNING OPERATION OF THE MONITORING EXCEED 180 DAYS AFTER APPROVAL.
- ENGINEERING ASSESSMENTS (INDICATOR RANGES OR THE PROCEDURES FOR ESTABLISHING INDICATOR RANGES ARE DETERMINED FROM ENGINEERING ASSESSMENTS AND OTHER DATA, SUCH ASMANUFACTURERS' DESIGN CRITERIA AND HISTORICAL MONITORING DATA, BECAUSE FACTORS SPECIFIC TO THE TYPE OF MONITORING, CONTROL DEVICE, OR PSEU MAKE COMPLIANCE OR PERFORMANCE TESTING UNNECESSARY). THE RATIONALE AND JUSTIFICATION SHALL INCLUDE DOCUMENTATION DEMONSTRATING THAT COMPLIANCE TESTING IS NOT REQUIRED TO ESTABLISH THE INDICATOR RANGE.

RATIONALE AND JUSTIFICATION:

Pursuant to the requirements of Title V Permit No. S-002 Condition No. 6.D.1 an annual source test is required to ensure compliance with the VOC limit.

CAM MONITORING APPROACH CRITERIA

COMPLETE THIS SECTION FOR **EACH** EU THAT NEEDS TO BE ADDRESSED IN THIS CAM PLAN SUBMITTAL. THIS SECTION MAY BE COPIED AS NEEDED FOR EACH EU. THIS SECTION IS TO BE USED TO PROVIDE MONITORING DATA AND INFORMATION FOR EACH INDICATOR SELECTED FOR EACH EU IN ORDER TO MEET THE MONITORING DESIGN CRITERIA SPECIFIED IN 40 CFR 64.3 AND 64.4. IF MORE THAN TWO INDICATORS ARE BEING SELECTED FOR A EU OR IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL ACCORDINGLY WITH THE APPROPRIATE PSEU DESIGNATION, POLLUTANT, AND INDICATOR NOs.

7a) EU DESIGNATION: MDF Dryer Baghouses	**7b) POLLUTANT:** PM	**7c) [a]INDICATOR NO. 1:** Parameter Emissions Monitoring System – Pressure Differential	**7d) [a]INDICATOR NO. 2:** Visible Emission Monitoring
8a) GENERAL CRITERIA DESCRIBE THE MONITORING APPROACH USED TO MEASURE THE INDICATORS:		Install, calibrate, maintain and operate monitoring device to record air stream pressure drop across the baghouse.	Modified EPA Method 22
[b]ESTABLISH THE APPROPRIATE INDICATOR RANGE OR THE PROCEDURES FOR ESTABLISHING THE INDICATOR RANGE WHICH PROVIDES A REASONABLE ASSURANCE OF COMPLIANCE:		Increase in pressure differential is an indicator of blinding or malfunction of cleaning cycle.	No visible emissions.
8b) PERFORMANCE CRITERIA PROVIDE THE SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA, SUCH AS DETECTOR LOCATION, INSTALLATION SPECIFICATIONS, AND MINIMUM ACCEPTABLE ACCURACY:		The sensors are located across inlet and outlet compartments of the baghouse.	N/A
[c]FOR NEW OR MODIFIED MONITORING EQUIPMENT, PROVIDE VERIFICATION PROCEDURES, INCLUDING MANUFACTURER'S RECOMMENDATIONS, TO CONFIRM THE OPERATIONAL STATUS OF THE MONITORING:		N/A	N/A
PROVIDE QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES THAT ARE ADEQUATE TO ENSURE THE CONTINUING VALIDITY OF THE DATA, (i.e., DAILY CALIBRATIONS, VISUAL INSPECTIONS, ROUTINE MAINTENANCE, CGA, RATA, ETC.):		Calibrate, maintain and operate instrumentation using procedures that take into account manufacturer's specifications.	N/A
[d]PROVIDE THE MONITORING FREQUENCY:		The differential pressure is monitored at least once per operating day.	Daily when operating.
PROVIDE THE DATA COLLECTION PROCEDURES THAT WILL BE USED:		The differential pressure (inches of water column) is logged at least once per day. Data is reviewed at least once per operating week.	Inspection is logged pursuant to requirements of the Operational Maintenance and Compliance Plan.
PROVIDE THE DATA AVERAGING PERIOD FOR THE PURPOSE OF DETERMINING WHETHER AN EXCURSION OR EXCEEDANCE HAS OCCURRED:		None	N/A

[a]DESCRIBE ALL INDICATORS TO BE MONITORED WHICH SATISFIES 40 CFR 64.3(a). INDICATORS OF EMISSION CONTROL PERFORMANCE FOR THE CONTROL DEVICE AND ASSOCIATED CAPTURE SYSTEM MAY INCLUDE MEASURED OR PREDICTED EMISSIONS (INCLUDING VISIBLE EMISSIONS OR OPACITY), PROCESS AND CONTROL DEVICE OPERATING PARAMETERS THAT AFFECT CONTROL DEVICE (AND CAPTURE SYSTEM) EFFICIENCY OR EMISSION RATES, OR RECORDED FINDINGS OF INSPECTION AND MAINTENANCE ACTIVITIES.

[b]INDICATOR RANGES MAY BE BASED ON A SINGLE MAXIMUM OR MINIMUM VALUE OR AT MULTIPLE LEVELS THAT ARE RELEVANT TO DISTINCTLY DIFFERENT OPERATING CONDITIONS, EXPRESSED AS A FUNCTION OF PROCESS VARIABLES, EXPRESSED AS MAINTAINING THE APPLICABLE INDICATOR IN A PARTICULAR OPERATIONAL STATUS OR DESIGNATED CONDITION, OR ESTABLISHED AS INTERDEPENDENT BETWEEN MORE THAN ONE INDICATOR. FOR CEMS, COMS, OR PEMS, INCLUDE THE MOST RECENT CERTIFICATION TEST FOR THE MONTIOR.

[c]THE VERIFICATION FOR OPERATIONAL STATUS SHOULD INCLUDE PROCEDURES FOR INSTALLATION, CALIBRATION, AND OPERATION OF THE MONITORING EQUIPMENT, CONDUCTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, NECESSARY TO CONFIRM THE MONITORING EQUIPMENT IS OPERATIONAL PRIOR TO THE COMMENCEMENT OF THE REQUIRED MONITORING.

[d]EMISSION UNITS WITH POSTCONTROL PTE ≥ 100 PERCENT OF THE AMOUNT CLASSIFYING THE SOURCE AS A MAJOR SOURCE MUST COLLECT FOUR OR MORE VALUES PER HOUR TO BE AVERAGED. A REDUCED DATA COLLECTION FREQUENCY MAY BE APPROVED IN LIMITED CIRCUMSTANCES. OTHER EMISSION UNITS MUST COLLECT DATA AT LEAST ONCE PER 24 HOUR PERIOD.

RATIONALE AND JUSTIFICATION

COMPLETE THIS SECTION FOR **EACH** PSEU THAT NEEDS TO BE ADDRESSED IN THIS CAM PLAN SUBMITTAL. THIS SECTION MAY BE COPIED AS NEEDED FOR EACH PSEU. THIS SECTION IS TO BE USED TO PROVIDE RATIONALE AND JUSTIFICATION FOR THE SELECTION OF EACH INDICATOR AND MONITORING APPROACH AND EACH INDICATOR RANGE IN ORDER TO MEET THE SUBMITTAL REQUIREMENTS SPECIFIED IN 40 CFR 64.4.

9a) EU DESIGNATION:	9b) REGULATED AIR POLLUTANT:
MDF Dryer Baghouses	PM

10) INDICATORS AND THE MONITORING APPROACH: PROVIDE THE RATIONALE AND JUSTIFICATION FOR THE SELECTION OF THE INDICATORS AND THE MONITORING APPROACH USED TO MEASURE THE INDICATORS. ALSO PROVIDE ANY DATA SUPPORTING THE RATIONALE AND JUSTIFICATION. EXPLAIN THE REASONS FOR ANY DIFFERENCES BETWEEN THE VERIFICATION OF OPERATIONAL STATUS OR THE QUALITY ASSURANCE AND CONTROL PRACTICES PROPOSED AND THE MANUFACTURER'S RECOMMENDATIONS. (IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL ACCORDINGLY WITH THE APPROPRIATE PSEU DESIGNATION AND POLLUTANT):

Changes in differential pressure are indicative of process changes, changes in baghouse efficiency, or leaks.

