

**AIR QUALITY DIVISION
CHAPTER 6, SECTION 3
OPERATING PERMIT**

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



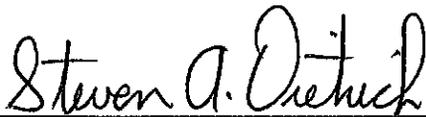
PERMIT NO. 3-3-156-1

Issue Date: **March 3, 2014**
Expiration Date: **August 27, 2017**
Effective Date: **March 3, 2014**
Replaces Permit No.: **3-3-156**

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,

**University of Wyoming
Central Energy Plant
Section 34, Township 16 North, Range 73 West
Albany 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

3-3-14

Date



Todd Parfitt, Director
Department of Environmental Quality

3/7/14

Date

WAQSR CHAPTER 6, SECTION 3 OPERATING PERMIT

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

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GENERAL INFORMATION

Company Name: **University of Wyoming**

Mailing Address: **1000 East University Ave., Department 3227**

City: **Laramie** State: **WY** Zip: **82701**

Plant Name: **Central Energy Plant**

Plant Location: **Section 34, Township 16 North, Range 73 West, Albany County, WY
(654 North 19th Street, Laramie)**

Plant Mailing Address: **1000 East University Ave., Department 3227**

City: **Laramie** State: **WY** Zip: **82701**

Name of Owner: **University of Wyoming** Phone: **(307) 766-2077**

Responsible Official: **Forrest Selmer** Phone: **(307) 766-2077**

Plant Manager/Contact: **Michael McConahay** Phone: **(307) 766-2139**

DEQ Air Quality Contact: **District 1 Engineer** Phone: **(307) 777-7391**
122 W. 25th Street
Cheyenne, WY 82002

SIC Code: **4961**

Description of Process: **The Central Energy Plant produces steam, chilled water, and compressed air for heating and cooling the university campus buildings.**

SOURCE EMISSION POINTS

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

SOURCE ID#	SOURCE DESCRIPTION	SIZE	CH. 6, SEC. 2 PERMITS
1	E. Keeler D.S. 30,000 oil/gas boiler	37.5 MMBtu/hr	MD-150
2	IBW VSG-60 coal/oil/gas boiler (baghouse)	73.17 MMBtu/hr	MD-150
3	IBW VSG-60 coal/oil/gas boiler (baghouse)	73.17 MMBtu/hr	MD-150
4	IBW VSG-60 coal/oil/gas boiler (baghouse)	73.17 MMBtu/hr	MD-150
5	Ash handling system (storage silo vent)	10 TPH	OP-137
6	Cummins KTA-3067-CS generator engine (fuel oil/diesel-fired)	1600 hp	None

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	19
PM ₁₀ Particulate Matter	19
Sulfur Dioxide (SO ₂)	441
Nitrogen Oxides (NO _x)	210
Carbon Monoxide (CO)	90
Volatile Organic Compounds (VOCs)	1
HAZARDOUS AIR POLLUTANT (HAP) EMISSIONS	10.4

Emission estimates are from the operating permit application.

FACILITY-SPECIFIC PERMIT CONDITIONS

Facility-Wide Permit Conditions

- (F1) **SULFUR DIOXIDE EMISSIONS INVENTORY** [WAQSR Ch 14, Sec 3]
The permittee shall comply with the requirements of WAQSR Ch 14, Sec 3, including estimating SO₂ emissions in accordance with Ch 14 Sec 3(b), and adjusting estimates in accordance with Ch 14 Sec 3(c), if necessary.

