

AIR QUALITY DIVISION
CHAPTER 6, SECTION 3
OPERATING PERMIT

WYOMING DEPARTMENT OF
ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
122 West 25th Street
Cheyenne, Wyoming 82002



PERMIT NO. 3-3-105

Issue Date: **June 22, 2015**
Expiration Date: **June 22, 2020**
Effective Date: **June 22, 2015**
Replaces Permit No.: **3-2-105**

In accordance with the provisions of W.S. §35-11-203 through W.S. §35-11-212 and Chapter 6, Section 3 of the Wyoming Air Quality Standards and Regulations,

Saratoga Forest Management
Saratoga Studmill
Section 12, Township 17 North, Range 84 West
Carbon County, Wyoming

is authorized to operate a stationary source of air contaminants consisting of emission units described in this permit. The units described are subject to the terms and conditions specified in this permit. All terms and conditions of the permit are enforceable by the State of Wyoming. All terms and conditions of the permit, except those designated as not federally enforceable, are enforceable by EPA and citizens under the Act. A copy of this permit shall be kept on-site at the above named facility.

Steven A. Dietrich, Administrator
Air Quality Division

6-22-15

Date

Todd Parfitt, Director
Department of Environmental Quality

6/24/15

Date

WAQSR CHAPTER 6, SECTION 3 OPERATING PERMIT

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

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SOURCE EMISSION POINTS

This table may not include any or all insignificant activities at this facility.

AQD ID	SOURCE ID#	SOURCE DESCRIPTION	SIZE	CH. 6, SEC. 2 PERMITS
BOL002	02	Wellons Wood Fired Boiler *	75 MMBtu/hr	MD-505
CKD001	04	Dry Kiln System (3 Kilns)	125 MM board feet/year	MD-505
CSH007	05	Bark Hog Fugitives	10.8 TPH	None
TNK001	06	Dry Fuel Bin Cyclone	0.75 TPH	None
TNK002	06a	Green Fuel Bin Vent (target box)	10.8 TPH	None
TNK003	07	Shavings Bin Cyclone	3 TPH	None
TNK004	08a	Chip Surge Bin Vent (target box)	30 TPH	None
LUD002	09	Chip Bin Truck Loadout (target box)	30 TPH	None
CSH004	10	Ash Handling Fugitives	5000 TPY	None
CSH006	11	#1 Debarker Fugitives	300 linear feet/minute	None
CSH005	12	Trim End Hog Fugitives	0.75 TPH	None
LUD001	13	Shavings Loadout Fugitives	15 TPH	None
CSH008	14	Chipper #1 Fugitives	30 TPH	None
CSH003	14b	Chip Screening Fugitives	30 TPH	None
CSH009	15	Log Sawing Fugitives	30,000 board feet/hour	None
FUG005	16	End Coating Fugitives	5 gal/hr	None
FUG006	17	Unpaved Roadway Fugitives	4,973 miles/yr	None
FUG007	18	Paved Roadway Fugitives	551 miles/yr	None
FUG008	21	Bark Storage Pile Fugitives	2 acres	None

* Particulate emissions controlled by multiclone and electrostatic precipitator (ESP)

TOTAL FACILITY ESTIMATED EMISSIONS

For informational purposes only. These emissions are not to be assumed as permit limits.

POLLUTANT	EMISSIONS (TPY)
CRITERIA POLLUTANT EMISSIONS	
Particulate Matter	117
PM ₁₀ Particulate Matter	73
PM _{2.5} Particulate Matter	71
Sulfur Dioxide (SO ₂)	8
Nitrogen Oxides (NO _x)	99
Carbon Monoxide (CO)	99
Volatile Organic Compounds (VOCs)	143
HAZARDOUS AIR POLLUTANT (HAP) EMISSIONS	21.2
GREENHOUSE GAS EMISSIONS (CO₂e)	21,129

Emission estimates are from the operating permit application. The highest single HAP is methanol at 7.6 TPY.

FACILITY-SPECIFIC PERMIT CONDITIONS

Source-Specific Permit Conditions

- (F1) **VISIBLE AND FUGITIVE EMISSIONS** [WAQSR Ch 3, Sec 2; Ch 6, Sec 2 Permit MD-505]
- (a) Visible emissions from the wood fired boiler (unit 02) shall not exceed 20 percent opacity, except for one six-minute period per hour of not more than 27 percent.
 - (b) Visible emissions of any contaminant discharged into the atmosphere from any other single emission source (including units 04, 06, 06a, 07, 08a and 09) shall not exhibit greater than 20 percent opacity except for one period or periods aggregating not more than six minutes in any one hour of not more than 40 percent opacity.
- (F2) **NO_x AND PARTICULATE EMISSIONS** [WAQSR Ch 3, Sec 2(g); Ch 6, Sec 2 Permit MD-505]
- (a) NO_x and particulate emissions from the wood fired boiler (unit 02) shall not exceed the limits specified in Table I.
 - (b) Particulate emissions from the cyclones (units 06 and 07) and target boxes (units 06a, 08a and 09) shall not exceed the limits specified in Table II.

Table I: NO_x and Particulate Emission Limits						
Source Description	NO _x			Particulate		
	lb/MMBtu	lb/hr	TPY	lb/MMBtu	lb/hr	TPY
Wellons Wood Fired Boiler (unit 02)	0.3	22.5	99	0.1	7.5	33

Table II: Particulate Emission Limits		
Source Description	Process Weight Maximum (tons/hour)	Emission Limit (lb/hr)
Dry Fuel Bin Cyclone (unit 06)	0.75	3.0
Green Fuel Bin Vent (target box) (unit 06a)	10.8	15.7
Shavings Bin Cyclone (unit 07)	3.0	7.1
Chip Surge Bin Vent (target box) (unit 08a)	30	29.6
Chip Bin Truck Loadout (target box) (unit 09)	30	29.6

- (F3) **OPERATING REQUIREMENTS** [WAQSR Ch 5, Sec 2(i)(iv); Ch 6, Sec 2 Permit MD-505]
- (a) Total dry kiln system (unit 04) throughput shall not exceed 125 million board feet per year.
 - (b) The permittee may dispose of hydrocarbon soaked sawdust from small spills in the wood fired boiler (unit 02).
 - (i) Only spill material generated at the Saratoga Studmill facility shall be disposed of in this manner.
 - (ii) Spills greater than 25 gallons liquid volume shall require Division approval prior to disposal.
 - (c) The permittee shall operate and maintain the wood fired boiler (unit 02), air pollution control equipment, and monitoring equipment according to manufacturer’s specifications and good air pollution control practices at all times, including startup, shutdown, and malfunction.

Testing and Monitoring Requirements

- (F4) **BOILER EMISSIONS TESTING** [WAQSR Ch 6, Sec 3(h)(i)(C)(I); 40 CFR 60 Subpart Dc]
- (a) The permittee shall measure particulate and NO_x emissions from the wood fired boiler (unit 02) at least once every five years, for comparison with the emission limits specified in condition F2.
 - (i) For particulate emissions, Methods 5, 5B or 17 and the requirements of 40 CFR 60 Subpart Dc shall be used. The permittee shall measure the CAM indicators during the tests.
 - (ii) For NO_x emissions, Methods 1-4 and 7 or 7E shall be used.

- (b) Testing shall be conducted in accordance with WAQSR Chapter 5, Section 2(h).
- (c) Notification of the test date shall be provided to the Division at least 15 days prior to testing. The notification may be provided electronically through the Division's IMPACT system (<https://airimpact.wyo.gov>), or in writing to the DEQ Air Quality Contact listed on page 3 of this permit.

(F5) **ADDITIONAL EMISSIONS TESTING [W.S. 35-11-110]**

- (a) The Division reserves the right to require additional testing as provided under condition G1 of this permit. The Division shall specify the necessary test method(s) and procedure(s) prior to the test, which may include the following test methods found at 40 CFR 60, Appendix A:
 - (i) For visible emissions, Method 9.
 - (ii) For particulate emissions from the wood fired boiler (unit 02), Methods 5, 5B or 17 and the requirements of 40 CFR 60 Subpart Dc.
 - (iii) For other particulate emission sources, Methods 1-4 and 5.
 - (iv) For NO_x emissions, Methods 1-4 and 7 or 7E.
 - (v) For alternative test methods, or methods used for other pollutants, the approval of the Administrator must be obtained prior to using the test method to measure emissions.
- (b) Unless otherwise specified, testing shall be conducted in accordance with WAQSR Ch 5, Sec 2(h).

(F6) **VISIBLE EMISSIONS MONITORING**

[WAQSR Ch 5, Sec 2(j); Ch 6, Sec 2 Permit MD-505; Ch 6, Sec 3(h)(i)(C)(I); 40 CFR 60 Subpart Dc]

- (a) For measuring the opacity of visible emissions from the wood fired boiler (unit 02):
 - (i) The permittee shall operate and maintain a continuous opacity monitoring system (COMS) in accordance with the requirements of WAQSR Ch 5, Sec 2(j) and 40 CFR 60 Subpart Dc §60.47c.
 - (ii) Except for system breakdown, repairs, calibration checks, and zero and span adjustments required under WAQSR Ch 5, Sec 2 (j)(iv), the COMS shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:
 - (A) All continuous monitoring systems referenced by WAQSR Ch 5, Sec 2(j)(iii)(A) and (B) for measuring opacity of emissions shall complete a minimum of one cycle of sampling and analyzing for each successive ten second period and one cycle of data recording for each successive six minute period.
 - (B) The COMS need not be operated when the emission source is not in operation and no pollutants are being emitted from the stack.
 - (iii) The permittee shall comply with the approved Quality Assurance/Quality Control (QA/QC) plan, attached as Appendix B of this permit, for the COMS. Revisions to the plan must first be approved by the Division and a WAQSR Ch 6, Sec 3 operating permit amendment issued prior to implementing the revised plan.
- (b) The permittee shall conduct, at a minimum, monthly visual observations of the dry kiln system (unit 04), cyclones (units 06 and 07), and target boxes (units 06a, 08a and 09) to determine if excessive visible emissions are present. Observations shall be conducted during active operation of each source.
 - (i) The visual observations shall be conducted by a person who is educated on the general procedures for determining the presence of visible emissions but not necessarily certified to perform Method 9 observations.
 - (ii) Observation of excessive visible emissions from any source listed above shall prompt immediate inspection and, if necessary, corrective actions.

