

COPY

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JUN 30 2008

PLACER COUNTY AIR POLLUTION
CONTROL DISTRICT

July 30, 2008

SPRENV00215

Mr. Bruce Springsteen
Placer County Air Pollution Control District
3091 County Center Drive, Suite 240
Auburn, CA 95603

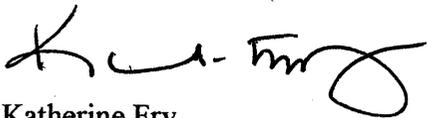
**Subject: SierraPine – Rocklin Division; Title V Permit S-0001
Compliance Assurance Monitoring (CAM) Plan**

Dear Mr. Springsteen:

Please find attached the Compliance Assurance Monitoring Plan developed by SierraPine to ensure compliance of those emission units subject to the requirements of 40 CFR Part 64 with the emission limits identified in the subject Title V permit. As the next annual performance test for the Kipper Boiler is not required until January 2009, SierraPine is requesting that the monitoring requirements for the boiler be implemented within 180 days after the renewal date of the Title V permit. Additionally, we would like to use the same 180 days to establish pressure differential operating ranges for the various baghouses subject to this regulation.

If you have any questions about this plan, or if you need additional information, please do not hesitate to call me at (916) 677-4468.

Sincerely,



Katherine Fry
Director of Environmental Affairs

CERTIFICATION STATEMENT (FORM 507-M)

| | | |
|-----------------------|--|------------------------------|
| DISTRICT: | Placer County Air Pollution Control District | ► DISTRICT USE ONLY ◀ |
| COMPANY NAME: | SierraPine, A California Limited Partnership | DISTRICT ID: |
| FACILITY NAME: | SierraPine - Rocklin Division | |

Identify, by checking off below, the forms and attachments that are part of your submittal. If the submittal contains forms or attachments that are not identified below, please identify these attachments in the blank space provided below. Review the instructions if you are unsure of the forms and attachments that need to be included in a complete application.

Forms included:

Stationary Source Summary Form

Total Stationary Source Emission Form

Compliance Plan Form

Compliance Plan Certification Form

Exempt Equipment Form

Certification Statement Form

List other forms or attachments
Compliance Assurance Monitoring
(CAM) Plan

check here if additional forms listed on back

Attachments included:

Description of Operating Scenarios

Sample emission calculations

Fugitive emission estimates

List of Applicable requirements

Discussion of units out of compliance with applicable federal requirements and if applicable, a schedule of Compliance

Facility schematic showing emission points

NSR Permit

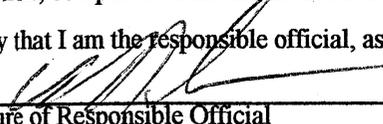
PSD Permit

Enhanced monitoring protocols

Risk management verification per 112(r)

I certify under penalty of law, based on information and belief formed after reasonable inquiry, that the information contained in this application, composed of the forms and attachments identified above, are true, accurate, and complete.

I certify that I am the responsible official, as defined in Rule 507, Federal Operating Permit Program.



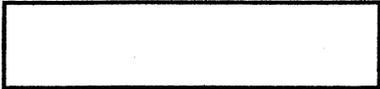
 Signature of Responsible Official Date

Grady Mulberry

 Print Name of Responsible Official

General Manager, SierraPine

 Title of Responsible Official and Company Name



| | |
|---|--|
| COMPLIANCE ASSURANCE MONITORING (CAM) PLAN | |
| | |
| | |
| | |

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: 07/25/2008 | 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: |
| <input checked="" type="checkbox"/> RENEWAL APPLICATION. <u>ALL</u> PSEUs (POLLUTANT-SPECIFIC EMISSIONS UNITS CONSIDERED SEPARATELY WITH RESPECT TO EACH REGULATED AIR POLLUTANT) FOR WHICH A CAM PLAN HAS <u>NOT</u> YET BEEN APPROVED NEED TO BE ADDRESSED IN THIS CAM PLAN SUBMITTAL. |
| <input type="checkbox"/> INITIAL APPLICATION (SUBMITTED AFTER 4/20/98). <u>ONLY</u> 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. |
| <input type="checkbox"/> SIGNIFICANT MODIFICATION TO LARGE PSEUs. <u>ONLY</u> 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, <u>ONLY</u> 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 <u>ALL</u> OF THE FOLLOWING CRITERIA (IF NO, THEN THE REMAINDER OF THIS FORM NEED NOT BE COMPLETED): |
| <input checked="" type="checkbox"/> YES <input type="checkbox"/> 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 <u>NOT</u> EXEMPT; |
| <u>LIST OF EXEMPT EMISSION LIMITATIONS OR STANDARDS:</u> <ul style="list-style-type: none"> • 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 <u>NOT</u> AN EXEMPT BACKUP UTILITY POWER EMISSIONS UNIT THAT IS MUNICIPALLY-OWNED. |