11) INDICATOR RANGES: PROVIDE THE RATIONALE AND JUSTIFICATION FOR THE SELECTION OF THE INDICATOR RANGES. THE RATIONALE AND JUSTIFICATION SHALL INDICATE HOW **EACH** INDICATOR RANGE WAS SELECTED BY EITHER A COMPLIANCE OR PERFORMANCE TEST, A TEST PLAN AND SCHEDULE, OR BY ENGINEERING ASSESSMENTS. DEPENDING ON WHICH METHOD IS BEING USED FOR EACH INDICATOR RANGE, INCLUDE THE SPECIFIC INFORMATION REQUIRED BELOW FOR THAT SPECIFIC INDICATOR RANGE. (IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL ACCORDINGLY WITH THE APPROPRIATE EU DESIGNATION AND POLLUTANT):

- COMPLIANCE OR PERFORMANCE TEST (INDICATOR RANGES DETERMINED FROM CONTROL DEVICE OPERATING PARAMETER DATA OBTAINED DURING A COMPLIANCE OR PERFORMANCE TEST CONDUCTED UNDER REGULATORY SPECIFIED CONDITIONS OR UNDER CONDITIONS REPRESENTATIVE OF MAXIMUM POTENTIAL EMISSIONS UNDER ANTICIPATED OPERATING CONDITIONS. SUCH DATA MAY BE SUPPLEMENTED BY ENGINEERING ASSESSMENTS AND MANUFACTURER'S RECOMMENDATIONS). THE RATIONALE AND JUSTIFICATION SHALL INCLUDE A SUMMARY OF THE COMPLIANCE OR PERFORMANCE TEST RESULTS THAT WAS USED TO DETERMINE THE INDICATOR RANGE AND DOCUMENTATION INDICATING THAT NO CHANGES HAVE TAKEN PLACE THAT COULD RESULT IN A SIGNIFICANT CHANGE IN THE CONTROL SYSTEM PERFORMANCE OR THE SELECTED INDICATOR RANGES SINCE THE COMPLIANCE OR PERFORMANCE TEST WAS CONDUCTED.
- TEST PLAN AND SCHEDULE (INDICATOR RANGES WILL BE DETERMINED FROM A PROPOSED IMPLEMENTATION PLAN AND SCHEDULE FOR INSTALLING, TESTING, AND PERFORMING ANY OTHER APPROPRIATE ACTIVITIES PRIOR TO USE OF THE MONITORING). THE RATIONALE AND JUSTIFICATION SHALL INCLUDE THE PROPOSED IMPLEMENTATION PLAN AND SCHEDULE THAT WILL PROVIDE FOR USE OF THE MONITORING AS EXPEDITIOUSLY AS PRACTICABLE AFTER APPROVAL OF THIS CAM PLAN, BUT IN NO CASE SHALL THE SCHEDULE FOR COMPLETING INSTALLATION AND BEGINNING OPERATION OF THE MONITORING EXCEED 180 DAYS AFTER APPROVAL.
- ENGINEERING ASSESSMENTS (INDICATOR RANGES OR THE PROCEDURES FOR ESTABLISHING INDICATOR RANGES ARE DETERMINED FROM ENGINEERING ASSESSMENTS AND OTHER DATA, SUCH AS MANUFACTURERS' DESIGN CRITERIA AND HISTORICAL MONITORING DATA, BECAUSE FACTORS SPECIFIC TO THE TYPE OF MONITORING, CONTROL DEVICE, OR PSEU MAKE COMPLIANCE OR PERFORMANCE TESTING UNNECESSARY). THE RATIONALE AND JUSTIFICATION SHALL INCLUDE DOCUMENTATION DEMONSTRATING THAT COMPLIANCE TESTING ISNOT REQUIRED TO ESTABLISH THE INDICATOR RANGE.

RATIONALE AND JUSTIFICATION:

Changes in differential pressure are indicative of process changes, changes in baghouse efficiency, or leaks.

CAM MONITORING APPROACH CRITERIA

COMPLETE THIS SECTION FOR **EACH** EU THAT NEEDS TO BE ADDRESSED IN THIS CAM PLAN SUBMITTAL. THIS SECTION MAY BE COPIED AS NEEDED FOR EACH EU. THIS SECTION IS TO BE USED TO PROVIDE MONITORING DATA AND INFORMATION FOR EACH INDICATOR SELECTED FOR EACH EU IN ORDER TO MEET THE MONITORING DESIGN CRITERIA SPECIFIED IN 40 CFR 64.3 AND 64.4. IF MORE THAN TWO INDICATORS ARE BEING SELECTED FOR A EU OR IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL ACCORDINGLY WITH THE APPROPRIATE PSEU DESIGNATION, POLLUTANT, AND INDICATOR NOs.

7a) EU DESIGNATION: Kipper Boiler WESP(s)	7b) POLLUTANT: PM	7c) [a]INDICATOR NO. 1: Parameter Emissions Monitoring System – Secondary voltage and current are measured to determine the power to each WESP.	7d) [a]INDICATOR NO. 2: Visible Emission Monitoring
8a) GENERAL CRITERIA DESCRIBE THE MONITORING APPROACH USED TO MEASURE THE INDICATORS:		The secondary voltage is measured using a voltmeter and the secondary current is measured using an ammeter. The total power (P) input to the WESP is the products of the secondary voltage (V) and the secondary current (I). (P=V*I)	Modified EPA Method 22
[b]ESTABLISH THE APPROPRIATE INDICATOR RANGE OR THE PROCEDURES FOR ESTABLISHING THE INDICATOR RANGE WHICH PROVIDES A REASONABLE ASSURANCE OF COMPLIANCE:		The minimum operating power is established during performance tests conducted annually.	No visible emissions
8b) PERFORMANCE CRITERIA PROVIDE THE SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA, SUCH AS DETECTOR LOCATION, INSTALLATION SPECIFICATIONS, AND MINIMUM ACCEPTABLE ACCURACY:		Secondary current and secondary voltage are measured after each transformer/rectifier set prior to the electrode.	N/A
[c]FOR NEW OR MODIFIED MONITORING EQUIPMENT, PROVIDE VERIFICATION PROCEDURES, INCLUDING MANUFACTURER'S RECOMMENDATIONS, TO CONFIRM THE OPERATIONAL STATUS OF THE MONITORING:		N/A	N/A
PROVIDE QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES THAT ARE ADEQUATE TO ENSURE THE CONTINUING VALIDITY OF THE DATA, (i.e., DAILY CALIBRATIONS, VISUAL INSPECTIONS, ROUTINE MAINTENANCE, CGA, RATA, ETC.):		WESP power is proportional to collection efficiency and is used to predict compliance. Confirm the meters read zero when the unit is not operating.	N/A
[d]PROVIDE THE MONITORING FREQUENCY:		The voltage and current on each WESP is monitored continuously (at least one measurement per 15-minute period)	Daily when operating.
PROVIDE THE DATA COLLECTION PROCEDURES THAT WILL BE USED:		Data is collected and logged into a data acquisition system.	Inspection is logged pursuant to requirements of the Operational Maintenance and Compliance Plan.
PROVIDE THE DATA AVERAGING PERIOD FOR THE PURPOSE OF DETERMINING WHETHER AN EXCURSION OR EXCEEDANCE HAS OCCURRED:		Any 24-hour block average WESP power that is less than 75 % of the value determined during the last performance test is considered an excursion.	N/A

[a]DESCRIBE ALL INDICATORS TO BE MONITORED WHICH SATISFIES 40 CFR 64.3(a). INDICATORS OF EMISSION CONTROL PERFORMANCE FOR THE CONTROL DEVICE AND ASSOCIATED CAPTURE SYSTEM MAY INCLUDE MEASURED OR PREDICTED EMISSIONS (INCLUDING VISIBLE EMISSIONS OR OPACITY), PROCESS AND CONTROL DEVICE OPERATING PARAMETERS THAT AFFECT CONTROL DEVICE (AND CAPTURE SYSTEM) EFFICIENCY OR EMISSION RATES, OR RECORDED FINDINGS OF INSPECTION AND MAINTENANCE ACTIVITIES.

[b]INDICATOR RANGES MAY BE BASED ON A SINGLE MAXIMUM OR MINIMUM VALUE OR AT MULTIPLE LEVELS THAT ARE RELEVANT TO DISTINCTLY DIFFERENT OPERATING CONDITIONS, EXPRESSED AS A FUNCTION OF PROCESS VARIABLES, EXPRESSED AS MAINTAINING THE APPLICABLE INDICATOR IN A PARTICULAR OPERATIONAL STATUS OR DESIGNATED CONDITION, OR ESTABLISHED AS INTERDEPENDENT BETWEEN MORE THAN ONE INDICATOR. FOR CEMS, COMS, OR PEMS, INCLUDE THE MOST RECENT CERTIFICATION TEST FOR THE MONTIOR.