(F7) **COMPLIANCE ASSURANCE MONITORING**

[WAQSR Ch 6, Sec 2 Permit MD-505; Ch 6, Sec 3(h)(i)(C)(I); Ch 7, Sec 3(c)(ii)]

For particulate emissions from the ESP controlled wood fired boiler (unit 02), the permittee shall adhere to the compliance assurance monitoring (CAM) plan, attached as Appendix A of this permit, and shall conduct monitoring as follows during active operation of the boiler:

- (a) The permittee shall monitor, on a continuous basis, the opacity of emissions from the ESP using the COMS required by condition F6(a).
 - (i) An excursion, which is considered to be an opacity measurement greater than the indicator ranges established in the approved CAM plan, shall prompt immediate inspection and, if appropriate, corrective action.

- (ii) The permittee shall follow all other applicable requirements under conditions CAM-1 through CAM-4 of this permit.
 - (b) The permittee shall perform testing for particulate emissions as required by condition F4, for comparison with the emission limits specified in condition F2, and to further refine the relationship between emissions and the indicator ranges in the CAM plan.
 - (i) The permittee shall measure the CAM indicators during the tests. Following each test, the permittee shall evaluate the data from the test, together with data from previous testing, to determine if the indicator ranges in the CAM plan should be revised.
- (F8) **ADDITIONAL MONITORING [WAQSR Ch 6, Sec 3(h)(i)(C)(I)]**
- (a) Periodic monitoring for NO_x emissions from the wood fired boiler (unit 02) shall consist of the testing specified in condition F4, and properly operating and maintaining the unit in accordance with condition F3(c) so that emission limits in condition F2 are not exceeded.
 - (b) The permittee shall monitor the dry kiln system (unit 04) throughput on a monthly basis, to ensure compliance with the annual limit specified in condition F3(a).
 - (c) The permittee shall monitor the dates and estimated quantities of liquid spill material burned in the wood fired boiler (unit 02), to ensure compliance with condition F3(b).

Recordkeeping Requirements

- (F9) **TESTING AND MONITORING RECORDS [WAQSR WAQSR Ch 5, Sec 2(g)(ii) and (g)(v); Ch 6, Sec 2 Permit MD-505; Ch 6, Sec 3(h)(i)(C)(II); Ch 7, Sec 3(i)(ii); 40 CFR 60 Subpart Dc]**
- (a) For any testing or monitoring performed under conditions F4, F5 and F6(b), other than Method 9 observations, the permittee shall record, as applicable, the following:
 - (i) The date, place, and time of sampling, measurements, or observations;
 - (ii) The date(s) analyses were performed, as applicable;
 - (iii) The company or entity that performed the analyses or observations;
 - (iv) The analytical techniques or methods used;
 - (v) The results of such analyses or observations;
 - (vi) The operating conditions and parameters as they existed at the time of testing, monitoring, or observation; and
 - (vii) Any corrective actions taken upon observing excessive visible emissions from the dry kiln system (unit 04), cyclones (units 06 and 07), and target boxes (units 06a, 08a and 09), or detecting noncompliance with opacity limitations specified in condition F1(b).
 - (b) For any Method 9 observations required by the Division under condition F5, the permittee shall keep field records in accordance with Section 2.2 of Method 9.
 - (c) For the wood fired boiler (unit 02), additional recordkeeping requirements for the continuous opacity monitoring required under condition F6(a) are described in WAQSR Ch 5, Sec 2(g) and 40 CFR 60 Subpart Dc and include, but are not limited to:
 - (i) Maintaining records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the boiler; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
 - (ii) Maintaining records of all measurements, reports, and other information required by 40 CFR 60 Subpart Dc recorded in a permanent form suitable for inspection.
 - (iii) Maintaining records of data, calculations, and assumptions used to determine opacity of the emissions discharged to the atmosphere.
 - (d) For the compliance assurance monitoring required under condition F7 the permittee shall:
 - (i) Record the the opacity of visible emissions from the ESP controlled wood fired boiler (unit 02) as measured during the testing required by condition F4, and the evaluation of CAM indicator ranges.
 - (ii) Record the date, time, and duration of any excursions as well as the CAM indicator value(s) during each excursion.
 - (iii) Maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to WAQSR Ch 7, Sec 3(h), any activities undertaken to implement a Quality Improvement Plan (QIP), and other supporting information required to be maintained under WAQSR Ch 7, Sec 3.

- (e) For the monitoring required under condition F8(b) the permittee shall record the dry kiln system (unit 04) throughput on a monthly basis.
 - (f) For the monitoring required under condition F8(c) the permittee shall record the dates and estimated quantities of liquid spill material burned.
 - (g) The permittee shall retain these records on-site at the facility for a period of at least five years from the date the records are generated.
- (F10) MAINTENANCE RECORDS [WAQSR Ch 6, Sec 3(h)(i)(C)(II)]
- (a) The permittee shall maintain records of maintenance activities for the wood fired boiler (unit 02), which shall include:
 - (i) The maintenance activity performed;
 - (ii) The date and place the activity was performed;
 - (iii) The company and individual(s) that performed the activity;
 - (iv) The purpose of the activity; and
 - (v) An explanation for any deviation from the manufacturer's specifications or good maintenance practice for the boiler.
 - (b) The permittee shall retain these records on-site at the facility for a period of at least five years from the date the records are generated.

Reporting Requirements

- (F11) TEST REPORTS [WAQSR Ch 6, Sec 3(h)(i)(C)(III)]
- (a) The permittee shall report the results of any emissions tests performed under conditions F4 and F5, within 45 days of completing the tests. The reports shall include the information indicated in condition F9(a)-(b).
 - (i) The reports shall also include the evaluation of the CAM indicator ranges as required by condition F7(b). If the evaluation indicates the CAM range(s) need to be revised, the permittee shall submit a revised CAM plan to the Division, along with a request to administratively amend this permit, within 60 days of completing the test.
 - (b) The reports shall reference this permit condition (F11) and be submitted to the Division in accordance with condition G4.
- (F12) MONITORING REPORTS [WAQSR Ch 6, Sec 3(h)(i)(C)(III)]
- (a) The following shall be reported to the Division for each semiannual reporting period from January 1 through June 30, and from July 1 through December 31, within 31 days of the end of each period (by July 31 and January 31, respectively, each year):
 - (i) Summary results of the visible emissions monitoring of the dry kiln system (unit 04), cyclones (units 06 and 07), and target boxes (units 06a, 08a and 09) required by condition F6(b). Monitoring during which visible emissions are observed shall be included in the report with a brief description of any corrective actions taken upon observing excessive visible emissions. If no visible emissions are observed during the reporting period, this shall be stated in the report.
 - (ii) Summary results of the compliance assurance monitoring required under condition F7. The results shall include the following, as applicable:
 - (A) Information on the number, duration, and cause of excursions, as applicable, and the corrective actions taken (if no excursions occurred during the reporting period, this shall be stated in the report);
 - (B) Summary information on the number, duration, and cause of monitor downtime incidents; and
 - (C) A description of the action taken to implement a QIP (if required) during the reporting period as specified in Ch 7, Sec 3 (h). Upon completion of a QIP, the permittee shall include in the next summary report documentation that the implementation of the plan has reduced the likelihood of similar excursions.
 - (iii) Calendar year-to-date actual board foot throughput for the dry kiln system (unit 04).
 - (b) Additional reporting requirements for the wood fired boiler (unit 02) continuous opacity monitoring required under condition F6(a) are described in 40 CFR 60 Subpart Dc.
 - (c) All instances of deviations from the conditions of this permit must be clearly identified in each report.

- (d) The reports shall reference this permit condition (F12), and be submitted to the Division in accordance with condition G4.

(F13) **BOILER EXCESS EMISSIONS & MONITORING SYSTEM PERFORMANCE REPORTS**

[WAQSR Ch 5, Sec 2(g)(iii); Ch 6, Sec 2 Permit MD-505; Ch 6, Sec 3(h)(i)(C)(III); 40 CFR 60 Subpart Dc]

- (a) For the wood fired boiler (unit 02), the permittee shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in paragraph (b) of this condition) and/or a summary report form (see paragraph (a)(v) of this condition) to the Administrator quarterly. All reports shall be postmarked, or submitted via the Division's IMPACT system, by the 30th day following the end of each calendar quarter. Written reports of excess emissions shall include the following information:
 - (i) The magnitude of excess emissions computed in accordance with WAQSR Chapter 5, Section 2(j)(viii), any conversion factor(s) used, the date and time of commencement and completion of each time period of excess emissions, and the process operating time during the reporting period.
 - (ii) Specific identification of each period of excess emissions that occurs during start ups, shutdowns or malfunctions of the boiler, the nature and cause of any malfunction (if known), and the corrective action taken or preventative measures adopted.
 - (iii) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
 - (iv) When no excess emissions have occurred or the continuous monitoring system(s) has been inoperative, repaired, or adjusted, such information shall be stated in the report.
 - (v) One summary report form for each pollutant monitored at each affected facility in a format approved by the Division.
 - (A) If the total duration of excess emissions for the reporting period is less than one percent of the total operating time for the reporting period and continuous monitoring system downtime for the reporting period is less than five percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in paragraph (a) of this condition need not be submitted unless requested by the Administrator.
 - (B) If the total duration of excess emissions for the reporting period is one percent or greater of the total operating time for the reporting period or the total continuous monitoring system downtime for the reporting period is five percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in paragraph (a) of this condition shall both be submitted.
- (b) For the purpose of reporting under this condition, excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 20 percent except that one six-minute period per hour of not more than 27 percent opacity need not be reported.
- (c) The reports shall reference this permit condition (F13) and be submitted to the Division in accordance with condition G4.

(F14) **GREENHOUSE GAS REPORTS [W.S. 35-11-110]**

The permittee shall submit to the Division a summary of any report(s) required to be submitted to the EPA under 40 CFR Part 98.