6) 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 | EMISSION LIMITATION OR STANDARD | 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. |
| | | | | | |

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: |
|---|--------------------------|---|-----------------------------------|
| 8a) GENERAL CRITERIA DESCRIBE THE MONITORING APPROACH USED TO MEASURE THE INDICATORS: ^b ESTABLISH THE APPROPRIATE INDICATOR RANGE OR THE PROCEDURES FOR ESTABLISHING THE INDICATOR RANGE WHICH PROVIDES A REASONABLE ASSURANCE OF COMPLIANCE: | | 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) | |
| | | The minimum operating power is established during performance tests conducted annually. | |
| 8b) PERFORMANCE CRITERIA PROVIDE THE SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA, SUCH AS DETECTOR LOCATION, INSTALLATION SPECIFICATIONS, AND MINIMUM ACCEPTABLE ACCURACY: ^c FOR NEW OR MODIFIED MONITORING EQUIPMENT, PROVIDE VERIFICATION PROCEDURES, INCLUDING MANUFACTURER'S RECOMMENDATIONS, TO CONFIRM THE OPERATIONAL STATUS OF THE MONITORING: 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.): ^d PROVIDE THE MONITORING FREQUENCY: PROVIDE THE DATA COLLECTION PROCEDURES THAT WILL BE USED: PROVIDE THE DATA AVERAGING PERIOD FOR THE PURPOSE OF DETERMINING WHETHER AN EXCURSION OR EXCEEDANCE HAS OCCURRED: | | Secondary current and secondary voltage are measured after each transformer/rectifier set prior to the electrode. | |
| | | N/A | |
| | | WESP power is proportional to collection efficiency and is used to predict compliance. Confirm the meters read zero when the unit is not operating. | |
| | | The voltage and current on each WESP is monitored continuously (at least one measurement per 15-minute period) | |
| | | Data is collected and logged into a data acquisition system. | |
| | | Any 3-hour block average WESP power that is less than 75 % of the value determined during the last performance test is considered an excursion. | |

^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 MONITOR.

^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.

^e 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:
Kipper Boiler WESP(s)

9b) REGULATED AIR POLLUTANT:
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 established 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, 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 <u>MONITORING APPROACH</u> USED TO MEASURE THE INDICATORS: ^b ESTABLISH THE APPROPRIATE <u>INDICATOR RANGE</u> OR THE PROCEDURES FOR ESTABLISHING THE INDICATOR RANGE WHICH PROVIDES A REASONABLE ASSURANCE OF COMPLIANCE: | | Install, calibrate, maintain and operate a system to continuously monitor and record the average temperature across the RO. | |
| | | 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 <u>OBTAINING REPRESENTATIVE DATA</u> , SUCH AS DETECTOR LOCATION, INSTALLATION SPECIFICATIONS, AND MINIMUM ACCEPTABLE ACCURACY: ^c FOR NEW OR MODIFIED MONITORING EQUIPMENT, PROVIDE <u>VERIFICATION PROCEDURES</u> , INCLUDING MANUFACTURER'S RECOMMENDATIONS, TO CONFIRM THE OPERATIONAL STATUS OF THE MONITORING: PROVIDE <u>QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES</u> THAT ARE ADEQUATE TO ENSURE THE CONTINUING VALIDITY OF THE DATA, (i.e., DAILY CALIBRATIONS, VISUAL INSPECTIONS, ROUTINE MAINTENANCE, CGA, RATA, ETC.): ^d PROVIDE THE <u>MONITORING FREQUENCY</u> : PROVIDE THE <u>DATA COLLECTION PROCEDURES</u> THAT WILL BE USED: PROVIDE THE <u>DATA AVERAGING PERIOD</u> FOR THE PURPOSE OF DETERMINING WHETHER AN EXCURSION OR EXCEEDANCE HAS OCCURRED: | | 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. | |
| | | N/A | |
| | | Annual source tests. | |
| | | 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). | |
| | | The temperature is logged at least once every 15-minutes into a data acquisition system. | |
| | | An exceedance 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.