Source-Specific Permit Conditions

- (F2) **VISIBLE EMISSIONS** [WAQSR Ch 3, Sec 2] (**Modified March 3, 2014**)
- (a) Visible emissions of particulate matter from each boiler stack (units 1 - 4) shall not exceed 20 percent opacity, except that 40 percent opacity shall be allowed for not more than 2 minutes in any hour.
 - (b) Visible emissions from the fuel oil-fired generator engine (unit 6) shall not exceed 30 percent opacity except for periods not exceeding ten consecutive seconds.
 - (c) Visible emissions of any contaminant discharged into the atmosphere from any other single emission source, including the ash storage silo vent (unit 5), 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.
- (F3) **COAL AND FUEL OIL REQUIREMENTS** [WAQSR Ch 6, Sec 2 Permit MD-150]
- (a) Coal consumption for the IBW boilers (units 2, 3 and 4), shall not exceed 36,000 tons per year. The coal sulfur content shall not exceed 0.7 percent.
 - (b) Combined fuel oil consumption for all four boilers (units 1, 2, 3 and 4) and the emergency generator (unit 6), shall not exceed 50,000 gallons per year. Fuel oil sulfur content shall not exceed 0.45 percent.
- (F4) **BOILER EMISSIONS** [WAQSR Ch 6, Sec 2 Permit MD-150]
The permittee may not operate more than three of the four boilers (units 1, 2, 3 and 4) simultaneously. During the operation of any combination of the boilers, emission rates shall not exceed the maximum allowable rates shown in Table I.

POLLUTANT	lb/MMBtu of heat input	lb/hr	TPY *
Particulate	0.05	11.0	18.9
SO ₂		322.4	441.0
NO _x	0.7	153.7	210.2
CO		65.8	90.0

* Annual allowable emission rates are based on coal consumption of 36,000 TPY, per condition F3(a)

- (F5) **ASH STORAGE SILO EMISSIONS** [WAQSR Ch 6, Sec 2 Permit OP-137]
The particulate emission rate from the ash storage silo vent (unit 5) shall not exceed 0.2 lb/hr.
- (F6) **TEMPORARY ENGINE REPLACEMENT** [WAQSR Ch 6, Sec 3(h)(i)(I)]
- (a) Should the Cummins engine break down or require an overhaul, the permittee may bring on site and operate a temporary replacement engine until repairs are made. Permanent replacement of an engine **must** be evaluated by the Division under Ch 6, Sec 2 of WAQSR to determine appropriate permitting action and evaluate the need for additional requirements resulting from the permanent replacement.
 - (b) The temporary replacement unit shall be identical or similar to the unit replaced with emission levels at or below those of the unit replaced.
 - (c) The permittee shall notify the Division in writing of such replacement within five working days, provide the date of startup of the replacement, and provide a statement regarding the applicability of any New Source Performance Standards (NSPS) in 40 CFR Part 60; any National Emission Standards for Hazardous Air Pollutants (NESHAPs) in 40 CFR Part 63; and Compliance Assurance Monitoring (CAM) in WAQSR Ch 7, Sec 3.

Testing Requirements

- (F7) BOILER TESTING [Ch 6, Sec 3(h)(i)(C)(I)]
- (a) For emissions from the IBW boilers, the permittee shall conduct particulate, SO₂, NO_x and CO emissions testing at least once every five years for comparison with the emission limits specified in condition F4.
 - (i) Testing shall occur during operation of at least two of the IBW boilers, or during the anticipated peak seasonal load period.
 - (ii) The methods specified in condition F8 shall be used to measure emissions
 - (b) Testing shall be conducted in accordance with WAQSR Ch 5, Sec 2(h).
- (F8) 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. Should testing be required, test methods found at 40 CFR 60, Appendix A, shall be used as follows:
 - (i) For visible emissions, Method 9 shall be used.
 - (ii) For particulate emissions, Methods 1-4 and 5 shall be used.
 - (iii) For SO₂ emissions, Methods 1-4 and 6 or 6C shall be used.
 - (iv) For NO_x emissions, Methods 1-4 and 7 or 7E shall be used.
 - (v) For CO emissions, Methods 1-4 and 10 shall be used.
 - (vi) 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).