- (a) The reports shall be submitted to the Division within 60 days of submission to EPA, in a format as specified by the Division.
- (b) The reports shall be submitted in accordance with condition G4(a) of this permit, to the attention of the Division's Emission Inventory Program. A copy need not be sent to the DEQ Air Quality contact.

(F15) **REPORTING EXCESS EMISSIONS & DEVIATIONS FROM PERMIT REQUIREMENTS**

[WAQSR Ch 6, Sec 3(h)(i)(C)(III)]

- (a) General reporting requirements are described under the General Conditions of this permit. The Division reserves the right to require reports as provided under condition G1 of this permit.
- (b) Emissions which exceed the limits specified in this permit and which are not reported under a different condition of this permit shall be reported annually with the emission inventory unless specifically superseded by condition G17, condition G19, or other condition(s) of this permit. The probable cause of such exceedance, the duration of the exceedance, the magnitude of the exceedance, and any corrective

actions or preventative measures taken shall be included in this annual report. For sources and pollutants which are not continuously monitored, if at any time emissions exceed the limits specified in this permit by 100 percent, or if a single episode of emission limit exceedance spans a period of 24 hours or more, such exceedance shall be reported to the Division within one working day of the exceedance. (Excess emissions due to an emergency shall be reported as specified in condition G17. Excess emissions due to unavoidable equipment malfunction shall be reported as specified in condition G19.)

- (c) Any other deviation from the conditions of this permit shall be reported to the Division in writing within 30 days of the deviation or discovery of the deviation.

WAQSR CHAPTER 5, SECTION 2 NEW SOURCE PERFORMANCE STANDARDS (NSPS) AND
40 CFR 60 SUBPART Dc REQUIREMENTS FOR
SMALL INDUSTRIAL-COMMERCIAL-INSTITUTIONAL STEAM GENERATING UNITS

SUBPART Dc REQUIREMENTS

[40 CFR 60 Subparts A and Dc; WAQSR Ch 5, Sec 2 and Ch 6, Sec 2 Permit MD-505]

The permittee shall meet all applicable requirements of 40 CFR 60 Subparts A and Dc and WAQSR Ch 5, Sec 2, as they apply to each steam generating unit as defined under §60.40c, including the wood fired boiler (unit 02).

The subparts are available at <http://www.gpoaccess.gov/cfr/retrieve.html>, or from the Division upon request.

WAQSR CHAPTER 7, SECTION 3
COMPLIANCE ASSURANCE MONITORING (CAM) REQUIREMENTS

WAQSR Ch 7, Sec 3 is available at <http://deq.state.wy.us/aqd/standards.asp>, or from the Division upon request.

- (CAM-1) COMPLIANCE ASSURANCE MONITORING REQUIREMENTS [WAQSR Ch 7, Sec 3(b) and (c)]
The permittee shall follow the CAM plan attached as Appendix A of this permit and meet all CAM requirements of WAQSR Ch 7, Sec 3 as they apply to the wood fired boiler (unit 02). Compliance with the source specific monitoring, recordkeeping, and reporting requirements of this permit meets the monitoring, recordkeeping, and reporting requirements of WAQSR Ch 7, Sec 3, except for additional requirements specified under conditions CAM-2 through CAM-4.
- (CAM-2) OPERATION OF APPROVED MONITORING [WAQSR Ch 7, Sec 3(g)]
- (a) At all times, the permittee shall maintain the monitoring under this section, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
 - (b) Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities, the permittee shall conduct all monitoring in continuous operation (or at all required intervals) at all times that the pollutant specific emissions unit is operating.
 - (c) Upon detecting an excursion, the permittee shall restore operation of the pollutant-specific emission unit to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices. The response shall include minimizing the period of any start-up, shutdown or malfunction and taking any corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion.
 - (d) If the permittee identifies a failure to achieve compliance with an emission limit for which the monitoring did not provide an indication of an excursion while providing valid data, or the results of compliance or performance testing documents a need to modify the existing indicator ranges, the permittee shall promptly notify the Division and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes.
- (CAM-3) QUALITY IMPROVEMENT PLAN (QIP) REQUIREMENTS [WAQSR Ch 7, Sec 3(h)]
- (a) If the Division or the EPA Administrator determines, based on available information, that the permittee has used unacceptable procedures in response to an excursion or exceedance, the permittee may be required to develop and implement a Quality Improvement Plan (QIP).
 - (b) If required, the permittee shall maintain a written Quality Improvement Plan (QIP) and have it available for inspection.
 - (c) The plan shall include procedures for conducting one or more of the following:
 - (i) Improved preventative maintenance practices.
 - (ii) Process operation changes.
 - (iii) Appropriate improvements to control methods.
 - (iv) Other steps appropriate to correct control.
 - (v) More frequent or improved monitoring (in conjunction with (i) - (iv) above).
 - (d) If a QIP is required, the permittee shall develop and implement a QIP as expeditiously as practicable and shall notify the Division if the period for completing the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.
 - (e) Following implementation of a QIP, upon any subsequent determination under paragraph (a) above, the Division may require the permittee to make reasonable changes to the QIP if the QIP failed to address the cause of control device problems, or failed to provide adequate procedures for correcting control device problems as expeditiously as practicable.
 - (f) Implementation of a QIP shall not excuse the permittee from compliance with any existing emission limit(s) or any existing monitoring, testing, reporting, or recordkeeping requirements that may be applicable to the facility.
- (CAM-4) SAVINGS PROVISIONS [WAQSR Ch 7, Sec 3(j)]
Nothing in the CAM regulations shall excuse the permittee from compliance with any existing emission limit or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may be applicable to the facility.

COMPLIANCE CERTIFICATION AND SCHEDULE

Compliance Certification [WAQSR Ch 6, Sec 3(h)(iii)(E)]

- (C1) (a) The permittee shall submit by January 31 each year a certification addressing compliance with the requirements of this permit. The certification shall be submitted as a stand-alone document separate from any monitoring reports required under this permit.
- (b) (i) For visible emissions from the wood fired boiler (unit 02) the permittee shall assess compliance with condition F1(a) by conducting monitoring required by condition F6(a).
- (ii) For visible emissions from the dry kiln system (unit 04), cyclones (units 06 and 07), and target boxes (units 06a, 08a and 09) the permittee shall assess compliance with condition F1(b) by conducting monitoring required by condition F6(b).
- (iii) For NO_x emissions from the wood fired boiler (unit 02), the permittee shall assess compliance with condition F2(a) by conducting testing and maintenance required by conditions F4 and F8(a), and reviewing maintenance records kept in accordance with condition F10.
- (iv) For particulate emissions from the wood fired boiler (unit 02), the permittee shall assess compliance with condition F2(a) by conducting the testing required by condition F4 and CAM required by condition F7.
- (v) For particulate emissions from the cyclones (units 06 and 07) and target boxes (units 06a, 08a and 09) the permittee shall assess compliance with condition F2(b) by conducting monitoring required by condition F6(b).
- (vi) For the dry kiln system (unit 04) throughput limit, the permittee shall assess compliance with condition F3(a) by conducting monitoring required by condition F8(b).
- (vii) For hydrocarbon spill sawdust waste disposal, the permittee shall assess compliance with condition F3(b) by conducting monitoring required by condition F8(c).
- (viii) For the wood fired boiler (unit 02) operation and maintenance requirements, the permittee shall assess compliance with condition F3(c) by reviewing records kept in accordance with condition F10.
- (ix) For greenhouse gas reporting, the permittee shall assess compliance with condition F14 by verifying that reports were submitted in accordance with condition F14(a) and (b).
- (x) For the wood fired boiler (unit 02) subject to 40 CFR 60 Subpart Dc, the permittee shall assess compliance with Subpart Dc by conducting any applicable testing and monitoring required by §§60.44c through 60.47c, and reviewing records required by §60.48c(g).
- (c) The compliance certification shall include:
- (i) The permit condition or applicable requirement that is the basis of the certification;
- (ii) The current compliance status;
- (iii) Whether compliance was continuous or intermittent; and
- (iv) The methods used for determining compliance.
- (d) For any permit conditions or applicable requirements for which the source is not in compliance, the permittee shall submit with the compliance certification a proposed compliance plan and schedule for Division approval.
- (e) The compliance certification shall be submitted to the Division in accordance with condition G4 of this permit and to the Assistant Regional Administrator, Office of Enforcement, Compliance, and Environmental Justice (8ENF-T), U.S. EPA - Region VIII, 1595 Wynkoop Street, Denver, CO 80202-1129.
- (f) Determinations of compliance or violations of this permit are not restricted to the monitoring requirements listed in paragraph (b) of this condition; other credible evidence may be used.

Compliance Schedule [WAQSR Ch 6, Sec 3(h)(iii)(C) and (D)]

- (C2) The permittee shall continue to comply with the applicable requirements with which the permittee has certified that it is already in compliance.
- (C3) The permittee shall comply in a timely manner with applicable requirements that become effective during the term of this permit.

GENERAL PERMIT CONDITIONS

Powers of the Administrator: [W.S. 35-11-110]

- (G1) (a) The Administrator may require the owner or operator of any point source to complete plans and specifications for any application for a permit required by the Wyoming Environmental Quality Act or regulations made pursuant thereto and require the submission of such reports regarding actual or potential violations of the Wyoming Environmental Quality Act or regulations thereunder.
- (b) The Administrator may require the owner or operator of any point source to establish and maintain records; make reports; install, use and maintain monitoring equipment or methods; sample emissions, or provide such other information as may be reasonably required and specified.

Permit Renewal and Expiration: [WAQSR Ch 6, Sec 3(c)(i)(C), (d)(ii), (d)(iv)(B), and (h)(i)(B)] [W.S. 35-11-206(f)]

- (G2) This permit is issued for a fixed term of five years. Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application is submitted at least six months prior to the date of permit expiration. If the permittee submits a timely and complete application for renewal, the permittee's failure to have an operating permit is not a violation of WAQSR Chapter 6, Section 3 until the Division takes final action on the renewal application. This protection shall cease to apply after a completeness determination if the applicant fails to submit by the deadline specified in writing by the Division any additional information identified as being needed to process the application.

Duty to Supplement: [WAQSR Ch 6, Sec 3(c)(iii)]

- (G3) The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information. The permittee shall also provide additional information as necessary to address any requirements that become applicable to the facility after this permit is issued.