[c]THE VERIFICATION FOR OPERATIONAL STATUS SHOULD INCLUDE PROCEDURES FOR INSTALLATION, CALIBRATION, AND OPERATION OF THE MONITORING EQUIPMENT, CONDUCTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, NECESSARY TO CONFIRM THE MONITORING EQUIPMENT IS OPERATIONAL PRIOR TO THE COMMENCEMENT OF THE REQUIRED MONITORING.

[d]EMISSION UNITS WITH POSTCONTROL PTE ≥ 100 PERCENT OF THE AMOUNT CLASSIFYING THE SOURCE AS A MAJOR SOURCE MUST COLLECT FOUR OR MORE VALUES PER HOUR TO BE AVERAGED. A REDUCED DATA COLLECTION FREQUENCY MAY BE APPROVED IN LIMITED CIRCUMSTANCES. OTHER EMISSION UNITS MUST COLLECT DATA AT LEAST ONCE PER 24 HOUR PERIOD.

RATIONALE AND JUSTIFICATION

COMPLETE THIS SECTION FOR **EACH** PSEU THAT NEEDS TO BE ADDRESSED IN THIS CAM PLAN SUBMITTAL. THIS SECTION MAY BE COPIED AS NEEDED FOR EACH PSEU. THIS SECTION IS TO BE USED TO PROVIDE RATIONALE AND JUSTIFICATION FOR THE SELECTION OF EACH INDICATOR AND MONITORING APPROACH AND EACH INDICATOR RANGE IN ORDER TO MEET THE SUBMITTAL REQUIREMENTS SPECIFIED IN 40 CFR 64.4.

9a) EU DESIGNATION:	9b) REGULATED AIR POLLUTANT:
Kipper Boiler WESP(s)	PM

10) INDICATORS AND THE MONITORING APPROACH: PROVIDE THE RATIONALE AND JUSTIFICATION FOR THE SELECTION OF THE INDICATORS AND THE MONITORING APPROACH USED TO MEASURE THE INDICATORS. ALSO PROVIDE ANY DATA SUPPORTING THE RATIONALE AND JUSTIFICATION. EXPLAIN THE REASONS FOR ANY DIFFERENCES BETWEEN THE VERIFICATION OF OPERATIONAL STATUS OR THE QUALITY ASSURANCE AND CONTROL PRACTICES PROPOSED AND THE MANUFACTURER'S RECOMMENDATIONS. (IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL ACCORDINGLY WITH THE APPROPRIATE PSEU DESIGNATION AND POLLUTANT):

A wet electrostatic precipitator (WESP) is a particle control device that uses electrical forces to move the particles out of the flowing gas stream and onto collector plates. The particles are given an electrical charge by forcing them to pass through a corona, a region in which gaseous ions flow. The electrical field that forces the charged particles to the walls comes from electrodes maintained
at high voltage in the center of the flow lane. WESP power is proportional to collection efficiency and is used to predict compliance.

11) INDICATOR RANGES: PROVIDE THE RATIONALE AND JUSTIFICATION FOR THE SELECTION OF THE INDICATOR RANGES. THE RATIONALE AND JUSTIFICATION SHALL INDICATE HOW **EACH** INDICATOR RANGE WAS SELECTED BY EITHER A COMPLIANCE OR PERFORMANCE TEST, A TEST PLAN AND SCHEDULE, OR BY ENGINEERING ASSESSMENTS. DEPENDING ON WHICH METHOD IS BEING USED FOR EACH INDICATOR RANGE, INCLUDE THE SPECIFIC INFORMATION REQUIRED BELOW FOR THAT SPECIFIC INDICATOR RANGE. (IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL ACCORDINGLY WITH THE APPROPRIATE EU DESIGNATION AND POLLUTANT):

- COMPLIANCE OR PERFORMANCE TEST (INDICATOR RANGES DETERMINED FROM CONTROL DEVICE OPERATING PARAMETER DATA OBTAINED DURING A COMPLIANCE OR PERFORMANCE TEST CONDUCTED UNDER REGULATORY SPECIFIED CONDITIONS OR UNDER CONDITIONS REPRESENTATIVE OF MAXIMUM POTENTIAL EMISSIONS UNDER ANTICIPATED OPERATING CONDITIONS. SUCH DATA MAY BE SUPPLEMENTED BY ENGINEERING ASSESSMENTS AND MANUFACTURER'S RECOMMENDATIONS). THE RATIONALE AND JUSTIFICATION SHALL INCLUDE A SUMMARY OF THE COMPLIANCE OR PERFORMANCE TEST RESULTS THAT WAS USED TO DETERMINE THE INDICATOR RANGE AND DOCUMENTATION INDICATING THAT NO CHANGES HAVE TAKEN PLACE THAT COULD RESULT IN A SIGNIFICANT CHANGE IN THE CONTROL SYSTEM PERFORMANCE OR THE SELECTED INDICATOR RANGES SINCE THE COMPLIANCE OR PERFORMANCE TEST WAS CONDUCTED.

- TEST PLAN AND SCHEDULE (INDICATOR RANGES WILL BE DETERMINED FROM A PROPOSED IMPLEMENTATION PLAN AND SCHEDULE FOR INSTALLING, TESTING, AND PERFORMING ANY OTHER APPROPRIATE ACTIVITIES PRIOR TO USE OF THE MONITORING). THE RATIONALE AND JUSTIFICATION SHALL INCLUDE THE PROPOSED IMPLEMENTATION PLAN AND SCHEDULE THAT WILL PROVIDE FOR USE OF THE MONITORING AS EXPEDITIOUSLY AS PRACTICABLE AFTER APPROVAL OF THIS CAM PLAN, BUT IN NO CASE SHALL THE SCHEDULE FOR COMPLETING INSTALLATION AND BEGINNING OPERATION OF THE MONITORING EXCEED 180 DAYS AFTER APPROVAL.

- ENGINEERING ASSESSMENTS (INDICATOR RANGES OR THE PROCEDURES FOR ESTABLISHING INDICATOR RANGES ARE DETERMINED FROM ENGINEERING ASSESSMENTS AND OTHER DATA, SUCH AS MANUFACTURERS' DESIGN CRITERIA AND HISTORICAL MONITORING DATA, BECAUSE FACTORS SPECIFIC TO THE TYPE OF MONITORING, CONTROL DEVICE, OR PSEU MAKE COMPLIANCE OR PERFORMANCE TESTING UNNECESSARY). THE RATIONALE AND JUSTIFICATION SHALL INCLUDE DOCUMENTATION DEMONSTRATING THAT COMPLIANCE TESTING IS NOT REQUIRED TO ESTABLISH THE INDICATOR RANGE.

RATIONALE AND JUSTIFICATION:

Performance testing is conducted annually. Indicator ranges are establish during the particulate matter compliance test runs. The final source test report provides proof of compliance and justification for the new lower limit total power and upper limit quench chamber temperature ranges. No changes have taken place that could result in a significant change in the control system performance or the selected indicator ranges since the compliance test was conducted.

CAM MONITORING APPROACH CRITERIA

COMPLETE THIS SECTION FOR **EACH** EMISSIONS UNIT (EU) THAT NEEDS TO BE ADDRESSED IN THIS CAM PLAN SUBMITTAL. THIS SECTION MAY BE COPIED AS NEEDED FOR EACH PSEU. THIS SECTION IS TO BE USED TO PROVIDE MONITORING DATA AND INFORMATION FOR EACH INDICATOR SELECTED FOR EACH EU IN ORDER TO MEET THE MONITORING DESIGN CRITERIA SPECIFIED IN 40 CFR 64.3 AND 64.4. IF MORE THAN TWO INDICATORS ARE BEING SELECTED FOR A EU OR IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL ACCORDINGLY WITH THE APPROPRIATE EU DESIGNATION, POLLUTANT, AND INDICATOR NOs.