Monitoring Requirements

- (F9) COAL, FUEL OIL, AND SULFUR MONITORING [WAQSR Ch 6, Sec 3 (h)(i)(C)(I)]
- (a) The permittee shall monitor the monthly consumption of coal and fuel oil.
 - (b) The permittee shall acquire at least two coal analyses per week to determine sulfur content of the coal for comparison with the sulfur content limit in condition F3(a).
 - (c) The permittee shall acquire analyses of all fuel oil delivered to the facility to determine sulfur content of the fuel oil for comparison with the sulfur content limit in condition F3(b).
- (F10) IBW BOILERS EMISSIONS MONITORING [WAQSR Ch 6, Sec 3(h)(i)(C)(I); Ch 7, Sec 3(c)(ii)]
- (a) For visible and particulate emissions from the baghouse controlled IBW boilers (units 2, 3, and 4), 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 each emission source:
 - (i) The permittee shall conduct, at minimum, once daily Method 22-like visual observations of each IBW boiler stack in accordance with the CAM plan, to determine the presence of visible emissions.
 - (ii) 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.
 - (iii) An excursion, which is considered observation of any visible emissions from any IBW boiler stack, shall prompt immediate inspection and, if necessary, corrective actions as described in the CAM plan.
 - (iv) The permittee shall maintain the boiler baghouses in accordance with the maintenance description included with the CAM plan.
 - (v) The permittee shall follow all other applicable requirements under conditions CAM-1 through CAM-4 of this permit.
 - (b) The permittee shall test for particulate, SO₂, NO_x and CO emissions from the IBW boilers at least once every five years as specified in condition F7.
 - (c) In addition for SO₂ emissions, the permittee shall monitor the coal and fuel oil consumption and sulfur content as required by condition F9.

(F11) ASH STORAGE SILO VENT AND CUMMINS GENERATOR EMISSIONS MONITORING
[WAQSR Ch 6, Sec 3 (h)(i)(C)(I)]

- (a) For visible and particulate emissions from the ash storage silo vent (unit 5), the permittee shall conduct, at minimum, weekly Method 22-like visual observations to determine the presence of visible emissions, and to determine maintenance needs or corrective action.
 - (i) The visual observations shall be conducted by a person qualified, but not necessarily certified, to perform Method 9 observations. Observation of any emissions from the vent shall prompt immediate inspection and, if necessary, corrective actions
- (b) The permittee shall conduct observations of visible emissions from the generator engine (unit 6) during periodic availability assurance tests, at least semi-annually, to assess compliance with the opacity limit and identify maintenance needs.

Recordkeeping Requirements

(F12) SULFUR DIOXIDE EMISSIONS INVENTORY RECORDS [WAQSR Ch 14, Sec 3(b)]

- (a) The permittee shall maintain all records used in the calculation of SO₂ emissions for the inventory required by condition F1, including but not limited to the following:
 - (i) Amount of fuel consumed;
 - (ii) Percent sulfur content of fuel and how the content was determined;
 - (iii) Quantity of product produced;
 - (iv) Emissions monitoring data;
 - (v) Operating data; and
 - (vi) How the emissions are calculated, including monitoring/estimation methodology with a demonstration that the selected methodology is acceptable under Ch 14, Sec 3.
- (b) The permittee shall maintain records of any physical changes to facility operations or equipment, or any other changes (e.g. raw material or feed) that may affect emissions projections of SO₂.
- (c) The permittee shall retain all records and support information for compliance with this condition and with the reporting requirements of condition F15 at the facility, for a period of **at least ten (10) years** from the date of establishment, or if the record was the basis for an adjustment to the milestone, five years after the date of an implementation plan revision, whichever is longer.