Submissions: [WAQSR Ch 6, Sec 3(c)(iv)] [W.S. 35-11-206(c)]

- (G4) Any application form, report, or certification submitted shall be certified as being true, accurate, and complete by a responsible official.
- (a) Submissions to the Division including reports, certifications, and emission inventories required under this permit shall be submitted either:
- (i) Electronically through the Division's IMPACT system (<https://airimpact.wyo.gov>); or
 - (ii) As separate, stand-alone documents sent to:
 - (A) Administrator, Air Quality Division
122 West 25th Street
Cheyenne, Wyoming 82002
 - (B) Unless otherwise noted elsewhere in this permit, a copy of each submission shall also be sent to the DEQ Air Quality Contact listed on page 3 of this permit.
- (b) Submissions to EPA.
- (i) Each certification required under condition C1 of this permit shall also be sent to:
Assistant Regional Administrator
Office of Enforcement, Compliance, and Environmental Justice (8ENF-T)
U.S. EPA - Region VIII
1595 Wynkoop Street
Denver, CO 80202-1129.
 - (ii) All other required submissions to EPA shall be sent to:
Office of Partnerships and Regulatory Assistance
Air and Radiation Program (8P-AR)
U.S. EPA - Region VIII
1595 Wynkoop Street
Denver, CO 80202-1129

Changes for Which No Permit Revision Is Required: [WAQSR Ch 6, Sec 3(d)(iii)]

- (G5) The permittee may change operations without a permit revision provided that:
- (a) The change is not a modification under any provision of title I of the Clean Air Act;
 - (b) The change has met the requirements of Chapter 6, Section 2 of the WAQSR and is not a modification under Chapter 5, Section 2 or Chapter 6, Section 4 of the WAQSR and the changes do not exceed the emissions allowed under the permit (whether expressed therein as a rate of emissions or in terms of total emissions); and
 - (c) The permittee provides EPA and the Division with written notification, in accordance with condition G4 of this permit, at least 14 days in advance of the proposed change. The permittee, EPA, and the Division shall attach such notice to their copy of the relevant permit. For each such change, the written notification required shall include a brief description of the change within the permitted facility, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change. The permit shield, if one exists for this permit, shall not apply to any such change made.

Transfer of Ownership or Operation: [WAQSR Ch 6, Sec 3(d)(v)(A)(IV)]

- (G6) A change in ownership or operational control of this facility is treated as an administrative permit amendment if no other change in this permit is necessary and provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the Division.

Reopening for Cause: [WAQSR Ch 6, Sec 3(d)(vii)] [W.S. 35-11-206(f)(ii) and (iv)]

- (G7) The Division will reopen and revise this permit as necessary to remedy deficiencies in the following circumstances:
- (a) Additional applicable requirements under the Clean Air Act or the WAQSR that become applicable to this source if the remaining permit term is three or more years. Such reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended.
 - (b) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the permit.
 - (c) The Division or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - (d) The Division or EPA determines that the permit must be revised or revoked to assure compliance with applicable requirements.

Annual Fee Payment: [WAQSR Ch 6, Sec 3(f)(i), (ii), and (vi)] [W.S. 35-11-211]

- (G8) The permittee shall, as a condition of continued operations, submit an annual fee to the Division as established in Chapter 6, Section 3 (f) of the WAQSR. The Division shall give written notice of the amount of fee to be assessed and the basis for such fee assessment annually. The assessed fee is due on receipt of the notice unless the fee assessment is appealed pursuant to W.S. 35-11-211(d). If any part of the fee assessment is not appealed it shall be paid to the Division on receipt of the written notice. Any remaining fee which may be due after completion of the appeal is immediately due and payable upon issuance of the Council's decision. Failure to pay fees owed the Division is a violation of Chapter 6, Section 3 (f) and W.S. 35-11-203 and may be cause for the revocation of this permit.

Annual Emissions Inventories: [WAQSR Ch 6, Sec 3(f)(v)(G)]

- (G9) The permittee shall submit an annual emission inventory for this facility to the Division for fee assessment and compliance determinations within 60 days following the end of the calendar year. The emissions inventory shall be in a format specified by the Division and be submitted in accordance with condition G4(a) of this permit.

Severability Clause: [WAQSR Ch 6, Sec 3(h)(i)(E)]

(G10) The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

Compliance: [WAQSR Ch 6, Sec 3(h)(i)(F)(I) and (II)] [W.S. 35-11-203(b)]

(G11) The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Air Act, Article 2 of the Wyoming Environmental Quality Act, and the WAQSR and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

Permit Actions: [WAQSR Ch 6, Sec 3(h)(i)(F)(III)] [W.S. 35-11-206(f)]

(G12) This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Property Rights: [WAQSR Ch 6, Sec 3(h)(i)(F)(IV)]

(G13) This permit does not convey any property rights of any sort, or any exclusive privilege.

Duty to Provide Information: [WAQSR Ch 6, Sec 3(h)(i)(F)(V)]

(G14) The permittee shall furnish to the Division, within a reasonable time, any information that the Division may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Division copies of records required to be kept by the permit, including information claimed and shown to be confidential under W.S. 35-11-1101 (a) of the Wyoming Environmental Quality Act. Upon request by the Division, the permittee shall also furnish confidential information directly to EPA along with a claim of confidentiality.

Emissions Trading: [WAQSR Ch 6, Sec 3(h)(i)(H)]

(G15) No permit revision is 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.

Inspection and Entry: [WAQSR Ch 6, Sec 3(h)(iii)(B)] [W.S. 35-11-206(c)]

(G16) Authorized representatives of the Division, upon presentation of credentials and other documents as may be required by law, shall be given permission to:

- (a) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) have access to and copy at reasonable times any records that must be kept under the conditions of this permit;
- (c) inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) sample or monitor any substances or parameters at any location, during operating hours, for the purpose of assuring compliance with this permit or applicable requirements.

Excess Emissions Due to an Emergency: [WAQSR Ch 6, Sec 3(l)]

(G17) The permittee may seek to establish that noncompliance with a technology-based emission limitation under this permit was due to an emergency, as defined in Ch 6, Sec 3(l)(i) of the WAQSR. To do so, the permittee shall demonstrate the affirmative defense of emergency through properly signed, contemporaneous operating logs, or other relevant evidence that:

- (a) an emergency occurred and that the permittee can identify the cause(s) of the emergency;
- (b) the permitted facility was, at the time, being properly operated;
- (c) during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards, or other requirements in this permit;

- (d) The permittee submitted notice of the emergency to the Division within one working day of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

Diluting and Concealing Emissions: [WAQSR Ch 1, Sec 4]

- (G18) No person shall cause or permit the installation or use of any device, contrivance, or operational schedule which, without resulting in reduction of the total amount of air contaminant released to the atmosphere, shall dilute or conceal an emission from a source. This condition shall not apply to the control of odors.

Unavoidable Equipment Malfunction: [WAQSR Ch 1, Sec 5]

- (G19) (a) Any source believing that any emissions in excess of established regulation limits or standards resulted from an unavoidable equipment malfunction, shall notify the Division within 24 hours of the incident via telephone, electronic mail, fax, or other similar method. A detailed description of the circumstances of the incident as described in paragraph 5(a)(i)(A) Chapter 1, including a corrective program directed at preventing future such incidents, must be submitted within 14 days of the onset of the incident. The Administrator may extend this 14-day time period for cause.
- (b) The burden of proof is on the owner or operator of the source to provide sufficient information to demonstrate that an unavoidable equipment malfunction occurred.

Fugitive Dust: [WAQSR Ch 3, Sec 2(f)]

- (G20) The permittee shall minimize fugitive dust in compliance with standards in Ch 3, Sec 2(f) of WAQSR for construction/demolition activities, handling and transportation of materials, and agricultural practices.

Carbon Monoxide: [WAQSR Ch 3, Sec 5]

- (G21) The emission of carbon monoxide in stack gases from any stationary source shall be limited as may be necessary to prevent ambient standards from being exceeded.

Asbestos: [WAQSR Ch 3, Sec 8]

- (G22) The permittee shall comply with emission standards for asbestos during abatement, demolition, renovation, manufacturing, spraying and fabricating activities.
 - (a) No owner or operator shall build, erect, install, or use any article, machine, equipment, process, or method, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous dilutants to achieve compliance with a visible emissions standard, and the piecemeal carrying out of an operation to avoid coverage by a standard that applies only to operations larger than a specified size.
 - (b) All owners and operators conducting an asbestos abatement project, including an abatement project on a residential building, shall be responsible for complying with Federal requirements and State standards for packaging, transportation, and delivery to an approved waste disposal facility as provided in paragraph (m) of Ch 3, Sec 8.
 - (c) The permittee shall follow State and Federal standards for any demolition and renovation activities conducted at this facility, including:
 - (i) A thorough inspection of the affected facility or part of the facility where the demolition or renovation activity will occur shall be conducted to determine the presence of asbestos, including Category I and Category II non-friable asbestos containing material. The results of the inspection will determine which notification and asbestos abatement procedures are applicable to the activity.
 - (ii) The owner or operator shall follow the appropriate notification requirements of Ch 3, Sec 8(i)(ii).
 - (iii) The owner or operator shall follow the appropriate procedures for asbestos emissions control, as specified in Chapter 3, Section 8(i)(iii).
 - (d) No owner or operator of a facility may install or reinstall on a facility component any insulating materials that contain commercial asbestos if the materials are either molded and friable or wet-applied and friable after drying. The provisions of this paragraph do not apply to spray-applied insulating materials regulated under paragraph (j) of Ch 3, Sec 8.
 - (e) The permittee shall comply with all other requirements of WAQSR Ch 3, Sec 8.