7a) EU DESIGNATION: TMDF RO	7b) POLLUTANT: VOC	7c) [a]INDICATOR NO. 1: Parameter Emissions Monitoring System – Temperature	7d) [a]INDICATOR NO. 2:
8a) GENERAL CRITERIA DESCRIBE THE MONITORING APPROACH USED TO MEASURE THE INDICATORS:		Install, calibrate, maintain and operate a system to continuously monitor and record the average temperature across the RO.	
[b]ESTABLISH THE APPROPRIATE INDICATOR RANGE OR THE PROCEDURES FOR ESTABLISHING THE INDICATOR RANGE WHICH PROVIDES A REASONABLE ASSURANCE OF COMPLIANCE:		A source test is conducted annually to determine if the unit is operating in compliance with VOC limit. The 3-hr block average temperature across the unit established during testing becomes the minimum operating temperature until the next successful test is conducted.	
8b) PERFORMANCE CRITERIA PROVIDE THE SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA, SUCH AS DETECTOR LOCATION, INSTALLATION SPECIFICATIONS, AND MINIMUM ACCEPTABLE ACCURACY:		Positioning of the thermocouples was establish during the installation of the RO. Data collected during the annual source test correlates directly with that collected for continuous compliance assurance.	
[c]FOR NEW OR MODIFIED MONITORING EQUIPMENT, PROVIDE VERIFICATION PROCEDURES, INCLUDING MANUFACTURER'S RECOMMENDATIONS, TO CONFIRM THE OPERATIONAL STATUS OF THE MONITORING:		N/A	
PROVIDE QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES THAT ARE ADEQUATE TO ENSURE THE CONTINUING VALIDITY OF THE DATA, (i.e., DAILY CALIBRATIONS, VISUAL INSPECTIONS, ROUTINE MAINTENANCE, CGA, RATA, ETC.):		Annual source tests.	
[d]PROVIDE THE MONITORING FREQUENCY:		The 3-hr block average of all recorded temperature readings, calculated after every 3 hours of operation as the average of the evenly spaced recorded reading in the previous 3 operating hours (excluding periods identified in 40 CFR 63.2270 (b) & (c).	
PROVIDE THE DATA COLLECTION PROCEDURES THAT WILL BE USED:		The temperature is logged at least once every 15-minutes into a data acquisition system.	
PROVIDE THE DATA AVERAGING PERIOD FOR THE PURPOSE OF DETERMINING WHETHER AN EXCURSION OR EXCEEDANCE HAS OCCURRED:		An exceedence occurs if the 3- hr block average temperature across the RO is less than the temperature established during the most recent successful source test.	

[a]DESCRIBE ALL INDICATORS TO BE MONITORED WHICH SATISFIES 40 CFR 64.3(a). INDICATORS OF EMISSION CONTROL PERFORMANCE FOR THE CONTROL DEVICE AND ASSOCIATED CAPTURE SYSTEM MAY INCLUDE MEASURED OR PREDICTED EMISSIONS (INCLUDING VISIBLE EMISSIONS OR OPACITY), PROCESS AND CONTROL DEVICE OPERATING PARAMETERS THAT AFFECT CONTROL DEVICE (AND CAPTURE SYSTEM) EFFICIENCY OR EMISSION RATES, OR RECORDED FINDINGS OF INSPECTION AND MAINTENANCE ACTIVITIES.

[b]INDICATOR RANGES MAY BE BASED ON A SINGLE MAXIMUM OR MINIMUM VALUE OR AT MULTIPLE LEVELS THAT ARE RELEVANT TO DISTINCTLY DIFFERENT OPERATING CONDITIONS, EXPRESSED AS A FUNCTION OF PROCESS VARIABLES, EXPRESSED AS MAINTAINING THE APPLICABLE INDICATOR IN A PARTICULAR OPERATIONAL STATUS OR DESIGNATED CONDITION, OR ESTABLISHED AS INTERDEPENDENT BETWEEN MORE THAN ONE INDICATOR. FOR CEMS, COMS, OR PEMS, INCLUDE THE MOST RECENT CERTIFICATION TEST FOR THE MONTIOR.

[c]THE VERIFICATION FOR OPERATIONAL STATUS SHOULD INCLUDE PROCEDURES FOR INSTALLATION, CALIBRATION, AND OPERATION OF THE MONITORING EQUIPMENT, CONDUCTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, NECESSARY TO CONFIRM THE MONITORING EQUIPMENT IS OPERATIONAL PRIOR TO THE COMMENCEMENT OF THE REQUIRED MONITORING.

[d]EMISSION UNITS WITH POSTCONTROL PTE ≥ 100 PERCENT OF THE AMOUNT CLASSIFYING THE SOURCE AS A MAJOR SOURCE MUST COLLECT FOUR OR MORE VALUES PER HOUR TO BE AVERAGED. A REDUCED DATA COLLECTION FREQUENCY MAY BE APPROVED IN LIMITED CIRCUMSTANCES. OTHER EMISSION UNITS MUST COLLECT DATA AT LEAST ONCE PER 24 HOUR PERIOD.

RATIONALE AND JUSTIFICATION

COMPLETE THIS SECTION FOR **EACH** PSEU THAT NEEDS TO BE ADDRESSED IN THIS CAM PLAN SUBMITTAL. THIS SECTION MAY BE COPIED AS NEEDED FOR EACH EU. THIS SECTION IS TO BE USED TO PROVIDE RATIONALE AND JUSTIFICATION FOR THE SELECTION OF EACH INDICATOR AND MONITORING APPROACH AND EACH INDICATOR RANGE IN ORDER TO MEET THE SUBMITTAL REQUIREMENTS SPECIFIED IN 40 CFR 64.4.

9a) PSEU DESIGNATION:	9b) REGULATED AIR POLLUTANT:
TMDF RO	VOC

10) INDICATORS AND THE MONITORING APPROACH: PROVIDE THE RATIONALE AND JUSTIFICATION FOR THE SELECTION OF THE INDICATORS AND THE MONITORING APPROACH USED TO MEASURE THE INDICATORS. ALSO PROVIDE ANY DATA SUPPORTING THE RATIONALE AND JUSTIFICATION. EXPLAIN THE REASONS FOR ANY DIFFERENCES BETWEEN THE VERIFICATION OF OPERATIONAL STATUS OR THE QUALITY ASSURANCE AND CONTROL PRACTICES PROPOSED AND THE MANUFACTURER'S RECOMMENDATIONS. (IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL ACCORDINGLY WITH THE APPROPRIATE PSEU DESIGNATION AND POLLUTANT):

EPA Method 25A, a method approved by EPA to quantify VOCs, is employed annually to ensure compliance with the VOC limit.

11) INDICATOR RANGES: PROVIDE THE RATIONALE AND JUSTIFICATION FOR THE SELECTION OF THE INDICATOR RANGES. THE RATIONALE AND JUSTIFICATION SHALL INDICATE HOW **EACH** INDICATOR RANGE WAS SELECTED BY EITHER A COMPLIANCE OR PERFORMANCE TEST, A TEST PLAN AND SCHEDULE, OR BY ENGINEERING ASSESSMENTS. DEPENDING ON WHICH METHOD IS BEING USED FOR EACH INDICATOR RANGE, INCLUDE THE SPECIFIC INFORMATION REQUIRED BELOW FOR THAT SPECIFIC INDICATOR RANGE. (IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL ACCORDINGLY WITH THE APPROPRIATE PSEU DESIGNATION AND POLLUTANT):

- COMPLIANCE OR PERFORMANCE TEST (INDICATOR RANGES DETERMINED FROM CONTROL DEVICE OPERATING PARAMETER DATA OBTAINED DURING A COMPLIANCE OR PERFORMANCE TEST CONDUCTED UNDER REGULATORY SPECIFIED CONDITIONS OR UNDER CONDITIONS REPRESENTATIVE OF MAXIMUM POTENTIAL EMISSIONS UNDER ANTICIPATED OPERATING CONDITIONS. SUCH DATA MAY BE SUPPLEMENTED BY ENGINEERING ASSESSMENTS AND MANUFACTURER'S RECOMMENDATIONS). THE RATIONALE AND JUSTIFICATION SHALL INCLUDE A SUMMARY OF THE COMPLIANCE OR PERFORMANCE TEST RESULTS THAT WAS USED TO DETERMINE THE INDICATOR RANGE AND DOCUMENTATION INDICATING THAT NO CHANGES HAVE TAKEN PLACE THAT COULD RESULT IN A SIGNIFICANT CHANGE IN THE CONTROL SYSTEM PERFORMANCE OR THE SELECTED INDICATOR RANGES SINCE THE COMPLIANCE OR PERFORMANCE TEST WAS CONDUCTED.
- TEST PLAN AND SCHEDULE (INDICATOR RANGES WILL BE DETERMINED FROM A PROPOSED IMPLEMENTATION PLAN AND SCHEDULE FOR INSTALLING, TESTING, AND PERFORMING ANY OTHER APPROPRIATE ACTIVITIES PRIOR TO USE OF THE MONITORING). THE RATIONALE AND JUSTIFICATION SHALL INCLUDE THE PROPOSED IMPLEMENTATION PLAN AND SCHEDULE THAT WILL PROVIDE FOR USE OF THE MONITORING AS EXPEDITIOUSLY AS PRACTICABLE AFTER APPROVAL OF THIS CAM PLAN, BUT IN NO CASE SHALL THE SCHEDULE FOR COMPLETING INSTALLATION AND BEGINNING OPERATION OF THE MONITORING EXCEED 180 DAYS AFTER APPROVAL.
- ENGINEERING ASSESSMENTS (INDICATOR RANGES OR THE PROCEDURES FOR ESTABLISHING INDICATOR RANGES ARE DETERMINED FROM ENGINEERING ASSESSMENTS AND OTHER DATA, SUCH ASMANUFACTURERS' DESIGN CRITERIA AND HISTORICAL MONITORING DATA, BECAUSE FACTORS SPECIFIC TO THE TYPE OF MONITORING, CONTROL DEVICE, OR PSEU MAKE COMPLIANCE OR PERFORMANCE TESTING UNNECESSARY). THE RATIONALE AND JUSTIFICATION SHALL INCLUDE DOCUMENTATION DEMONSTRATING THAT COMPLIANCE TESTING IS NOT REQUIRED TO ESTABLISH THE INDICATOR RANGE.