(F13) TESTING, MONITORING AND CAM RECORDS

[WAQSR Ch 6, Sec 3(h)(i)(C)(II); Ch 7, Sec 3(i)(ii) and Ch 6, Sec 2 Permit MD-150]

- (a) For any testing or monitoring required under conditions F7, F8, F10 and F11, 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) any analyses were performed;
 - (iii) The company, entity or person that performed the analyses or observations;
 - (iv) The analytical or observational techniques or methods used;
 - (v) The results of such analyses or observations;
 - (vi) The operating conditions/parameters as they existed at the time of sampling or measurement; and
 - (vii) Records of any corrective actions taken.
- (b) Additionally, for the Compliance Assurance Monitoring (CAM) required under condition F10(a):
 - (i) The permittee shall record the date, time, and duration of any excursions as well as the CAM indicator value(s) during each excursion.
 - (ii) The permittee shall also 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.
- (c) For any Method 9 observations required by the Division under condition F8, the permittee shall keep field records in accordance with Section 2.2 of Method 9.
- (d) For fuel and sulfur monitoring required by condition F9, the permittee shall maintain records of the coal and fuel oil sulfur content analyses, and the monthly and calendar year-to-date totals of coal and fuel oil consumption.
- (e) The permittee shall retain on-site at the facility, the records of each test, measurement, or observation and support information for a period of at least five years from the date of such information.

- (F14) MAINTENANCE RECORDS [WAQSR Ch 6, Sec 3(h)(i)(C)(II)]
- (a) The permittee shall record all maintenance activities performed on the common boiler baghouse as described in the CAM plan. The record of maintenance activities shall include:
 - (i) The maintenance activity performed;
 - (ii) The date, place, and time 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 maintenance activities described in the CAM plan.
 - (b) The permittee shall retain on-site at the facility, the records of each maintenance activity for a period of at least five years from the date of the maintenance activity, and make available upon request.

Reporting Requirements

- (F15) SULFUR DIOXIDE EMISSIONS INVENTORY REPORTS
[WAQSR Ch 14, Sec 3(b) and (c)] **(Modified March 3, 2014)**
- (a) The permittee shall report calendar year SO₂ emissions by April 15th of the following year. The inventory shall be submitted in the format specified by the Division.
 - (b) Emissions from startup, shutdown, and upset conditions shall be included in the inventory.
 - (c) If the permittee uses a different emission monitoring or calculation method than was used to report SO₂ emissions in **2006**, the permittee shall adjust reported SO₂ emissions to be comparable to the emission monitoring or calculation method that was used in **2006**. The calculations that are used to make this adjustment shall be included with the annual emission report.
 - (d) The annual reports shall reference this permit condition (F15) and shall be submitted in accordance with condition G4 of this permit.
- (F16) TEST AND MONITORING REPORTS [WAQSR Ch 6, Sec 3(h)(i)(C)(III) and Ch 7, Sec 3 (i)]
- (a) The permittee shall report the results of the particulate, SO₂, NO_x and CO emissions tests required under condition F7 within 45 days of conducting the tests, except as follows: If the tests results show noncompliance with a permitted emission limit, the permittee shall notify the Division as soon as the results are discovered, and written results must be submitted within 30 days of the test date, to assure timely notification of noncompliance.
 - (b) The following shall be reported to the Division by January 31 and July 31 each year:
 - (i) Summary results of the coal and fuel oil consumption and sulfur content monitoring required under condition F9, including the calendar year-to-date totals of coal and fuel oil consumption.
 - (ii) Summary results of the visible emissions monitoring required under conditions F10(a) and F11, and any corrective actions taken upon detection of visible emissions. If there were no visible emissions, this shall be reported.
 - (iii) Additionally, the results of CAM required under condition F10(a) for the baghouse controlled IBW boilers shall include the following:
 - (A) Summary information on the number, duration, and cause of excursions, as applicable, and the corrective actions taken;
 - (B) A description of the action taken to implement a QIP (if required) during the reporting period as specified in Chapter 7, Section 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.
 - (c) All instances of deviations from the conditions of this permit must be clearly identified in each report.
 - (d) The semiannual reports shall reference this permit condition (F16) and shall be submitted in accordance with condition G4 of this permit.
- (F17) 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)(i) 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