Open Burning Restrictions: [WAQSR Ch 10, Sec 2]

- (G23) The permittee conducting an open burn shall comply with all rules and regulations of the Wyoming Department of Environmental Quality, Division of Air Quality, and with the Wyoming Environmental Quality Act.
- (a) No person shall burn prohibited materials using an open burning method, except as may be authorized by permit. ***“Prohibited materials”*** means substances including, but not limited to; natural or synthetic rubber products, including tires; waste petroleum products, such as oil or used oil filters; insulated wire; plastic products, including polyvinyl chloride (“PVC”) pipe, tubing and connectors; tar, asphalt, asphalt shingles, or tar paper; railroad ties; wood, wood waste, or lumber that is painted or chemically treated; explosives or ammunition; batteries; hazardous waste products; asbestos or asbestos containing materials; or materials which cause dense smoke discharges, excluding refuse and flaring associated with oil and gas well testing, completions and well workovers.
- (b) No person or organization shall conduct or cause or permit open burning for the disposal of trade wastes, for a salvage operation, for the destruction of fire hazards if so designated by a jurisdictional fire authority, or for firefighting training, except when it can be shown by a person or organization that such open burning is absolutely necessary and in the public interest. Any person or organization intending to engage in such open burning shall file a request to do so with the Division.

Sulfur Dioxide Emission Trading and Inventory Program [WAQSR Ch 14]

- (G24) Any BART (Best Available Retrofit Technology) eligible facility, or facility which has actual emissions of SO₂ greater than 100 tpy in calendar year 2000 or any subsequent year, shall comply with the applicable requirements of WAQSR Ch 14, Sections 1 through 3, with the exceptions described in sections 2(c) and 3(a).

Stratospheric Ozone Protection Requirements: [40 CFR Part 82]

- (G25) The permittee shall comply with all applicable Stratospheric Ozone Protection Requirements, including but not limited to:
- (a) *Standards for Appliances* [40 CFR Part 82, Subpart F]
The permittee shall comply with the standards for recycling and emission reduction pursuant to 40 CFR Part 82, Subpart F - Recycling and Emissions Reduction, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:
- (i) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
 - (ii) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
 - (iii) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
 - (iv) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record keeping requirements pursuant to §82.166. (“MVAC-like appliance” is defined at §82.152).
 - (v) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.166.
 - (vi) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
 - (vii) The permittee shall comply with all other requirements of Subpart F.
- (b) *Standards for Motor Vehicle Air Conditioners* [40 CFR Part 82, Subpart B]
If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term “motor vehicle” as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term “MVAC” as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or the system used on passenger buses using HCFC-22 refrigerant.

STATE ONLY PERMIT CONDITIONS

The conditions listed in this section are State only requirements and are not federally enforceable.

Ambient Standards

(S1) The permittee shall operate the emission units described in this permit such that the following ambient standards are not exceeded:

POLLUTANT	STANDARD*	CONDITION	WAQSR CH. 2, SEC.
PM ₁₀ particulate matter	50 micrograms per cubic meter	annual arithmetic mean	2 (a)
	150 micrograms per cubic meter	24-hr average concentration with not more than one exceedance per year	
PM _{2.5} particulate matter	15 micrograms per cubic meter	annual arithmetic mean	2 (b)
	35 micrograms per cubic meter	98 th percentile 24-hr average concentration	
Nitrogen dioxide	53 parts per billion	annual average concentration	3
	100 parts per billion	three-year average of the annual 98 th percentile of the daily maximum 1-hr average concentration	
	0.053 parts per million	annual arithmetic mean	
Sulfur dioxide	75 parts per billion	three-year average of the annual (99 th percentile) of the daily max 1-hr average	4
	0.5 parts per million	3-hr blocks not to be exceeded more than once per calendar year	
Carbon monoxide	10 milligrams per cubic meter	max 8-hr concentration with not more than one exceedance per year	5
	40 milligrams per cubic meter	max 1-hr concentration with not more than one exceedance per year	
Ozone	0.075 parts per million	three-year average of the annual fourth-highest daily maximum 8-hr average concentration	6
Hydrogen sulfide	70 micrograms per cubic meter	½ hour average not to be exceeded more than two times per year	7
	40 micrograms per cubic meter	½ hour average not to be exceeded more than two times in any five consecutive days	
Suspended sulfate	0.25 milligrams SO ₃ per 100 square centimeters per day	maximum annual average	8
	0.50 milligrams SO ₃ per 100 square centimeters per day	maximum 30-day value	
Lead and its compounds	0.15 micrograms per cubic meter	maximum arithmetic 3-month mean concentration for a 3-year period	10

*Exceedances of these standards shall be determined using the procedures in 40 CFR 50.

Hydrogen Sulfide: [WAQSR Ch 3, Sec 7]

- (S2) Any exit process gas stream containing hydrogen sulfide which is discharged to the atmosphere from any source shall be vented, incinerated, flared or otherwise disposed of in such a manner that ambient sulfur dioxide and hydrogen sulfide standards are not exceeded.

Odors: [WAQSR Ch 2, Sec 11]

- (S3) (a) The ambient air standard for odors from any source shall be limited to an odor emission at the property line which is undetectable at seven dilutions with odor free air as determined by a scentometer as manufactured by the Barnebey-Cheney Company or any other instrument, device, or technique designated by the Division as producing equivalent results. The occurrence of odors shall be measured so that at least two measurements can be made within a period of one hour, these determinations being separated by at least 15 minutes.
- (b) Odor producing materials shall be stored, transported, and handled in a manner that odors produced from such materials are confined and that accumulation of such materials resulting from spillage or other escape is prevented.

SUMMARY OF SOURCE EMISSION LIMITS AND REQUIREMENTS

Source ID#: **02** Source Description: **Wellons Wood Fired Boiler**

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	20 percent opacity [F1] 0.1 lb/MMBtu, 7.5 lb/hr and 33 TPY [F2]	WAQSR Ch 3, Sec 2; Ch 6, Sec 2 Permit MD-505 and 40 CFR 60 Subpart Dc	Test every five years [F4] Additional testing if required [F5]	COM system, monitor opacity continuously [F6] CAM [F7 and CAM-1 through CAM-4]	Record monitoring and test results [F9] CAM records [F12]	15 days: Notification of testing [F4] 45 days: Test results [F11] Semiannual: CAM results [F12] Quarterly: Excess emissions and monitoring system performance reports [F13] Report excess emissions and permit deviations [F15]
NO _x	0.3 lb/MMBtu, 22.5 lb/hr and 99 TPY [F2]	WAQSR Ch 6, Sec 2 Permit MD-505	Test every five years [F4] Additional testing if required [F5]	Operate and maintain in accordance with manufacturer specs [F8]	Record monitoring and test results [F9] Maintenance records [F13]	15 days: Notification of testing [F4] 45 days: Test results [F11] Report excess emissions and permit deviations [15]
VOC	Get Division approval before disposing of hydrocarbon soaked sawdust for spills > 25 gal [F3]	WAQSR Ch 6, Sec 2 Permit MD-505	Testing if required [F5]	Date and quantity of hydrocarbon soaked sawdust disposed of in boiler [F8]	Record monitoring results and any additional testing [F9]	Report excess emissions and permit deviations [F15]
Additional Particulate	WAQSR Ch 5, Sec 2 and 40 CFR 60 Subparts A & Dc					

Source ID#: **04** Source Description: **Dry Kiln System**

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	20 percent opacity [F1] Throughput not to exceed 125 MM bdf/yr [F3]	WAQSR Ch 3, Sec 2 and Ch 6, Sec 2 Permit MD-505	Testing if required [F5]	Monthly visual observations [F6]; Monitor board throughput [F8]	Record monitoring results and any additional testing [F9]	Semiannual: Report monitoring results [F12] Report excess emissions and permit deviations [F15]

Source ID#: **06, 06a, 07, 08a, 09** Source Description: **Cyclones and Target Boxes**

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	20 percent opacity [F1] Process weight emission limits [F2]	WAQSR Ch 3, Sec 2	Testing if required [F5]	Monthly visual observations [F6]	Record monitoring results and any additional testing [F9]	Semiannual: Report monitoring results [F12] Report excess emissions and permit deviations [F15]

These tables are intended only to highlight and summarize applicable requirements for each source. The corresponding permit conditions, listed in brackets, contain detailed descriptions of the compliance requirements. Compliance with the summary conditions in these tables may not be sufficient to meet permit requirements. These tables may not reflect all emission sources at this facility.

ABBREVIATIONS

ACFM	Actual cubic feet per minute
AFRC	Air-fuel ratio controls
AQD	Air Quality Division
BACT	Best available control technology (see Definitions)
bdf	board feet
Btu	British thermal unit
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CFR	Code of Federal Regulations
CO	Carbon monoxide
CO ₂ e	Carbon dioxide equivalent
DEQ	Wyoming Department of Environmental Quality
EPA	United States Environmental Protection Agency (see Definitions)
ESP	Electrostatic Precipitator
g/hp-hr	Gram(s) per horsepower hour
gal	Gallon(s)
gr	Grain(s)
H ₂ S	Hydrogen sulfide
HAP(s)	Hazardous air pollutant(s)
hp	Horsepower
hr	Hour(s)
lb	Pound(s)
M	Thousand
MACT	Maximum available control technology (see Definitions)
mfr	Manufacturer
mg	Milligram(s)
MM	Million
MVACs	Motor vehicle air conditioners
NMHC(s)	Non-methane hydrocarbon(s)
NO _x	Oxides of nitrogen
NSCR	Non-selective catalytic reduction
O ₂	Oxygen
PM	Particulate matter
PM ₁₀	Particulate matter less than or equal to a nominal diameter of 10 micrometers
ppmv	Parts per million (by volume)
ppmw	Parts per million (by weight)
QIP	Quality Improvement Plan
RICE	Reciprocating internal combustion engine
SCF	Standard cubic foot (feet)
SCFD	Standard cubic foot (feet) per day
SCM	Standard cubic meter(s)
SIC	Standard Industrial Classification
SO ₂	Sulfur dioxide
SO _x	Oxides of sulfur
TPD	Ton(s) per day (1 ton = 2000 pounds, unless otherwise specified)
TPH	Ton(s) per hour (1 ton = 2000 pounds, unless otherwise specified)
TPY	Tons per year (1 ton = 2000 pounds, unless otherwise specified)
U.S.C.	United States Code
µg	Microgram(s)
VOC(s)	Volatile organic compound(s)
W.S.	Wyoming Statute
WAQSR	Wyoming Air Quality Standards & Regulations (see Definitions)

DEFINITIONS

"Act" means the Clean Air Act, as amended, 42 U.S.C. 7401, *et seq.*

"Administrator" means Administrator of the Air Quality Division, Wyoming Department of Environmental Quality.