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^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

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9a) PSEU DESIGNATION:
MDF RO

9b) REGULATED AIR POLLUTANT:
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 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:

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: |
|--|----------------------|--|-----------------------------------|
| 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. | |
| ^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. | |
| 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. | |
| ^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.): | | Calibrate, maintain and operate instrumentation using procedures that take into account manufacturer's specifications. | |
| ^d PROVIDE THE MONITORING FREQUENCY: | | The differential pressure is monitored at least once per operating day. | |
| 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. | |
| PROVIDE THE DATA AVERAGING PERIOD FOR THE PURPOSE OF DETERMINING WHETHER AN EXCURSION OR EXCEEDANCE HAS OCCURRED: | | None | |

^aDESCRIBE 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.

^bINDICATOR 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 MONITOR.

^cTHE 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.

^dEMISSION 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:

MDF Dryer Baghouses

9b) REGULATED AIR POLLUTANT:

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: T 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 <u>MONITORING APPROACH</u> USED TO MEASURE THE INDICATORS: ^b ESTABLISH THE APPROPRIATE <u>INDICATOR RANGE</u> OR THE PROCEDURES FOR ESTABLISHING THE INDICATOR RANGE WHICH PROVIDES A REASONABLE ASSURANCE OF COMPLIANCE: | | Install, calibrate, maintain and operate a system to continuously monitor and record the average temperature across the RO. | |
| | | 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 <u>SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA</u> , SUCH AS DETECTOR LOCATION, INSTALLATION SPECIFICATIONS, AND MINIMUM ACCEPTABLE ACCURACY: ^c FOR NEW OR MODIFIED MONITORING EQUIPMENT, PROVIDE <u>VERIFICATION PROCEDURES</u> , INCLUDING MANUFACTURER'S RECOMMENDATIONS, TO CONFIRM THE <u>OPERATIONAL STATUS</u> OF THE MONITORING: PROVIDE <u>QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES</u> THAT ARE ADEQUATE TO ENSURE THE CONTINUING VALIDITY OF THE DATA, (i.e., DAILY CALIBRATIONS, VISUAL INSPECTIONS, ROUTINE MAINTENANCE, CGA, RATA, ETC.): ^d PROVIDE THE <u>MONITORING FREQUENCY</u> : PROVIDE THE <u>DATA COLLECTION PROCEDURES</u> THAT WILL BE USED: PROVIDE THE <u>DATA AVERAGING PERIOD</u> FOR THE PURPOSE OF DETERMINING WHETHER AN EXCURSION OR EXCEEDANCE HAS OCCURRED: | | 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. | |
| | | N/A | |
| | | Annual source tests. | |
| | | 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)). | |
| | | The temperature is logged at least once every 15-minutes into a data acquisition system. | |
| | | An exceedance occurs if the 3- hr block average temperature across the RO is less than the temperature established during the most recent successful source test. | |

^aDESCRIBE 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.

^bINDICATOR 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 MONITOR.

^cTHE 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.

^dEMISSION 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:
TMDR RO

9b) REGULATED AIR POLLUTANT:
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 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:

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: |
|---|----------------------|---|-----------------------------------|
| 8a) GENERAL CRITERIA DESCRIBE THE MONITORING APPROACH USED TO MEASURE THE INDICATORS: ^b ESTABLISH THE APPROPRIATE <u>INDICATOR RANGE</u> OR THE PROCEDURES FOR ESTABLISHING THE INDICATOR RANGE WHICH PROVIDES A REASONABLE ASSURANCE OF COMPLIANCE: | | Install, calibrate, maintain and operate monitoring device to record air stream pressure drop across the baghouse. | |
| | | Increase in pressure differential is an indicator of blinding or malfunction of cleaning cycle. | |
| 8b) PERFORMANCE CRITERIA PROVIDE THE SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA, SUCH AS DETECTOR LOCATION, INSTALLATION SPECIFICATIONS, AND MINIMUM ACCEPTABLE ACCURACY: ^c FOR NEW OR MODIFIED MONITORING EQUIPMENT, PROVIDE VERIFICATION PROCEDURES, INCLUDING MANUFACTURER'S RECOMMENDATIONS, TO CONFIRM THE OPERATIONAL STATUS OF THE MONITORING: 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.): ^d PROVIDE THE MONITORING FREQUENCY: PROVIDE THE DATA COLLECTION PROCEDURES THAT WILL BE USED: PROVIDE THE DATA AVERAGING PERIOD FOR THE PURPOSE OF DETERMINING WHETHER AN EXCURSION OR EXCEEDANCE HAS OCCURRED: | | The sensors are located across inlet and outlet compartments of the baghouse. | |
| | | N/A | |
| | | Calibrate, maintain and operate instrumentation using procedures that take into account manufacturer's specifications. | |
| | | The differential pressure is monitored at least once per operating day. | |
| | | The differential pressure (inches of water column) is logged at least once per operating day. Data is reviewed once per operating week. | |
| | | Daily – once every 24 hours. | |

^aDESCRIBE 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.