(F18) 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 3 NATIONAL EMISSION STANDARDS FOR
HAZARDOUS AIR POLLUTANTS (NESHAPS) AND 40 CFR 63**

**SUBPART ZZZZ REQUIREMENTS FOR
STATIONARY RICE (RECIPROCATING INTERNAL COMBUSTION ENGINES)**

(Modified March 3, 2014)

SUBPART ZZZZ REQUIREMENTS [40 CFR 63 Subparts A and ZZZZ; and WAQSR Ch 5, Sec 3]

The permittee shall meet all applicable requirements of 40 CFR 63 Subparts A and Subpart ZZZZ and WAQSR Ch 5, Sec 3, as they apply to each affected source as indicated in §63.6590(a). An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand. (As required by condition F6(c), if an engine is replaced or reconstructed, subpart applicability will need to be re-evaluated and a statement regarding applicability submitted to the Division.) This facility is currently identified as an area source of HAP emissions. Affected sources at this facility include the Cummins diesel engine (unit 6).

**SUBPART JJJJJ REQUIREMENTS FOR INDUSTRIAL, COMMERCIAL, AND INSTITUTIONAL
BOILERS AREA SOURCES**

SUBPART JJJJJ REQUIREMENTS [40 CFR 63 Subparts A and JJJJJ; and WAQSR Ch 5, Sec 3]

The permittee shall meet all applicable requirements of 40 CFR 63 Subparts A and JJJJJ and WAQSR Chapter 5, Section 3 as they apply to any existing, new, or reconstructed industrial, commercial, and institutional boiler as identified in §63.11194 (with the exceptions defined in §63.11195), within a subcategory (coal, biomass, oil), as listed in §63.11200 and defined in §63.11237, located at an area source. Affected sources include the four existing boilers: the Keeler boiler (unit 1) and the three IBW boilers (units 2, 3 and 4).

The subpart is available at <http://www.gpoaccess.gov/cfr/retrieve.html>, or is available 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 Chapter 7, Section 3 as they apply to the baghouse controlled IBW boilers (units 2, 3 and 4). 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 the sulfur dioxide emissions inventory, the permittee shall assess compliance with condition F1 of this permit by reviewing records kept in accordance with condition F12 and verifying reports were submitted in accordance with condition F15.
- (ii) For visible emissions from the boilers, the permittee shall assess compliance with condition F2(a) by conducting the monitoring required by condition F10(a).
- (iii) For visible emissions from the ash storage silo and Cummins engine, the permittee shall assess compliance with condition F2(b) and (c) by conducting the monitoring required by condition F11.
- (iv) For coal and fuel oil consumption and sulfur content for the boilers, the permittee shall assess compliance with condition F3 by conducting the monitoring required by condition F9.
- (v) For particulate, NO_x and CO emissions from the boilers, the permittee shall assess compliance with condition F4, by conducting the testing required by condition F7, and in addition for particulate, by conducting the monitoring required by condition F10(a).
- (vi) For SO₂ emissions from the boilers, the permittee shall assess compliance with condition F4 by conducting the testing required by condition F7, and the monitoring required by condition F10(c).
- (vii) For particulate emissions from the ash storage silo vent, the permittee shall assess compliance with condition F5 by conducting the monitoring required by condition F11(a).
- (viii) For greenhouse gas reporting, the permittee shall assess compliance with condition F17 by verifying that reports were submitted in accordance with condition F17(b).
- (ix) The permittee shall assess compliance with Part 63 Subpart ZZZZ by conducting any applicable testing and monitoring required by §§63.6610 through 63.6640 and by reviewing the records required by §§63.6655 and 63.6665.
- (x) The permittee shall assess compliance with Part 63 Subpart JJJJJ by conducting any applicable testing and monitoring required by §§63.11210 through 63.11224 and by reviewing the records required by §63.11225.
- (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 document submitted shall be certified as being true, accurate, and complete by a responsible official.
- (a) Submissions to the Division.
- (i) Any submissions to the Division including reports, certifications, and emission inventories required under this permit shall be submitted as separate, stand-alone documents and shall be sent to:
Administrator, Air Quality Division
122 West 25th Street
Cheyenne, Wyoming 82002
- (ii) Unless otherwise noted elsewhere in this permit, a copy of each submission to the Administrator under paragraph (a)(i) of this condition shall 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 (8ENFT)
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 1 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 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.