"Applicable requirement" means all of the following as they apply to emissions units at a source subject to Chapter 6, Section 3 of the WAQSR (including requirements with future effective compliance dates that have been promulgated or approved by the EPA or the State through rulemaking at the time of issuance of the operating permit):

- (a) Any standard or other requirement provided for in the Wyoming implementation plan approved or promulgated by EPA under title I of the Act that implements the relevant requirements of the Act, including any revisions to the plan promulgated in 40 CFR Part 52;
- (b) Any standards or requirements in the WAQSR which are not a part of the approved Wyoming implementation plan and are not federally enforceable;
- (c) Any term or condition of any preconstruction permits issued pursuant to regulations approved or promulgated through rulemaking under title I, including parts C or D of the Act and including Chapter 5, Section 2 and Chapter 6, Sections 2 and 4 of the WAQSR;
- (d) Any standard or other requirement promulgated under Section 111 of the Act, including Section 111(d) and Chapter 5, Section 2 of the WAQSR;
- (e) Any standard or other requirement under Section 112 of the Act, including any requirement concerning accident prevention under Section 112(r)(7) of the Act and including any regulations promulgated by EPA and the State pursuant to Section 112 of the Act;
- (f) Any standard or other requirement of the acid rain program under title IV of the Act or the regulations promulgated thereunder;
- (g) Any requirements established pursuant to Section 504(b) or Section 114(a)(3) of the Act concerning enhanced monitoring and compliance certifications;
- (h) Any standard or other requirement governing solid waste incineration, under Section 129 of the Act;
- (i) Any standard or other requirement for consumer and commercial products, under Section 183(e) of the Act (having to do with the release of volatile organic compounds under ozone control requirements);
- (j) Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under title VI of the Act, unless the EPA has determined that such requirements need not be contained in a title V permit;
- (k) Any national ambient air quality standard or increment or visibility requirement under part C of title I of the Act, but only as it would apply to temporary sources permitted pursuant to Section 504(e) of the Act; and
- (l) Any state ambient air quality standard or increment or visibility requirement of the WAQSR.
- (m) Nothing under paragraphs (A) through (L) above shall be construed as affecting the allowance program and Phase II compliance schedule under the acid rain provision of Title IV of the Act.

"BACT" or "Best available control technology" means an emission limitation (including a visible emission standard) based on the maximum degree of reduction of each pollutant subject to regulation under the WAQSR or regulation under the Federal Clean Air Act, which would be emitted from or which results for any proposed major emitting facility or major modification which the Administrator, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application or production processes and available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. If the Administrator determines that technological or economic limitations on the application of measurement methodology to a particular class of sources would make the imposition of an emission standard infeasible, he may instead prescribe a design, equipment, work practice or operational standard or combination thereof to satisfy the requirement of Best Available Control Technology. Such standard shall, to the degree possible, set forth the emission reduction achievable by implementation of such design, equipment, work practice, or operation and shall provide for compliance by means which achieve equivalent results. Application of BACT shall not result in emissions in excess of those allowed under Chapter 5, Section 2 of the WAQSR and any other new source performance standard or national emission standards for hazardous air pollutants promulgated by EPA but not yet adopted by the state.

"Department" means the Wyoming Department of Environmental Quality or its Director.

"Director" means the Director of the Wyoming Department of Environmental Quality.

"Division" means the Air Quality Division of the Wyoming Department of Environmental Quality or its Administrator.

"Emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

"EPA" means the Administrator of the U.S. Environmental Protection Agency or the Administrator's designee.

"Fuel-burning equipment" means any furnace, boiler apparatus, stack, or appurtenances thereto used in the process of burning fuel or other combustible material for the purpose of producing heat or power by indirect heat transfer.

"Fugitive emissions" means those emissions which could not reasonably pass through a stack chimney, vent, or other functionally equivalent opening.

"Insignificant activities" means those activities which are incidental to the facility's primary business activity and which result in emissions of less than one ton per year of a regulated pollutant not included in the Section 112 (b) list of hazardous air pollutants or emissions less than 1000 pounds per year of a pollutant regulated pursuant to listing under Section 112 (b) of the Act provided, however, such emission levels of hazardous air pollutants do not exceed exemptions based on insignificant emission levels established by EPA through rulemaking for modification under Section 112 (g) of the Act.

"MACT" or "Maximum achievable control technology" means the maximum degree of reduction in emissions that is deemed achievable for new sources in a category or subcategory that shall not be less stringent than the emission control that is achieved in practice by the best controlled similar source, as determined by the Administrator. Emission standards promulgated for existing sources in a category or subcategory may be less stringent than standards for new sources in the same category or subcategory but shall not be less stringent, and may be more stringent than:

- (a) the average emission limitation achieved by the best performing 12 percent of the existing sources (for which the Administrator has emission information), excluding those sources that have, within 18 months before the emission standard is proposed or within 30 months before such standard is promulgated, whichever is later, first achieved a level of emission rate or emission reduction which complies, or would comply if the source is not subject to such standard, with the lowest achievable emission rate applicable to the source category and prevailing at the time, in the category or subcategory for categories and subcategories with 30 or more sources, or
- (b) the average emission limitation achieved by the best performing five sources (for which the Administrator has or could reasonably obtain emissions information) in the category or subcategory for categories or subcategories with fewer than 30 sources.

"Modification" means any physical change in, or change in the method of operation of, an affected facility which increases the amount of any air pollutant (to which any state standards applies) emitted by such facility or which results in the emission of any such air pollutant not previously emitted.

"Permittee" means the person or entity to whom a Chapter 6, Section 3 permit is issued.

"Potential to emit" means the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation is enforceable by EPA and the Division. This term does not alter or affect the use of this term for any other purposes under the Act, or the term "capacity factor" as used in title IV of the Act or the regulations promulgated thereunder.

"Regulated air pollutant" means the following:

- (a) Nitrogen oxides (NO_x) or any volatile organic compound;
- (b) Any pollutant for which a national ambient air quality standard has been promulgated;

- (c) Any pollutant that is subject to any standard established in Chapter 5, Section 2 of the WAQSR or Section 111 of the Act;
- (d) Any Class I or II substance subject to a standard promulgated under or established by title VI of the Act; or
- (e) Any pollutant subject to a standard promulgated under Section 112 or other requirements established under Section 112 of the Act, including Sections 112(g), (j), and (r) of the Act, including the following:
 - (i) Any pollutant subject to requirements under Section 112(j) of the Act. If EPA fails to promulgate a standard by the date established pursuant to Section 112(e) of the Act, any pollutant for which a subject source would be major shall be considered to be regulated on the date 18 months after the applicable date established pursuant to Section 112(e) of the Act; and
 - (ii) Any pollutant for which the requirements of Section 112(g)(2) of the Act have been met, but only with respect to the individual source subject to Section 112(g)(2) requirement.
- (f) Pollutants regulated solely under Section 112(r) of the Act are to be regulated only with respect to the requirements of Section 112(r) for permits issued under this Chapter 6, Section 3 of the WAQSR.

"Renewal" means the process by which a permit is reissued at the end of its term.

"Responsible official" means one of the following:

- (a) For a corporation:
 - (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or
 - (ii) A duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
 - (A) the facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or
 - (B) the delegation of authority to such representative is approved in advance by the Division;
- (b) For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
- (c) For a municipality, State, Federal, or other public agency: Either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency; or
- (d) For affected sources:
 - (i) The designated representative or alternate designated representative in so far as actions, standards, requirements, or prohibitions under title IV of the Act or the regulations promulgated thereunder are concerned; and
 - (ii) The designated representative, alternate designated representative, or responsible official under Chapter 6, Section 3 (b)(xxvi) of the WAQSR for all other purposes under this section.

"WAQSR" means the Wyoming Air Quality Standards and Regulations promulgated under the Wyoming Environmental Quality Act, W.S. §35-11-101, *et seq.*

APPENDIX A
COMPLIANCE ASSURANCE MONITORING PLAN

Saratoga Forest Management
 Compliance Assurance Monitoring Plan
 Source 2, Wellons Wood-Fired Boiler

<p>III. Performance Criteria</p>	<p>maintenance personnel respond to identify, correct and document any problem.</p>	
<p>A. Collection of Representative Data</p>	<p>The COMS is located on the ESP stack. The monitoring shall be continuous collecting a reading every 10 seconds to calculate and record each 6 minute average as required by 40 CFR 60.13. COMS design, installation and operation comply with 40 CFR 60, Appendix B, Performance Specification 1. Standard operating procedures for the COMS have been established</p>	<p>A source test is a direct measurement of the particulate emissions. Testing equipment and protocols, calibration methods and frequencies, and analytical methods comply with 40 CFR 60, appendix A.</p>
<p>B. Verification of Operational Status</p>	<p>N/A</p>	<p>N/A</p>
<p>C. QA/QC Practices and Criteria</p>	<p>Quality assurance plans for the COMS have been submitted to WDEQ under LP. Daily zero/span checks, quarterly audits and annual zero calibrations performed to ensure proper operation.</p>	<p>Included in source test plans and quality assurance procedures of the source test organization.</p>
<p>D. Monitoring Frequency</p>	<p>Measured continuously, sampled at 10 second intervals.</p>	<p>Once during permit term.</p>
<p>Data Collection Procedure</p>	<p>6 minute averages will be recorded on the Boiler Control System.</p>	<p>Report submitted to WDEQ.</p>
<p>Averaging Period</p>	<p>6 minutes.</p>	<p>In accordance with EPA Method 5.</p>

III. Justification

- a. Background
 - The pollutant-specific emission unit is the Wellons 75 MMBTU/hr wood fired boiler.
 - Particulate emissions from the exhaust of the boiler is controlled by a multicyclone and dry electrostatic precipitator.
- b. Rationale for Selection of Performance Indicators

Saratoga Forest Management
Compliance Assurance Monitoring Plan
Source 2, Wellons Wood-Fired Boiler

Opacity was selected because it is a sensitive indicator of the operation of the electrostatic precipitator. As discussed below, opacity readings within the indicator levels can be reasonably assured to demonstrate proper operation of the boiler and ESP. Opacity readings above the indication levels indicate either a boiler upset or an improperly operating electrostatic precipitator. Measurement of opacity is also required by 40 CFR 60.43.

c. Rationale for Selection of Indicator Levels

A quantitative correlation between opacity and particulate loading that is accurate enough to determine a specific opacity that correlates to the particulate emission limit for the boiler would take a great deal of time and stack testing. However, it is known that opacity is directly related to particulate grain loading. Saratoga Forest Management has chosen a 6 minute average opacity of 20% as the proposed action level. Minor fluctuations in the opacity of the unit such as this are not unexpected (as indicated by the NSPS opacity allowances of one 6 minute average per hour of up to 27%.) However, opacity levels are normally very low and elevated opacity readings for a longer period of time indicate potential problems with boiler and/or ESP operation.