^bINDICATOR 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 MONITOR.

^cTHE 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.

^eEMISSION 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:
TMDf BH 758 A/B/C

9b) REGULATED AIR POLLUTANT:
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: TMDF BH 733 | 7b) POLLUTANT: PM | 7c) ^a INDICATOR NO. 1: Parameter Emissions Monitoring System – Pressure Differential | 7d) ^a INDICATOR NO. 2: |
|--|----------------------|---|-----------------------------------|
| 8a) GENERAL CRITERIA DESCRIBE THE <u>MONITORING APPROACH</u> USED TO MEASURE THE INDICATORS: ^b ESTABLISH THE APPROPRIATE <u>INDICATOR RANGE</u> OR THE PROCEDURES FOR ESTABLISHING THE INDICATOR RANGE WHICH PROVIDES A REASONABLE ASSURANCE OF COMPLIANCE: | | Install, calibrate, maintain and operate monitoring device to record air stream pressure drop across the baghouse. | |
| | | Increase in pressure differential is an indicator of blinding or malfunction of cleaning cycle. | |
| 8b) PERFORMANCE CRITERIA PROVIDE THE <u>SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA</u> , SUCH AS DETECTOR LOCATION, INSTALLATION SPECIFICATIONS, AND MINIMUM ACCEPTABLE ACCURACY: ^c FOR NEW OR MODIFIED MONITORING EQUIPMENT, PROVIDE <u>VERIFICATION PROCEDURES</u> , INCLUDING MANUFACTURER'S RECOMMENDATIONS, TO CONFIRM THE OPERATIONAL STATUS OF THE MONITORING: PROVIDE <u>QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES</u> THAT ARE ADEQUATE TO ENSURE THE CONTINUING VALIDITY OF THE DATA, (i.e., DAILY CALIBRATIONS, VISUAL INSPECTIONS, ROUTINE MAINTENANCE, CGA, RATA, ETC.): ^d PROVIDE THE <u>MONITORING FREQUENCY</u> : PROVIDE THE <u>DATA COLLECTION PROCEDURES</u> THAT WILL BE USED: PROVIDE THE <u>DATA AVERAGING PERIOD</u> FOR THE PURPOSE OF DETERMINING WHETHER AN EXCURSION OR EXCEEDANCE HAS OCCURRED: | | The sensors are located across inlet and outlet compartments of the baghouse. | |
| | | N/A | |
| | | Calibrate, maintain and operate instrumentation using procedures that take into account manufacturer's specifications. | |
| | | The differential pressure is monitored at least once per operating day. | |
| | | The differential pressure (inches of water column) is logged at least once per operating day. Data is reviewed once per operating week. | |
| | | Daily (once every 24 hrs) | |

^aDESCRIBE 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.

^bINDICATOR 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 MONITOR.

^cTHE 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.

^dEMISSION 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:
TMDf BH 733

9b) REGULATED AIR POLLUTANT:
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: TMDF BH 752 | 7b) POLLUTANT: PM | 7c) ^a INDICATOR NO. 1: Parameter Emissions Monitoring System – Pressure Differential | 7d) ^a INDICATOR NO. 2: |
|---|----------------------|---|-----------------------------------|
| 8a) GENERAL CRITERIA DESCRIBE THE <u>MONITORING APPROACH</u> USED TO MEASURE THE INDICATORS: | | Install, calibrate, maintain and operate monitoring device to record air stream pressure drop across the baghouse. | |
| ^b ESTABLISH THE APPROPRIATE <u>INDICATOR RANGE</u> 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. | |
| 8b) PERFORMANCE CRITERIA PROVIDE THE <u>SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA</u> , SUCH AS DETECTOR LOCATION, INSTALLATION SPECIFICATIONS, AND MINIMUM ACCEPTABLE ACCURACY: | | The sensors are located across inlet and outlet compartments of the baghouse. | |
| ^c FOR NEW OR MODIFIED MONITORING EQUIPMENT, PROVIDE <u>VERIFICATION PROCEDURES</u> , INCLUDING MANUFACTURER'S RECOMMENDATIONS, TO CONFIRM THE OPERATIONAL STATUS OF THE MONITORING: | | N/A | |
| PROVIDE <u>QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES</u> 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. | |
| ^d PROVIDE THE <u>MONITORING FREQUENCY</u> : | | The differential pressure is monitored at least once per operating day. | |
| PROVIDE THE <u>DATA COLLECTION PROCEDURES</u> 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. | |
| PROVIDE THE <u>DATA AVERAGING PERIOD</u> FOR THE PURPOSE OF DETERMINING WHETHER AN EXCURSION OR EXCEEDANCE HAS OCCURRED: | | Daily – once every 24 hours | |