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 fire fighting 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

(Modified March 3, 2014)

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, in accordance with 40 CFR 50:

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-hour 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

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#: 1, 2, 3 and 4 Source Description: (1) E. Keeler D.S. and (3) IBW VSG-60 Boilers

Pollutant	Emissions Limit/Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	20 percent opacity [F2] 0.05 lb/MMBtu, 11.0 lb/hr, 18.9 TPY [F4] *	WAQSR Ch 3, Sec 2; Ch 6, Sec 2 Permit MD-150	Test at least once every five years [F7]	CAM: Monitor visible emissions daily. Testing per condition F7 [F10] *	Record CAM and test results [F13] Record baghouse maintenance[F14]	45 days: report test results. Semi-annually report CAM results [F16] Report excess emissions and permit deviations [F18]
SO ₂	Combined coal use not to exceed 36,000 TPY, and sulfur content not to exceed 0.7%. Combined fuel oil use not to exceed 50,000 gallons per year, and sulfur content not to exceed 0.45% [F3] 322.4 lb/hr, 441.0 TPY [F4]*	WAQSR Ch 6, Sec 2 Permit MD-150	Test at least once every five years [F7]	Monitor coal and fuel oil use and sulfur content [F9] Testing per condition F7 [F10]	Record: test results; coal and fuel oil use monthly; fuel oil sulfur content with each delivery; coal sulfur content twice weekly; and year to date SO ₂ totals [F13]	45 days: report test results. Semi-annually report coal/fuel oil use, sulfur content, and SO ₂ [F16] Report excess emissions and permit deviations [F18]
NO _x	0.7 lb/MMBtu, 153.7 lb/hr, 210.2 TPY [F4]*	WAQSR Ch 6, Sec 2 Permit MD-150	Test at least once every five years [F7]	Testing per condition F7 [F10]	Record test results [F13]	45 days: report test results [F16] Report excess emissions and permit deviations [F18]
CO	65.8 lb/hr, 90.0 TPY [F4]*	WAQSR Ch 6, Sec 2 Permit MD-150	Test at least once every five years [F7]	Testing per condition F7 [F10]	Record test results [F13]	45 days: report test results [F16] Report excess emissions and permit deviations [F18]
HAPs	WAQSR Ch 5, Sec 3 and 40 CFR 63 Subparts A and JJJJJ					

* Emission limits are set based on operation of three of the four boilers at any given time. CAM requirements do not apply to Unit 1, which has a separate stack and is not controlled by the baghouse.

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.

Source ID#: 5 Source Description: Ash Storage Silo Vent

Pollutant	Emissions Limit/Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	20 percent opacity [F2] 0.2 lb/hr [F5]	WAQSR Ch 3, Sec 2; Ch 6, Sec 2 Permit OP-137	Testing if required [F8]	Monitor visible emissions weekly [F11]	Record monitoring results [F13]	Semiannually report monitoring results [F16] Report excess emissions and permit deviations [F18]

Source ID#: 6 Source Description: Cummins KTA-3067-CS Generator Engine

Pollutant	Emissions Limit/Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	30 percent opacity [F2]	WAQSR Ch 3, Sec 2	Testing if required [F8]	Semi-annual observations [F11]	Record monitoring results [F13]	Semiannually report monitoring results [F16] Report excess emissions and permit deviations [F18]
HAPs	WAQSR Ch 5, Sec 3 and 40 CFR 63 Subparts A & ZZZZ					