RATIONALE AND JUSTIFICATION:

Pursuant to the requirements of Title V Permit No. S-002 Condition No. 6.D.1 an annual source test is required to ensure compliance with the VOC limit.

CAM MONITORING APPROACH CRITERIA

COMPLETE THIS SECTION FOR **EACH** EU THAT NEEDS TO BE ADDRESSED IN THIS CAM PLAN SUBMITTAL. THIS SECTION MAY BE COPIED AS NEEDED FOR EACH EU. THIS SECTION IS TO BE USED TO PROVIDE MONITORING DATA AND INFORMATION FOR EACH INDICATOR SELECTED FOR EACH EU IN ORDER TO MEET THE MONITORING DESIGN CRITERIA SPECIFIED IN 40 CFR 64.3 AND 64.4. IF MORE THAN TWO INDICATORS ARE BEING SELECTED FOR A EU OR IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL ACCORDINGLY WITH THE APPROPRIATE PSEU DESIGNATION, POLLUTANT, AND INDICATOR NOs.

7a) EU DESIGNATION: TMDF BH 758A/B/C	**7b) POLLUTANT:** PM	**7c) [a]INDICATOR NO. 1:** Parameter Emissions Monitoring System – Pressure Differential	**7d) [a]INDICATOR NO. 2:** Visible Emissions Monitoring
8a) GENERAL CRITERIA DESCRIBE THE MONITORING APPROACH USED TO MEASURE THE INDICATORS:		Install, calibrate, maintain and operate monitoring device to record air stream pressure drop across the baghouse.	Modified EPA Method 22
[b]ESTABLISH THE APPROPRIATE INDICATOR RANGE OR THE PROCEDURES FOR ESTABLISHING THE INDICATOR RANGE WHICH PROVIDES A REASONABLE ASSURANCE OF COMPLIANCE:		Increase in pressure differential is an indicator of blinding or malfunction of cleaning cycle.	No visible emissions.
8b) PERFORMANCE CRITERIA PROVIDE THE SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA, SUCH AS DETECTOR LOCATION, INSTALLATION SPECIFICATIONS, AND MINIMUM ACCEPTABLE ACCURACY:		The sensors are located across inlet and outlet compartments of the baghouse.	N/A
[c]FOR NEW OR MODIFIED MONITORING EQUIPMENT, PROVIDE VERIFICATION PROCEDURES, INCLUDING MANUFACTURER'S RECOMMENDATIONS, TO CONFIRM THE OPERATIONAL STATUS OF THE MONITORING:		N/A	N/A
PROVIDE QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES THAT ARE ADEQUATE TO ENSURE THE CONTINUING VALIDITY OF THE DATA, (i.e., DAILY CALIBRATIONS, VISUAL INSPECTIONS, ROUTINE MAINTENANCE, CGA, RATA, ETC.):		Calibrate, maintain and operate instrumentation using procedures that take into account manufacturer's specifications.	N/A
[d]PROVIDE THE MONITORING FREQUENCY:		The differential pressure is monitored at least once per operating day.	Daily when operating.
PROVIDE THE DATA COLLECTION PROCEDURES THAT WILL BE USED:		The differential pressure (inches of water column) is logged at least once per operating day. Data is reviewed once per operating week.	Inspection is logged pursuant to requirements of the Operational Maintenance and Compliance Plan.
PROVIDE THE DATA AVERAGING PERIOD FOR THE PURPOSE OF DETERMINING WHETHER AN EXCURSION OR EXCEEDANCE HAS OCCURRED:		Daily – once every 24 hours.	N/A

[a]DESCRIBE ALL INDICATORS TO BE MONITORED WHICH SATISFIES 40 CFR 64.3(a). INDICATORS OF EMISSION CONTROL PERFORMANCE FOR THE CONTROL DEVICE AND ASSOCIATED CAPTURE SYSTEM MAY INCLUDE MEASURED OR PREDICTED EMISSIONS (INCLUDING VISIBLE EMISSIONS OR OPACITY), PROCESS AND CONTROL DEVICE OPERATING PARAMETERS THAT AFFECT CONTROL DEVICE (AND CAPTURE SYSTEM) EFFICIENCY OR EMISSION RATES, OR RECORDED FINDINGS OF INSPECTION AND MAINTENANCE ACTIVITIES.

[b]INDICATOR RANGES MAY BE BASED ON A SINGLE MAXIMUM OR MINIMUM VALUE OR AT MULTIPLE LEVELS THAT ARE RELEVANT TO DISTINCTLY DIFFERENT OPERATING CONDITIONS, EXPRESSED AS A FUNCTION OF PROCESS VARIABLES, EXPRESSED AS MAINTAINING THE APPLICABLE INDICATOR IN A PARTICULAR OPERATIONAL STATUS OR DESIGNATED CONDITION, OR ESTABLISHED AS INTERDEPENDENT BETWEEN MORE THAN ONE INDICATOR. FOR CEMS, COMS, OR PEMS, INCLUDE THE MOST RECENT CERTIFICATION TEST FOR THE MONTIOR.

[c]THE VERIFICATION FOR OPERATIONAL STATUS SHOULD INCLUDE PROCEDURES FOR INSTALLATION, CALIBRATION, AND OPERATION OF THE MONITORING EQUIPMENT, CONDUCTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, NECESSARY TO CONFIRM THE MONITORING EQUIPMENT IS OPERATIONAL PRIOR TO THE COMMENCEMENT OF THE REQUIRED MONITORING.

[d]EMISSION UNITS WITH POSTCONTROL PTE ≥ 100 PERCENT OF THE AMOUNT CLASSIFYING THE SOURCE AS A MAJOR SOURCE MUST COLLECT FOUR OR MORE VALUES PER HOUR TO BE AVERAGED. A REDUCED DATA COLLECTION FREQUENCY MAY BE APPROVED IN LIMITED CIRCUMSTANCES. OTHER EMISSION UNITS MUST COLLECT DATA AT LEAST ONCE PER 24 HOUR PERIOD.

RATIONALE AND JUSTIFICATION

COMPLETE THIS SECTION FOR **EACH** PSEU THAT NEEDS TO BE ADDRESSED IN THIS CAM PLAN SUBMITTAL. THIS SECTION MAY BE COPIED AS NEEDED FOR EACH PSEU. THIS SECTION IS TO BE USED TO PROVIDE RATIONALE AND JUSTIFICATION FOR THE SELECTION OF EACH INDICATOR AND MONITORING APPROACH AND EACH INDICATOR RANGE IN ORDER TO MEET THE SUBMITTAL REQUIREMENTS SPECIFIED IN 40 CFR 64.4.

9a) EU DESIGNATION:	9b) REGULATED AIR POLLUTANT:
TMDF BH 758 A/B/C	PM

10) INDICATORS AND THE MONITORING APPROACH: PROVIDE THE RATIONALE AND JUSTIFICATION FOR THE SELECTION OF THE INDICATORS AND THE MONITORING APPROACH USED TO MEASURE THE INDICATORS. ALSO PROVIDE ANY DATA SUPPORTING THE RATIONALE AND JUSTIFICATION. EXPLAIN THE REASONS FOR ANY DIFFERENCES BETWEEN THE VERIFICATION OF OPERATIONAL STATUS OR THE QUALITY ASSURANCE AND CONTROL PRACTICES PROPOSED AND THE MANUFACTURER'S RECOMMENDATIONS. (IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL ACCORDINGLY WITH THE APPROPRIATE PSEU DESIGNATION AND POLLUTANT):

Changes in differential pressure are indicative of process changes, changes in baghouse efficiency, or leaks.