^aDESCRIBE 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.

^bINDICATOR 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 MONITOR.

^cTHE 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.

^dEMISSION 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:
TMDf BH 752

9b) REGULATED AIR POLLUTANT:
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: TMDF BH 756 | 7b) POLLUTANT: PM | 7c) ^a INDICATOR NO. 1: Parameter Emissions Monitoring System – Pressure Differential. | 7d) ^a INDICATOR NO. 2: |
|--|----------------------|---|-----------------------------------|
| 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. | |
| ^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. | |
| 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. | |
| ^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.): | | Calibrate, maintain and operate instrumentation using procedures that take into account manufacturer's specifications. | |
| ^d PROVIDE THE MONITORING FREQUENCY: | | The differential pressure is monitored at once per operating day. | |
| 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. | |
| PROVIDE THE DATA AVERAGING PERIOD FOR THE PURPOSE OF DETERMINING WHETHER AN EXCURSION OR EXCEEDANCE HAS OCCURRED: | | Daily – once every 24 hours. | |

^aDESCRIBE ALL INDICATORS TO BE MONITORED WHICH SATISFIES 40 CFR 84.3(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.

^bINDICATOR 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 MONITOR.

^cTHE 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.

^dEMISSION 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:
TMDL BH 756

9b) REGULATED AIR POLLUTANT:
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: |
|--|----------------------|---|-----------------------------------|
| 8a) GENERAL CRITERIA DESCRIBE THE <u>MONITORING APPROACH</u> USED TO MEASURE THE INDICATORS: ^b ESTABLISH THE APPROPRIATE <u>INDICATOR RANGE</u> OR THE PROCEDURES FOR ESTABLISHING THE INDICATOR RANGE WHICH PROVIDES A REASONABLE ASSURANCE OF COMPLIANCE: | | Install, calibrate, maintain and operate monitoring device to record air stream pressure drop across the baghouse. | |
| | | Increase in pressure differential is an indicator of blinding or malfunction of cleaning cycle. | |
| 8b) PERFORMANCE CRITERIA PROVIDE THE <u>SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA</u> , SUCH AS DETECTOR LOCATION, INSTALLATION SPECIFICATIONS, AND MINIMUM ACCEPTABLE ACCURACY: ^c FOR NEW OR MODIFIED MONITORING EQUIPMENT, PROVIDE <u>VERIFICATION PROCEDURES</u> , INCLUDING MANUFACTURER'S RECOMMENDATIONS, TO CONFIRM THE OPERATIONAL STATUS OF THE MONITORING: PROVIDE <u>QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES</u> THAT ARE ADEQUATE TO ENSURE THE CONTINUING VALIDITY OF THE DATA, (i.e., DAILY CALIBRATIONS, VISUAL INSPECTIONS, ROUTINE MAINTENANCE, CGA, RATA, ETC.): ^d PROVIDE THE <u>MONITORING FREQUENCY</u> : PROVIDE THE <u>DATA COLLECTION PROCEDURES</u> THAT WILL BE USED: PROVIDE THE <u>DATA AVERAGING PERIOD</u> FOR THE PURPOSE OF DETERMINING WHETHER AN EXCURSION OR EXCEEDANCE HAS OCCURRED: | | The sensors are located across inlet and outlet compartments of the baghouse. | |
| | | N/A | |
| | | Calibrate, maintain and operate instrumentation using procedures that take into account manufacturer's specifications. | |
| | | The differential pressure is monitored at least once per operating day. | |
| | | The differential pressure (inches of water column) is logged at least once per operating day. Data is reviewed once per operating week. | |
| | | Daily – once every 24 hours | |

^aDESCRIBE 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.

^bINDICATOR 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 MONITOR.

^cTHE 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.

^dEMISSION 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:
Phase II baghouse

9b) REGULATED AIR POLLUTANT:
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.