The particulate limit for the boiler includes various averaging periods (lb/MMBtu, lb/hr, and TPy). However, EPA Reference Method 5 stack test used to directly measure particulate emissions would average particulate levels over three one hour time periods. Therefore, we believe that the proposed action levels based on six-minute averages would be adequate to not only demonstrate compliance with these particulate emission limits, but also to assure an opportunity to take corrective actions before any limits would be exceeded. The COMS provide direct, real-time measurement to demonstrate compliance with these limits.

Source testing is proposed as the secondary indicator because it provides direct measurement of particulate matter to demonstrate compliance with these limits.

APPENDIX B
QUALITY ASSURANCE/QUALITY CONTROL (QA/QC) PLAN

Quality Assurance/Quality Control Plan
For
Rosemount Analytical Model OPM 2000R
Opacity Monitor

Saratoga Forest Management
Saratoga, WY Sawmill

10-24-2013 033105

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Appendix A- Quarterly Audit Forms

Appendix B- Excess Emissions Report Forms

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1. Introduction

Installation of the continuous opacity measurement system (COMS) as well as preparation and maintenance of the Quality Assurance/Quality Control (QA/QC) plan is required by air quality construction permit #MD-505 issued by the Wyoming Department of Environmental Quality on July 25, 2000. The system has been designed and installed to meet the requirements of 40 CFR 60 Subpart Dc- Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.

2. Objectives

This QA/QC plan is designed to outline the operation and maintenance of the Rosemount Analytical Model OPM 2000 R opacity monitor installed to measure stack opacity from the Wellons boiler at the Saratoga, Wyoming sawmill. Implementation of these procedures will ensure adequate assessment and control of the precision, accuracy and completeness of the data from the monitor. This plan strives to achieve these standards by maximizing COMS uptime and providing Saratoga Forest Management and Wyoming DEQ with confidence in the quality of the emission data.

This QA/QC plan is not intended to be a tutorial for the operation and maintenance of the COMS. It is to serve as direction for documenting quality checks and corrective actions. This QA/QC plan, as well as the actual O&M of the COMS, should be only by those who are trained on the Saratoga COMS and have consent of the Operations Manager.

3. Monitor Specifications

Monitor

Manufacturer- Rosemount Analytical

Model #- OPM 2000R Transmissometer Opacity/Dust Density Transmitter

Serial #- RS99000285

The monitor is designed to meet the installation and operational specifications of 40 CFR 60 Appendix B Performance Specification 1 – Specifications and Test Procedures for Opacity Continuous Emission Monitoring Systems in Stationary Sources.

Data Acquisition System (DAS)

The majority of the data processing and opacity calculations are performed by the Intelligent Electronics employed by the OPM 2000R. Analog outputs from the device will be routed to the PC based boiler controls for storage and continuous readout of opacity measurements (instantaneous and/or six minute averages). An analog recording device will also be employed to ensure data availability.

4. Regulatory Requirements

The installation and maintenance of this monitor is required by Air Quality Construction Permit #MD-505 issued on July b the Wyoming Department of Environmental Quality, as well as 40 CFR 60.60.47c. The monitor is subject to the requirements of 40 CFR 60.13 and Performance Specification 1 (PS-1).

4.1 Emission Limitations

The Wellons boiler at the Saratoga sawmill is limited by 40 CFR 60.43c to 20% opacity (based on a six-minute average) except for one period per hour of not more than 27% opacity.

4.2 Monitor Span Value

As required by 40 CFR 60.47c, the span value for the monitor shall be set between 60 and 80%

5. Monitor Operation

The OPM 200R is an insitu optical transmitter that uses a visible light beam in the photopic region (peak and mean responses in the 500 to 600 nm range) to measure opacity of the stack emissions. The monitor consists of a transmitter/receiver (transceiver) module, a retroreflector module, and intelligent electronics. The transceiver and retroreflector modules are mounted opposite of each other on the stack. The OPM 2000R is a double pass monitor, the transceiver projects a controlled beam of light across the stack. The retroreflector corner cube reflects the beam back along a parallel path back to the transceiver. Particles in the gas stream cause a certain amount of light to be scattered and absorbed. The amount of absorption and scattering varies depending on the particulate content in the gas stream.

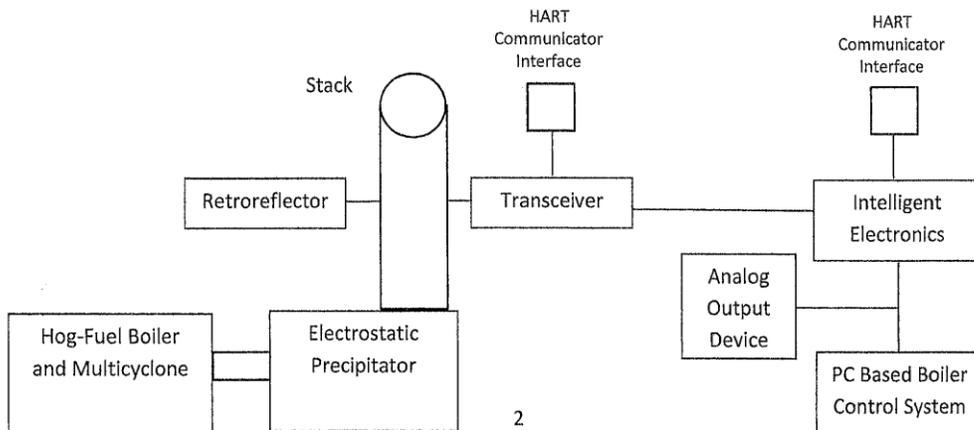
The light then strikes a detector, which converts the light into a voltage that can be processed. The detector signal is amplified by an independently powered detector/amplifier board. The amplified signal is digitized and transmitted to the intelligent electronics. The electronics calculates opacity, sends commands to the transceiver, and provides an operator interface via HART communications. The measurement value is compared to a reference value previously determined under clear-path conditions. The resulting ratio is the transmittance value for the measured path. This transmittance is then converted into stack exit opacity.

The OPM 2000R automatically compensates for the effects of ambient light, zero drift, and component aging with every measurement cycle. Four separate voltages produced in each cycle are compared against two sets of reference voltages taken during clear-path conditions. The first set is taken in 0% opacity conditions and the second set is taken in simulated 100% opacity conditions. The resulting reference zero and span voltages produce a reference point by which the transmitter judges current operation.

The OPM 2000R employs Intelligent Electronics, which consists of an IG-1 software board married to a HART daughter board. This combination provides controls to the monitor, performs regular scheduled zero/span checks and performs opacity calculations. The HART daughter board provides analog outputs to provide system information to external recorders and controllers.

The HART daughter board (as well as a board on the transceiver) provide connections for the HART communicator. The HART communicator is a handheld communications interface to allow operators to perform device setup, view process variables and configure analog outputs. These analog outputs will be routed to the PC based boiler controls to provide operators with necessary process information and system fault indicators. Opacity data will be collected, stored, and displayed by the boiler control system. Operational reports will also be available.

Figure 1 - Opacity Monitor Schematic



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6. Responsible Individuals

Individuals responsible for the implementation of this QA/AC plan are:

Position	Responsibilities
Operations Manger	1.Perform quarterly audits and annual zero alignment 2. Perform required monitor and DAS Maintenance and repairs 3. Advises site environmental coordinator when unacceptable operation is identified/ discovered 4. Review daily zero/span checks
Boiler Operator	1.Perform quarterly audits and annual zero alignment 2. Perform required monitor and DAS Maintenance and repairs 3. Advises site environmental coordinator when unacceptable operation is identified/ discovered 4. Review daily zero/span checks
Site Environmental Coordinator	1. Prepare/review quarterly audit reports and excess emission reports for submittal to regulatory agencies. 2. Prepare quarterly audit reports and excess emission reports

7. Training

Individuals directly responsible for monitor operation, maintenance and repair will be sufficiently trained on the operation and maintenance of the monitor.

8. Monitor Calibration/Audit Requirement

All calibrations and audits are performed by individuals trained on the operation and maintenance of the monitor, have operations manager consent, and using manufacturers recommended procedures. The following checks will be performed.

8.1 Daily Checks

The calibration drift shall be quantified and recorded at the zero and upscale-level opacity. The presence of any system faults shall also be determined and logged on a daily basis. If the calibration drift exceeds twice the allowed tolerance (>4% opacity) the monitor is considered out of control and the data considered invalid. The out of control period starts at the last successful drift check and ends at the completion of a successful drift check. If the calibration drift is greater than 2%, but less than 4%, corrective action shall be performed. However, the COMS will not be considered to be out-of-control, and all opacity data shall be considered valid. The performance standards for the daily checks are listed in Table 1.

**Table 1
Daily Performance Standards**

Parameter	Acceptable Criteria
Cal. Drift	<2%
Fault Indicators	No System Faults

8.2 Quarterly Audits

Quarterly performance audits are performed on the system to ensure proper operation and acceptability of system data. At least once each calendar quarter, Saratoga Forest Management or other trained individuals will perform an audit of the performance of the monitor and DAS. All checks shall be performed using the procedures in the operation manual. If any audit indicates unacceptable results the monitor will be considered "out of control" and the data considered invalid. For any Out of Control situation, corrective action must be taken and the failed portion of the audit reperformed.

The Out of Control period will commence at the completion of the failed check. The data will be considered valid upon the completion of a valid recheck. The performance standards for the quarterly audits are given in Table 2.