11) INDICATOR RANGES: PROVIDE THE RATIONALE AND JUSTIFICATION FOR THE SELECTION OF THE INDICATOR RANGES. THE RATIONALE AND JUSTIFICATION SHALL INDICATE HOW **EACH** INDICATOR RANGE WAS SELECTED BY EITHER A COMPLIANCE OR PERFORMANCE TEST, A TEST PLAN AND SCHEDULE, OR BY ENGINEERING ASSESSMENTS. DEPENDING ON WHICH METHOD IS BEING USED FOR EACH INDICATOR RANGE, INCLUDE THE SPECIFIC INFORMATION REQUIRED BELOW FOR THAT SPECIFIC INDICATOR RANGE. (IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL ACCORDINGLY WITH THE APPROPRIATE EU DESIGNATION AND POLLUTANT):

- COMPLIANCE OR PERFORMANCE TEST (INDICATOR RANGES DETERMINED FROM CONTROL DEVICE OPERATING PARAMETER DATA OBTAINED DURING A COMPLIANCE OR PERFORMANCE TEST CONDUCTED UNDER REGULATORY SPECIFIED CONDITIONS OR UNDER CONDITIONS REPRESENTATIVE OFMAXIMUM POTENTIAL EMISSIONS UNDER ANTICIPATED OPERATING CONDITIONS. SUCH DATA MAY BE SUPPLEMENTED BY ENGINEERING ASSESSMENTS AND MANUFACTURER'S RECOMMENDATIONS). THE RATIONALE AND JUSTIFICATION SHALLINCLUDE A SUMMARY OF THE COMPLIANCE OR PERFORMANCETEST RESULTS THAT WAS USED TO DETERMINE THE INDICATOR RANGE AND DOCUMENTATION INDICATING THAT NO CHANGES HAVE TAKEN PLACE THAT COULD RESULT IN A SIGNIFICANT CHANGE IN THE CONTROL SYSTEM PERFORMANCE OR THE SELECTED INDICATOR RANGES SINCE THE COMPLIANCE OR PERFORMANCE TEST WAS CONDUCTED.
- TEST PLAN AND SCHEDULE (INDICATOR RANGES WILL BE DETERMINED FROM A PROPOSED IMPLEMENTATION PLAN AND SCHEDULE FOR INSTALLING, TESTING, AND PERFORMING ANY OTHER APPROPRIATE ACTIVITIES PRIOR TO USE OF THE MONITORING). THE RATIONALE AND JUSTIFICATION SHALL INCLUDE THE PROPOSED IMPLEMENTATION PLAN AND SCHEDULE THAT WILL PROVIDE FOR USE OF THE MONITORING AS EXPEDITIOUSLY AS PRACTICABLE AFTER APPROVAL OF THIS CAM PLAN, BUT IN NO CASE SHALL THE SCHEDULE FOR COMPLETING INSTALLATION AND BEGINNING OPERATION OF THE MONITORING EXCEED 180 DAYS AFTER APPROVAL.
- ENGINEERING ASSESSMENTS (INDICATOR RANGES OR THE PROCEDURES FOR ESTABLISHING INDICATOR RANGES ARE DETERMINED FROM ENGINEERING ASSESSMENTS AND OTHER DATA, SUCH AS MANUFACTURERS'DESIGN CRITERIA AND HISTORICAL MONITORING DATA, BECAUSE FACTORS SPECIFIC TO THE TYPE OF MONITORING, CONTROL DEVICE, OR PSEU MAKE COMPLIANCE OR PERFORMANCE TESTING UNNECESSARY). THE RATIONALE AND JUSTIFICATION SHALL INCLUDE DOCUMENTATION DEMONSTRATING THATCOMPLIANCE TESTING IS NOT REQUIRED TO ESTABLISH THE INDICATOR RANGE.

RATIONALE AND JUSTIFICATION:

Changes in differential pressure are indicative of process changes, changes in baghouse efficiency, or leaks.

CAM MONITORING APPROACH CRITERIA

COMPLETE THIS SECTION FOR **EACH** EU THAT NEEDS TO BE ADDRESSED IN THIS CAM PLAN SUBMITTAL. THIS SECTION MAY BE COPIED AS NEEDED FOR EACH EU. THIS SECTION IS TO BE USED TO PROVIDE MONITORING DATA AND INFORMATION FOR EACH INDICATOR SELECTED FOR EACH EU IN ORDER TO MEET THE MONITORING DESIGN CRITERIA SPECIFIED IN 40 CFR 64.3 AND 64.4. IF MORE THAN TWO INDICATORS ARE BEING SELECTED FOR A EU OR IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL ACCORDINGLY WITH THE APPROPRIATE PSEU DESIGNATION, POLLUTANT, AND INDICATOR NOs.

7a) EU DESIGNATION: TMDF BH 756	**7b) POLLUTANT:** PM	**7c) [a]INDICATOR NO. 1:** Parameter Emissions Monitoring System – Pressure Differential.	**7d) [a]INDICATOR NO. 2:** Visible Emissions Monitoring
8a) GENERAL CRITERIA DESCRIBE THE MONITORING APPROACH USED TO MEASURE THE INDICATORS:		Install, calibrate, maintain and operate monitoring device to record air stream pressure drop across the baghouse.	Modified EPA Method 22
[b]ESTABLISH THE APPROPRIATE INDICATOR RANGE OR THE PROCEDURES FOR ESTABLISHING THE INDICATOR RANGE WHICH PROVIDES A REASONABLE ASSURANCE OF COMPLIANCE:		Increase in pressure differential is an indicator of blinding or malfunction of cleaning cycle.	No visible emissions.
8b) PERFORMANCE CRITERIA PROVIDE THE SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA, SUCH AS DETECTOR LOCATION, INSTALLATION SPECIFICATIONS, AND MINIMUM ACCEPTABLE ACCURACY:		The sensors are located across inlet and outlet compartments of the baghouse.	N/A
[c]FOR NEW OR MODIFIED MONITORING EQUIPMENT, PROVIDE VERIFICATION PROCEDURES, INCLUDING MANUFACTURER'S RECOMMENDATIONS, TO CONFIRM THE OPERATIONAL STATUS OF THE MONITORING:		N/A	N/A
PROVIDE QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES THAT ARE ADEQUATE TO ENSURE THE CONTINUING VALIDITY OF THE DATA, (i.e., DAILY CALIBRATIONS, VISUAL INSPECTIONS, ROUTINE MAINTENANCE, CGA, RATA, ETC.):		Calibrate, maintain and operate instrumentation using procedures that take into account manufacturer's specifications.	N/A
[d]PROVIDE THE MONITORING FREQUENCY:		The differential pressure is monitored at once per operating day.	Daily when operating.
PROVIDE THE DATA COLLECTION PROCEDURES THAT WILL BE USED:		The differential pressure (inches of water column) is logged at least once per operating day. Data is reviewed once per operating week.	Inspection is logged pursuant to requirements of the Operational Maintenance and Compliance Plan.
PROVIDE THE DATA AVERAGING PERIOD FOR THE PURPOSE OF DETERMINING WHETHER AN EXCURSION OR EXCEEDANCE HAS OCCURRED:		Daily – once every 24 hours.	N/A

[a]DESCRIBE ALL INDICATORS TO BE MONITORED WHICH SATISFIES 40 CFR 64.3(a). INDICATORS OF EMISSION CONTROL PERFORMANCE FOR THE CONTROL DEVICE AND ASSOCIATED CAPTURE SYSTEM MAY INCLUDE MEASURED OR PREDICTED EMISSIONS (INCLUDING VISIBLE EMISSIONS OR OPACITY), PROCESS AND CONTROL DEVICE OPERATING PARAMETERS THAT AFFECT CONTROL DEVICE (AND CAPTURE SYSTEM) EFFICIENCY OR EMISSION RATES, OR RECORDED FINDINGS OF INSPECTION AND MAINTENANCE ACTIVITIES.

[b]INDICATOR RANGES MAY BE BASED ON A SINGLE MAXIMUM OR MINIMUM VALUE OR AT MULTIPLE LEVELS THAT ARE RELEVANT TO DISTINCTLY DIFFERENT OPERATING CONDITIONS, EXPRESSED AS A FUNCTION OF PROCESS VARIABLES, EXPRESSED AS MAINTAINING THE APPLICABLE INDICATOR IN A PARTICULAR OPERATIONAL STATUS OR DESIGNATED CONDITION, OR ESTABLISHED AS INTERDEPENDENT BETWEEN MORE THAN ONE INDICATOR. FOR CEMS, COMS, OR PEMS, INCLUDE THE MOST RECENT CERTIFICATION TEST FOR THE MONTIOR.

[c]THE VERIFICATION FOR OPERATIONAL STATUS SHOULD INCLUDE PROCEDURES FOR INSTALLATION, CALIBRATION, AND OPERATION OF THE MONITORING EQUIPMENT, CONDUCTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, NECESSARY TO CONFIRM THE MONITORING EQUIPMENT IS OPERATIONAL PRIOR TO THE COMMENCEMENT OF THE REQUIRED MONITORING.