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)
Btu	British Thermal Unit
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
C.F.R.	Code of Federal Regulations
CO	Carbon monoxide
°F	Degrees Fahrenheit
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
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
TBD	To be determined
TPD	Ton(s) per day
TPH	Ton(s) per hour
TPY	Tons per year
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 C.F.R. 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

Attachment 8: Proposed CAM Program

COMPLIANCE ASSURANCE MONITORING PLAN:
FABRIC FILTER FOR PM CONTROL

I. Background

A. Emissions Unit

Description: Steam Heating Plant
Identification: IBW VSG-60
Facility: University of Wyoming, Central Energy Plant
Laramie, Wyoming

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation: Permit, 3-2-156
Emission limits:
Particulate matter: 0.05 lb/MM Btu Heat Input; 11.0 lb/hr
Monitoring requirements: Visible emissions and inspection and maintenance

C. Control Technology

Reverse-air baghouse operated under negative pressure.

II. Monitoring Approach

The key elements of the monitoring approach are presented below:

A. Indicator

Visible emissions will be used as an indicator.

B. Measurement Approach

Visible emissions from the baghouse exhaust will be monitored daily using EPA Reference Method 22 procedures.

C. Indicator Range

The indicator level is no visible emissions.

E. Performance Criteria

Data Representativeness: Measurements are being made at the emission point.

QA / QC Practices and Criteria: The observer will be knowledgeable in the procedures of Method 9 but not necessarily certified.

Monitoring Frequency and Data
Collection Procedure: A six-minute Method 22 observation
will be performed daily.

III. Justification

A. Background

The University of Wyoming Central Energy Plant consists of three 73.17 MM Btu/hr coal/oil/gas fired boilers and one 37.5 MM Btu/hr gas/oil fired boiler. The boilers were constructed to meet the steam requirements for the university. The monitoring approach outlined here applies to the three 73.17 MM Btu/hr coal boilers baghouse cells 1-7. They are Zurn reverse-air baghouses with 1,155 bags which filter flue gas from any of the three boilers. The induced draft fans maintain airflow through the baghouse.

B. Rationale for Selection of Performance Indicator

Visible emissions was selected as the performance indicator because it is indicative of operation of the baghouse in a manner necessary to comply with the particulate emission standard. When the baghouse is operating properly, there will not be any visible emissions from the exhaust. Any visible emissions indicates reduced performance of the particulate control device, therefore, the presence of visible emissions is used as a performance indicator.

Annually, each cell of the baghouse is inspected to verify that the bags and equipment are operating properly. Other items on the baghouse inspection report include: the bags replaced, tension adjustments, loose bags, and any bag supports which were repaired. A Report of Maintenance and Repairs is also filled out for any maintenance done in the baghouse.

Additionally, a baghouse log sheet provides documentation that the baghouse is in good repair and operating properly. Once per day, at a minimum, the baghouse is cleaned and pressure drop checked to verify that the bags and equipment are operating properly. Proper operation of the cleaning cycle facilitates gas flow through the baghouse and the removal of particulate, and also helps prevent blinding of the filter bags. Other items on the baghouse log sheet include the inlet pressure, cleaning cycle operation time, differential pressure, vacuum pressure after ash removal, and differential pressure before and after cleaning.

Reference method testing once during the permit term will confirm that the lack of visible emissions is consistent with compliant particulate emission rates.

C. Rationale for Selection of Indicator Level

The selected indicator range is no visible emissions. When an excursion occurs, corrective action will be initiated, beginning with an evaluation of the occurrence to determine the action required to correct the situation. All excursions will be documented and reported. An indicator range of visible emissions was selected because visible emissions are indicative of an increase in particulate emissions.