Table 2
Quarterly Audit Performance Standards

Parameter	Maximum Allowable Error
Stack Exit Correlation Error	≤ 2% Opacity
Fault Indicator Check	≤ No System Faults
Zero and Span Check	≤ 2% Opacity
Optical Alignment Check	≤ 2% Opacity
Dust Accumulation Check	≤ 4% Opacity
Calibration Error Check	≤ 4% Opacity
Zero Compensation*	≤ 4% Opacity
Valid Data Capture	≥ 95%

* The Zero Compensation assessment is not applicable to this monitor. The method of opacity determination employed by the OPM 2000R compares the signal from four different light pathlengths every cycle to continuously compensate for aging components, ambient light and zero drift.

8.2.1 Calibration Error Check

As required by 40 CFR 60.47c, the span of the monitor will be set between 60% and 80% opacity. Neutral density filters meeting the attenuation and calibration criteria of EPA proposed Method 203 will be used when performing the Calibration Error Checks.

8.3 Annual Zero Optical Alignment

At least once each year, the COMS simulated zero will be compared to the actual clear path zero of the installation in accordance with manufacturer's procedures. The audit may be conducted in conjunction with, but prior to, a performance audit. The zero audit is considered acceptable if the error is less than or equal to 2% opacity. If the monitor is out by more than 5% opacity for any one check or by more than 2% for three consecutive checks, the monitor is considered Out of Control and corrective action must be taken.

8.4 Corrective Action for Out of Control Periods

Any time the monitor determined to be Out of Control corrective action shall be taken and documented on the form in Appendix C. Following completion of the corrective action, the failing check shall be reperformed. Start time and end time of the Out of Control period shall be recorded on the monitor log.

9. Preventative Maintenance

9.1 Daily

On a daily basis (boiler operating day) the boiler operator (or whomever) checks and records on the Daily Operation & Maintenance Log the operational status of the COMS. Corrective actions are also initiated when dictated by the system fault indications or calibration results.

9.2 Quarterly

At least once per calendar quarter the External Filter Elements shall be cleaned.

9.3 Semi-Annually

The following maintenance shall be performed every six months

- Inspect purge air blowers
- Clean corner cube retroreflector
- Clean internal filter elements
- Clean transceiver window

9.4 Annually

The following maintenance shall be performed every 12 months

- Clean air lens assembly
- Inspect air lens seal plate
- Inspect beam splitter
- Inspect check valve
- Inspect detector/amplified board
- Inspect optical bench heater
- Inspect internal retroreflector
- Return neutral density filters for re-certification
- Inspect objective lens
- Inspect transceiver power supplies
- Inspect transceiver stack on LON board
- Inspect purge air failure flow switch
- Inspect weather housing
- Inspect zero jig

9.5 Spare Parts Inventory

At a minimum, a sufficient spare parts inventory, as recommended by the manufacturer, will be maintained on hand at the mill.

10. Data Recording and Recordkeeping

10.1 Daily Operation

Opacity and system operational data will be recorded and stored electronically on the PC based boiler control system. Daily checks of the COMS are also recorded on the Daily Operation & Maintenance Log. A separate analog recording device will be used to ensure data availability.

10.2 Audit Procedures

Hard copies of all audits and assessments will be filed in the Environmental files at the mill.

11. Reporting

11.1 Reporting of Audit Results

Saratoga Forest Management will submit a report containing the results of the performance audit performed in the quarter to the Wyoming Department of Environmental Quality. The report will be submitted within 30 days following the end of the calendar quarter. The report will contain the information and format as shown in Appendix A.

11.2 Excess Emissions Report

Saratoga Forest Management will submit an Excess Emissions Report to the Wyoming Department of Environmental Quality on a semi-annual basis. The report will be submitted by July 31 for the period of January 1 through June 30 and by January 31 for the period of July 1 through December 31. The Excess Emissions Report will contain the information and format as shown in Appendix B.

Appendix A
Quarterly Audit Report Form

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Opacity Monitor Quarterly Audit Report
Saratoga, Wyoming Studmill

Period Ending Date: _____

COMS Manufacturer: Rosemount Analytical OPM 2000R

Serial No. : RS99000285

I. Performance Audit

1. Stack Exit Correlation Error

- a. Actual pathlength correlation factor _____
- b. Correct pathlength correlation factor _____
- c. Stack exit correlation error _____

2. Active Fault Indicators; error messages present: _____

3. Zero and Upscale Calibration Check Responses

	Correct Value	Final Opacity	Difference
Zero			
Upscale			

4. Zero Compensation Value (percent opacity): Not applicable to this monitor

5. Optical Alignment Status: _____

6. Dust Accumulation on Optical Surface

	Initial Opacity	Final Opacity	Difference
Window 1			
Window 2			
Total			

7. Calibration Error

a. Filter values (equivalent opacity)

Low: _____ Mid: _____ High: _____

b. Test Results

Run #	Low	Mid	High
1			
2			
3			
4			
5			
Cal Error			



8. Corrective Action for Unacceptable Performance

Out of Control Periods

Date & Time	Total # of Hours	Corrective Action Taken	Results of Recheck

II. Zero Alignment Audit

1. Clear Path Zero Response: _____ % opacity
2. Simulated Zero Response: _____ % opacity
3. Zero Alignment Error: _____ % opacity
4. Zero Error of Previous Two (2) Assessments:

Date: _____ Zero Error: _____ % opacity

Date: _____ Zero Error: _____ % opacity

III. Calibration Drift Assessment

Out-of-Control periods

Date(s): _____

Number of days: _____

Corrective action taken: _____

Results of CD after corrective action taken. (Use format above)

IV. Data Capture Assessment

1. Source operating hours: _____

2. Total hours of valid COMS data: _____

(During source operating hours, including valid data obtained during routine calibration checks and QA/QC activities required by this method.)

3. Percent data capture: _____

V. Calculations (include on a separate page)

Appendix B
Excess Emissions Report Forms

10-24-2013 033105

**Department of Environmental Quality
Air Quality Division
Continuous Emission Monitoring Report**

Form A

I. General Information

- A. Facility Name: Saratoga Forest Management- Saratoga Studmill
- B. Process Unit/Pollutant Monitored: Wellons Hog Fuel Fired Boiler
- C. Applicable Permit Number or Regulation: Permit MD-505
- D. Applicable Emission Limit: 20% Opacity

II. Monitor Information

- A. Date of Original Monitor Installation: _____
- B. Date of Latest Monitor Certification: _____
- C. Pollutant/Opacity Monitor
 - 1. Manufacturer: Rosemount Analytical
 - 2. Model Number: OPM 2000R
 - 3. Serial Number of Main Chasis:
 - 4. Basis of Measurement (If applicable- wet or dry): N/A
 - 5. Instrument Span, Range Value (specify units): 65% Opacity
- D. Quality Assurance Data
 - 1. QA Plan Date:
 - 2. QA Plan Approval Date:

III. Operating/Monitoring Data

- A. Quarter: 1 2 3 4 (circle one) Year: _____
- B. Total Boiler Hours in Reporting Period: _____
- C. Hours Unit Operated During the Reporting Period: _____

Note: Include all unit operating time for the quarter including operating time associated with startup/shutdown and section 19 (emergency/abnormal) operations. Report time in hours to one decimal place, i.e. 1902.8.

IV. Quarterly Audits/Monitoring System Modifications

- A. Quarterly Audits
 - Type Audit:
 - Pollutant/Opacity Monitor Date Conducted: _____ Pass (circle one): Yes No

Note: A copy of the quarterly audits shall be included with the corresponding quarterly excess emission report.

B. Equipment Replaced During Reporting Period: _____

Note: Only equipment replacements or modifications to the system that could affect the ability of the continuous monitoring system to comply with the associated performance specification shall be reported.

V. Report Contact

A. Name: _____

B. Phone Number: _____



**Excess Emission Summary Table
Saratoga, Wyoming Studmill**

Monitor- Rosemount Analytical Model OPM 2000R Opacity Monitor

Source- Wellons Hog-Fuel Fired Boiler

Reporting Period _____

Emission Data Summary		COMS Performance Summary	
I. Duration of Excess Emissions	Hours	I. COMS Downtime in Reporting Period	Hours
A. Startup/Shutdown	_____	Due to:	
B. Control Equipment Problems	_____	A. Monitor Equipment Malfunctions	_____
C. Process Problems	_____	B. Non-Monitor Equipment Malfunctions	_____
D. Other Known Causes	_____	C. Malfunction	_____
E. Unknown Causes	_____	D. Quality Assurance Summary	_____
II. Total Duration of Excess Emissions	_____	E. Other known Causes	_____
III. Total Source Operating Time	_____	F. Unknown Causes	_____
Percentage of Excess Emissions (total duration of excess emissions x 100 divided by total source operating time minus total COMS downtime)	_____	II. Total COMS Downtime	_____
		Percentage COMS Downtime (total COMS downtime x 100 divided by total source operating time)	_____

Total time of excess emissions events due to emergency/abnormal operation (minutes) _____

Note:

1. Only report excess emissions which occur when the boiler is operating. Include all excess emissions in the Emissions Data Summary including those excess emissions associated with startup/shutdown and those excess emissions associated with Section 19 Emergency/Abnormal Operation. Report times in tenths of an hour. Report detailed excess emissions and causes in excess emissions table (WYDEQ Form C).
2. Only report COMS downtime which occurs when the boiler is operating. Report time in tenths of an hour. Include detailed COMS downtime and causes in Monitor Downtime Table (WYDEQ Form D).
3. Include an explanation of corrective actions taken for total excess emissions greater than 1% or monitor downtime greater than 5%.

Any changes in COMS, processing controls? Yes / No (circle one) If yes describe on a separate page.

"I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this certification are true, accurate, and complete."

Name: _____

Signature: _____

Title: _____

Date: _____

Appendix C
Maintenance & Corrective Action Forms

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Opacity Monitor Corrective Actions

Date/Time of initial out of control period _____ am/pm

Issue	Corrective Action Taken	Date/Time Recheck Completed	Initials

Total time monitor was out of control (to the nearest 1/10 of an hour) _____

Supervisor's signature upon completion _____