[d]EMISSION UNITS WITH POSTCONTROL PTE ≥ 100 PERCENT OF THE AMOUNT CLASSIFYING THE SOURCE AS A MAJOR SOURCE MUST COLLECT FOUR OR MORE VALUES PER HOUR TO BE AVERAGED. A REDUCED DATA COLLECTION FREQUENCY MAY BE APPROVED IN LIMITED CIRCUMSTANCES. OTHER EMISSION UNITS MUST COLLECT DATA AT LEAST ONCE PER 24 HOUR PERIOD.

RATIONALE AND JUSTIFICATION

COMPLETE THIS SECTION FOR **EACH** PSEU THAT NEEDS TO BE ADDRESSED IN THIS CAM PLAN SUBMITTAL. THIS SECTION MAY BE COPIED AS NEEDED FOR EACH PSEU. THIS SECTION IS TO BE USED TO PROVIDE RATIONALE AND JUSTIFICATION FOR THE SELECTION OF EACH INDICATOR AND MONITORING APPROACH AND EACH INDICATOR RANGE IN ORDER TO MEET THE SUBMITTAL REQUIREMENTS SPECIFIED IN 40 CFR 64.4.

9a) EU DESIGNATION:	9b) REGULATED AIR POLLUTANT:
TMDF BH 756	PM

10) INDICATORS AND THE MONITORING APPROACH: PROVIDE THE RATIONALE AND JUSTIFICATION FOR THE SELECTION OF THE INDICATORS AND THE MONITORING APPROACH USED TO MEASURE THE INDICATORS. ALSO PROVIDE ANY DATA SUPPORTING THE RATIONALE AND JUSTIFICATION. EXPLAIN THE REASONS FOR ANY DIFFERENCES BETWEEN THE VERIFICATION OF OPERATIONAL STATUS OR THE QUALITY ASSURANCE AND CONTROL PRACTICES PROPOSED AND THE MANUFACTURER'S RECOMMENDATIONS. (IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL ACCORDINGLY WITH THE APPROPRIATE PSEU DESIGNATION AND POLLUTANT):

Changes in differential pressure are indicative of process changes, changes in baghouse efficiency, or leaks.

11) INDICATOR RANGES: PROVIDE THE RATIONALE AND JUSTIFICATION FOR THE SELECTION OF THE INDICATOR RANGES. THE RATIONALE AND JUSTIFICATION SHALL INDICATE HOW **EACH** INDICATOR RANGE WAS SELECTED BY EITHER A COMPLIANCE OR PERFORMANCE TEST, A TEST PLAN AND SCHEDULE, OR BY ENGINEERING ASSESSMENTS. DEPENDING ON WHICH METHOD IS BEING USED FOR EACH INDICATOR RANGE, INCLUDE THE SPECIFIC INFORMATION REQUIRED BELOW FOR THAT SPECIFIC INDICATOR RANGE. (IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL ACCORDINGLY WITH THE APPROPRIATE EU DESIGNATION AND POLLUTANT):

- COMPLIANCE OR PERFORMANCE TEST (INDICATOR RANGES DETERMINED FROM CONTROL DEVICE OPERATING PARAMETER DATA OBTAINED DURING A COMPLIANCE OR PERFORMANCE TEST CONDUCTED UNDER REGULATORY SPECIFIED CONDITIONS OR UNDER CONDITIONS REPRESENTATIVE OF MAXIMUM POTENTIALEMISSIONS UNDER ANTICIPATED OPERATING CONDITIONS. SUCH DATA MAY BE SUPPLEMENTED BY ENGINEERING ASSESSMENTS AND MANUFACTURER'S RECOMMENDATIONS). THE RATIONALE AND JUSTIFICATION SHALLINCLUDE A SUMMARY OF THE COMPLIANCE OR PERFORMANCE TEST RESULTS THATWAS USED TO DETERMINE THE INDICATOR RANGE AND DOCUMENTATION INDICATING THAT NO CHANGES HAVE TAKEN PLACE THAT COULD RESULT IN A SIGNIFICANT CHANGE IN THE CONTROL SYSTEM PERFORMANCE OR THE SELECTED INDICATOR RANGES SINCE THE COMPLIANCE OR PERFORMANCE TESTWAS CONDUCTED.
- TEST PLAN AND SCHEDULE (INDICATOR RANGES WILL BE DETERMINED FROM A PROPOSED IMPLEMENTATION PLAN AND SCHEDULE FOR INSTALLING, TESTING, AND PERFORMING ANY OTHER APPROPRIATE ACTIVITIES PRIOR TO USE OF THE MONITORING). THE RATIONALE AND JUSTIFICATION SHALL INCLUDE THE PROPOSED IMPLEMENTATION PLAN AND SCHEDULE THAT WILL PROVIDE FOR USE OF THE MONITORING AS EXPEDITIOUSLY AS PRACTICABLE AFTER APPROVAL OF THIS CAM PLAN, BUT IN NO CASE SHALL THE SCHEDULE FOR COMPLETING INSTALLATION AND BEGINNING OPERATION OF THE MONITORING EXCEED 180 DAYS AFTER APPROVAL.
- ENGINEERING ASSESSMENTS (INDICATOR RANGES OR THE PROCEDURES FOR ESTABLISHING INDICATOR RANGES ARE DETERMINED FROM ENGINEERING ASSESSMENTS AND OTHER DATA, SUCH AS MANUFACTURERS' DESIGN CRITERIA AND HISTORICAL MONITORING DATA, BECAUSE FACTORS SPECIFIC TO THE TYPE OF MONITORING, CONTROL DEVICE, OR PSEU MAKE COMPLIANCE OR PERFORMANCE TESTING UNNECESSARY). THE RATIONALE AND JUSTIFICATION SHALL INCLUDE DOCUMENTATION DEMONSTRATING THAT COMPLIANCE TESTING IS NOT REQUIRED TO ESTABLISH THE INDICATOR RANGE.

RATIONALE AND JUSTIFICATION:

Changes in differential pressure are indicative of process changes, changes in baghouse efficiency, or leaks.

CAM MONITORING APPROACH CRITERIA

COMPLETE THIS SECTION FOR **EACH** EU THAT NEEDS TO BE ADDRESSED IN THIS CAM PLAN SUBMITTAL. THIS SECTION MAY BE COPIED AS NEEDED FOR EACH EU. THIS SECTION IS TO BE USED TO PROVIDE MONITORING DATA AND INFORMATION FOR EACH INDICATOR SELECTED FOR EACH EU IN ORDER TO MEET THE MONITORING DESIGN CRITERIA SPECIFIED IN 40 CFR 64.3 AND 64.4. IF MORE THAN TWO INDICATORS ARE BEING SELECTED FOR A EU OR IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL ACCORDINGLY WITH THE APPROPRIATE PSEU DESIGNATION, POLLUTANT, AND INDICATOR NOs.

7a) EU DESIGNATION: TMDF BH 752	7b) POLLUTANT: PM	7c) [a] INDICATOR NO. 1: Parameter Emissions Monitoring System – Pressure Differential	7d) [a] INDICATOR NO. 2: Visible Emissions Monitoring
8a) GENERAL CRITERIA DESCRIBE THE MONITORING APPROACH USED TO MEASURE THE INDICATORS:		Install, calibrate, maintain and operate monitoring device to record air stream pressure drop across the baghouse.	Modified EPA Method 22
[b] ESTABLISH THE APPROPRIATE INDICATOR RANGE OR THE PROCEDURES FOR ESTABLISHING THE INDICATOR RANGE WHICH PROVIDES A REASONABLE ASSURANCE OF COMPLIANCE:		Increase in pressure differential is an indicator of blinding or malfunction of cleaning cycle.	No visible emissions.
8b) PERFORMANCE CRITERIA PROVIDE THE SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA, SUCH AS DETECTOR LOCATION, INSTALLATION SPECIFICATIONS, AND MINIMUM ACCEPTABLE ACCURACY:		The sensors are located across inlet and outlet compartments of the baghouse.	N/A
[c] FOR NEW OR MODIFIED MONITORING EQUIPMENT, PROVIDE VERIFICATION PROCEDURES, INCLUDING MANUFACTURER'S RECOMMENDATIONS, TO CONFIRM THE OPERATIONAL STATUS OF THE MONITORING:		N/A	N/A
PROVIDE QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES THAT ARE ADEQUATE TO ENSURE THE CONTINUING VALIDITY OF THE DATA, (i.e., DAILY CALIBRATIONS, VISUAL INSPECTIONS, ROUTINE MAINTENANCE, CGA, RATA, ETC.):		Calibrate, maintain and operate instrumentation using procedures that take into account manufacturer's specifications.	N/A
[d] PROVIDE THE MONITORING FREQUENCY:		The differential pressure is monitored at least once per operating day.	Daily when operating.
PROVIDE THE DATA COLLECTION PROCEDURES THAT WILL BE USED:		The differential pressure (inches of water column) is logged at least once per operating day. Data is reviewed once per operating week.	Inspection is logged pursuant to requirements of the Operational Maintenance and Compliance Plan.
PROVIDE THE DATA AVERAGING PERIOD FOR THE PURPOSE OF DETERMINING WHETHER AN EXCURSION OR EXCEEDANCE HAS OCCURRED:		Daily – once every 24 hours	N/A

