

STATEMENT OF BASIS

To: Reviewers

Through: Lori Bocchino, Operating Permit Program Manager

From: Brian Fehr, Air Quality Engineer

Subject: Draft Operating Permit 3-2-101-1, PacifiCorp Energy, Wyodak Plant

Date: April 29, 2013

Introduction:

Attached is the draft modification of the Wyoming Air Quality Standards and Regulations (WAQSR) Ch 6, Sec 3 operating permit for the Wyodak Plant. The permittee requested the operating permit be modified to incorporate requirements that have become applicable to the facility since the issuance of permit 3-2-101 on February 18, 2009. In addition to the applicable requirements indicated below, equipment at the facility is now subject to 40 CFR 60, Subpart III (*Stationary Compression Ignition Internal Combustion Engines*), and 40 CFR 63, Subpart UUUUU (*Hazardous Air Pollutants: Coal-and-Oil Fired Electric Utility Steam Generating Units*) which are now included in the draft modification. Chapter 14, Section 4 was removed from the WAQSR on March 28, 2012. As such, requirements associated with the Mercury Trading Program are removed from the draft modification.

The waivers and Division letter in this paragraph have no remaining requirements, but are included to document the permit history for this facility. For help during maintenance of the sootblowing air compressor system, waivers AP-8727 (12/8/08), AP-8822 (1/5/09), AP-8930 (2/3/09), wv-11230 (10/8/10), wv-11303 (11/4/10), wv-11438 (12/15/10), and wv-11677 (2/4/11) were issued to temporarily allow 2 Caterpillar engines to operate. During times of maintenance in the boiler building, waivers wv-11724 (2/25/11), wv-11795 (3/10/11), and wv-12650 (10/27/11) allowed portable space heaters to be brought to the facility to heat the boiler building. Waiver wv-11738 (2/28/11) was issued to allow portable temporary diesel powered equipment to be used at the facility for 90 days during a maintenance outage. Waiver wv-13645 (7/31/12) was issued to temporarily conduct a mercury sorbent process test. Additionally, a temporary fogger system was allowed for supplemental dust control in a 10/12/12 Division letter.

Applicable requirements are incorporated from the following permits and Division letter:

Permit MD-7487 (5/20/09): authorized installation of pollution control equipment on the boiler (unit 1). Portions of this permit are superseded by MD-10472; however, remaining applicable requirements include SO₂, PM, CO and opacity limits for the boiler.

Permit MD-6043 (12/31/09) / MD-6043A (12/23/10): authorized the installation and operation of the PM and NO_x Best Available Retrofit Technologies (BART) determined controls. Applicable requirements include: NO_x and PM emission limits for the boiler, compliance with the Regional SO₂ Milestone and Backstop Trading Program, and utilization of EPA's Clean Air Market reporting program to convert monitoring data to annual emissions.

Permit MD-10472 (7/1/11): corrected existing monitoring requirements and established a method for determining excess emissions for SO₂ and CO. Applicable requirements include NO_x limits for the boiler, installation and operation of a CO Continuous Emission Monitoring System (CEMS), exceedance definitions for NO_x, CO, and SO₂ emissions, as well as NO_x and SO₂ plantwide applicability limits (PAL). This permit superseded portions of MD-7487.

Division Letter (6/12/12): superseded the 2/26/10 Division Letter that required Mercury monitoring under WAQSR Chapter 14, Section 4.

The permit revisions include the following:

- The Table of Contents was updated for repagination, the addition of PAL requirements, 40 CFR 60 Subpart IIII requirements, and 40 CFR 63 Subpart UUUUU requirements. Because the Division no longer attaches state and federal regulations to Title V permits, the previous contents of Appendices E through G are removed. Appendix E now includes the startup and shutdown definitions. Appendices F and G are reserved.
- The address for the Air Quality Division contact is updated in the General Information.
- The source emissions points table is updated to include newly issued permits for the boiler (source 1), and indicate assigned IDs for the space heaters and the diesel engines.
- The Emissions Table is updated to reflect emissions at the facility.
- Condition F4 now includes the SO₂ Milestone and Trading Program.
- The boiler opacity limits are removed from condition F6 and added to condition F5.
- Condition F6 reflects the boiler's current emission limits.
- The table in condition F7 is renumbered.
- A PM test specification is added to condition F10.
- CO emission testing methods are added to condition F11. Methods 1-4 and 5 shall be used for particulate emission testing of all sources.
- A continuous opacity monitoring system requirement is added to condition F12.
- CEMs monitoring for SO₂, NO_x, and CO plus startup and shutdown monitoring is added to condition F13.
- Condition F17 now includes recordkeeping for the boiler emissions, startups and shutdowns, plus the amount of coal burned each year.
- Cross references are updated in condition F22.
- Condition F24 now specifies boiler excess emissions and monitoring system performance reports.
- A 40 CFR 60 Subpart D reporting requirement is moved from condition F25 to condition F24.
- Due to the removal of WAQSR Chapter 14, Section 4, condition F25, which was originally condition F24, now specifies the reporting of excess emissions and condition F26 now specifies the greenhouse gas reporting requirement.
- Conditions F27 through F30 are added to include NO_x and SO₂ PAL limits and associated monitoring, recordkeeping, and reporting requirements.
- The Compliance Assurance Monitoring (CAM) requirements are updated to reflect the boiler's current emission control equipment and to remove the reference to Appendix E, as the Division no longer attaches state regulations to Title V permits.

- 40 CFR 60 Subparts D and Y and 40 CFR 63 Subpart ZZZZ requirements now reflect wording used in current Title V permits.
- 40 CFR 60 Subpart IIII requirements are added for the emergency and fire pump engines.
- 40 CFR 63 Subpart UUUUU requirements are added for the boiler.
- Condition C1 reflects the changes made to the permit.
- Condition S1 is updated to include current state ambient standards.
- Conditions S4 through S13 are reserved as SO₂ requirements for the boiler are now included in the F conditions.
- The Acid Rain Permit Conditions are updated to reflect updated AR-2 requirements.
- The Summary Tables are updated to reflect changes in the permit.
- Appendix D includes the current CAM plan for the boiler.
- The Startup and Shutdown definitions are included in Appendix E.
- Appendices F and G are reserved.
- Appendix H includes the current Acid Rain Program Phase II NO_x Compliance Plan.