[a] DESCRIBE ALL INDICATORS TO BE MONITORED WHICH SATISFIES 40 CFR 64.3(a). INDICATORS OF EMISSION CONTROL PERFORMANCE FOR THE CONTROL DEVICE AND ASSOCIATED CAPTURE SYSTEM MAY INCLUDE MEASURED OR PREDICTED EMISSIONS (INCLUDING VISIBLE EMISSIONS OR OPACITY), PROCESS AND CONTROL DEVICE OPERATING PARAMETERS THAT AFFECT CONTROL DEVICE (AND CAPTURE SYSTEM) EFFICIENCY OR EMISSION RATES, OR RECORDED FINDINGS OF INSPECTION AND MAINTENANCE ACTIVITIES.

[b] INDICATOR RANGES MAY BE BASED ON A SINGLE MAXIMUM OR MINIMUM VALUE OR AT MULTIPLE LEVELS THAT ARE RELEVANT TO DISTINCTLY DIFFERENT OPERATING CONDITIONS, EXPRESSED AS A FUNCTION OF PROCESS VARIABLES, EXPRESSED AS MAINTAINING THE APPLICABLE INDICATOR IN A PARTICULAR OPERATIONAL STATUS OR DESIGNATED CONDITION, OR ESTABLISHED AS INTERDEPENDENT BETWEEN MORE THAN ONE INDICATOR. FOR CEMS, COMS, OR PEMS, INCLUDE THE MOST RECENT CERTIFICATION TEST FOR THE MONTIOR.

[c] THE VERIFICATION FOR OPERATIONAL STATUS SHOULD INCLUDE PROCEDURES FOR INSTALLATION, CALIBRATION, AND OPERATION OF THE MONITORING EQUIPMENT, CONDUCTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, NECESSARY TO CONFIRM THE MONITORING EQUIPMENT IS OPERATIONAL PRIOR TO THE COMMENCEMENT OF THE REQUIRED MONITORING.

[d] EMISSION UNITS WITH POSTCONTROL PTE ≥ 100 PERCENT OF THE AMOUNT CLASSIFYING THE SOURCE AS A MAJOR SOURCE MUST COLLECT FOUR OR MORE VALUES PER HOUR TO BE AVERAGED. A REDUCED DATA COLLECTION FREQUENCY MAY BE APPROVED IN LIMITED CIRCUMSTANCES. OTHER EMISSION UNITS MUST COLLECT DATA AT LEAST ONCE PER 24 HOUR PERIOD.

RATIONALE AND JUSTIFICATION

COMPLETE THIS SECTION FOR **EACH** PSEU THAT NEEDS TO BE ADDRESSED IN THIS CAM PLAN SUBMITTAL. THIS SECTION MAY BE COPIED AS NEEDED FOR EACH PSEU. THIS SECTION IS TO BE USED TO PROVIDE RATIONALE AND JUSTIFICATION FOR THE SELECTION OF EACH INDICATOR AND MONITORING APPROACH AND EACH INDICATOR RANGE IN ORDER TO MEET THE SUBMITTAL REQUIREMENTS SPECIFIED IN 40 CFR 64.4.

9a) EU DESIGNATION:	9b) REGULATED AIR POLLUTANT:
TMDF BH 752	PM

10) INDICATORS AND THE MONITORING APPROACH: PROVIDE THE RATIONALE AND JUSTIFICATION FOR THE SELECTION OF THE INDICATORS AND THE MONITORING APPROACH USED TO MEASURE THE INDICATORS. ALSO PROVIDE ANY DATA SUPPORTING THE RATIONALE AND JUSTIFICATION. EXPLAIN THE REASONS FOR ANY DIFFERENCES BETWEEN THE VERIFICATION OF OPERATIONAL STATUS OR THE QUALITY ASSURANCE AND CONTROL PRACTICES PROPOSED AND THE MANUFACTURER'S RECOMMENDATIONS. (IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL ACCORDINGLY WITH THE APPROPRIATE PSEU DESIGNATION AND POLLUTANT):

Changes in differential pressure are indicative of process changes, changes in baghouse efficiency, or leaks.

11) INDICATOR RANGES: PROVIDE THE RATIONALE AND JUSTIFICATION FOR THE SELECTION OF THE INDICATOR RANGES. THE RATIONALE AND JUSTIFICATION SHALL INDICATE HOW **EACH** INDICATOR RANGE WAS SELECTED BY EITHER A COMPLIANCE OR PERFORMANCE TEST, A TEST PLAN AND SCHEDULE, OR BY ENGINEERING ASSESSMENTS. DEPENDING ON WHICH METHOD IS BEING USED FOR EACH INDICATOR RANGE, INCLUDE THE SPECIFIC INFORMATION REQUIRED BELOW FOR THAT SPECIFIC INDICATOR RANGE. (IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL ACCORDINGLY WITH THE APPROPRIATE EU DESIGNATION AND POLLUTANT):

- COMPLIANCE OR PERFORMANCE TEST (INDICATOR RANGES DETERMINED FROM CONTROL DEVICE OPERATING PARAMETER DATA OBTAINED DURING A COMPLIANCE OR PERFORMANCE TEST CONDUCTED UNDER REGULATORY SPECIFIED CONDITIONS OR UNDER CONDITIONS REPRESENTATIVE OF MAXIMUM POTENTIAL EMISSIONS UNDER ANTICIPATED OPERATING CONDITIONS. SUCH DATA MAY BE SUPPLEMENTED BY ENGINEERING ASSESSMENTS AND MANUFACTURER'S RECOMMENDATIONS). THE RATIONALE AND JUSTIFICATION SHALL INCLUDE A SUMMARY OF THE COMPLIANCE OR PERFORMANCE TEST RESULTS THAT WAS USED TO DETERMINE THE INDICATOR RANGE AND DOCUMENTATION INDICATING THAT NO CHANGES HAVE TAKEN PLACE THAT COULD RESULT IN A SIGNIFICANT CHANGE IN THE CONTROL SYSTEM PERFORMANCE OR THE SELECTED INDICATOR RANGES SINCE THE COMPLIANCE OR PERFORMANCE TEST WAS CONDUCTED.
- TEST PLAN AND SCHEDULE (INDICATOR RANGES WILL BE DETERMINED FROM A PROPOSED IMPLEMENTATION PLAN AND SCHEDULE FOR INSTALLING, TESTING, AND PERFORMING ANY OTHER APPROPRIATE ACTIVITIES PRIOR TO USE OF THE MONITORING). THE RATIONALE AND JUSTIFICATION SHALL INCLUDE THE PROPOSED IMPLEMENTATION PLAN AND SCHEDULE THAT WILL PROVIDE FOR USE OF THE MONITORING AS EXPEDITIOUSLY AS PRACTICABLE AFTER APPROVAL OF THIS CAM PLAN, BUT IN NO CASE SHALL THE SCHEDULE FOR COMPLETING INSTALLATION AND BEGINNING OPERATION OF THE MONITORING EXCEED 180 DAYS AFTER APPROVAL.
- ENGINEERING ASSESSMENTS (INDICATOR RANGES OR THE PROCEDURES FOR ESTABLISHING INDICATOR RANGES ARE DETERMINED FROM ENGINEERING ASSESSMENTS AND OTHER DATA, SUCH AS MANUFACTURERS' DESIGN CRITERIA AND HISTORICAL MONITORING DATA, BECAUSE FACTORS SPECIFIC TO THE TYPE OF MONITORING, CONTROL DEVICE, OR PSEU MAKE COMPLIANCE OR PERFORMANCE TESTING UNNECESSARY). THE RATIONALE AND JUSTIFICATION SHALL INCLUDE DOCUMENTATION DEMONSTRATING THAT COMPLIANCE TESTING IS NOT REQUIRED TO ESTABLISH THE INDICATOR RANGE.

RATIONALE AND JUSTIFICATION:

Changes in differential pressure are indicative of process changes, changes in baghouse efficiency, or leaks.