STATEMENT OF BASIS

To: Reviewers

Through: Michael Stoll, Operating Permit Program Manager

From: Melissa Meares, Air Quality Engineer

Subject: Draft Operating Permit 3-2-121, PacifiCorp Energy, Naughton Plant

Date: October 10, 2007 (*amended November 13, 2007*) ***(amended December 18, 2007)***

Introduction:

Attached is the draft Wyoming Air Quality Standards and Regulations (WAQSR) Chapter 6, Section 3 renewal operating permit for PacifiCorp Energy, Naughton Plant. Naughton is a coal fired steam-electric power generating facility. Sources of air pollution at the plant include three dry bottom tangentially/coal-fired boilers, unit 1 (160 megawatts), unit 2 (220 megawatts), and unit 3 (330 megawatts), coal and fly ash handling facilities, and diesel-fired emergency equipment.

Particulate matter emissions from units 1 and 2 are controlled by electrostatic precipitators (ESPs). Particulate emissions from unit 3 are controlled by an ESP followed by a wet flue gas desulfurization (FGD) scrubber to control SO_2 emissions. Particulate emissions from coal and fly ash handling facilities are controlled by baghouses and/or chemical and water dust suppression systems. Fugitive emissions from coal stockpiles and unpaved trafficked areas around the plant are controlled with water and chemical dust suppressants.

Permitting History:

CT-183 (12/5/78) and OP-122 (11/28/83): allowed for the construction and operation of a fly ash silo and pneumatic bulk truck loadout facility adjacent to the Naughton Plant. Operation and maintenance of the baghouse (unit 8) and fugitive emissions associated with the truck loadout (unit 16) were transferred from Pozzolan Products Co. to Utah Power and Light Co. (now PacifiCorp) on 4/6/87.

Waiver (9/26/86): was issued for the construction of a new coal weighing facility using a baghouse for dust control (unit 19). Operation and maintenance of the baghouse was assigned to Pittsburgh and Midway on 9/23/87. While under Pittsburgh and Midway's control, a permit was issued that set particulate and opacity limits for unit 19. Control of the baghouse returned to PacifiCorp on 7/31/97. The gr/dscf limit set while under Pittsburgh and Midway's control had been overlooked in the previous operating permit, but is included in this renewal.

Waiver (10/16/87): authorized construction of an ash storage silo to be used in conjunction with the existing ash loadout system with a baghouse for dust control. The silo was included in the first operating permit (30-121) as unit 9. By letter dated 3/9/99, PacifiCorp requested to delete this source since the unit was no longer in service.

Waiver (4/9/98): allowed installation of a new SO_2 scrubber pond to replace the existing pond. Both ponds would operate about a year simultaneously during the transition period. The waiver indicated the SO_2 control plan would be incorporated into the operating permit as a "state-only" enforceable condition.

Waiver (4/9/98): allowed replacement of the existing unit #1 75 kilowatt emergency generator with a 150 kilowatt unit.

MD-403 (4/28/99): authorized installation of low-NO_X burners on unit 3 and established NO_X emission limits. Total NO_X emissions from units 1, 2 and 3 are limited to 15,140 tons per calendar year. PacifiCorp is required to submit quarterly reports for the first two quarters and monthly reports for the last six months of each calendar year listing the NO_X emissions for each boiler per day and a year-to-date total for all three boilers. Emissions are determined from the continuous emission monitoring systems certified in accordance with 40 CFR Part 75.

Division Letter (1/14/02): accepted the scrubber operations plan, and fugitive dust plan, which were originally submitted in response to the FY2001 inspection report. Updated plans were verbally approved on 10/2/07 and are included as appendices in this renewal.

MD-867 (4/8/03): was issued to reduce allowable particulate emissions for five baghouse sources (units 4 thru 8). Previously these baghouse controlled sources were subject to the particulate matter emission limits under WAQSR Ch 3, Sec 2. The permittee voluntarily agreed to more stringent particulate matter emission limits on sources 4, 5, 6, 7, and 8 under permit MD-867. The permit analysis indicates sources 4 - 7 are not subject to 40 CFR 60 Subpart Y because they were constructed prior to October 1975. Source 8 is not subject to Subpart Y because it is not a piece of coal handling equipment.

Waivers AP-2582 (11/2/04) and AP-3438 (5/31/05); letter 10/7/05: addressed the temporary installation and testing of SO_3 flue gas conditioning equipment. This waiver is no longer in effect.

Waiver AP-4478 (4/21/06): allowed for the replacement of the 261 hp diesel fired emergency generator on unit 3 with a diesel fired 896 hp Caterpillar 3412 C TA V-12 generator engine. The Caterpillar engine is limited to 200 hours of operation per year.

Waiver AP-5480 (12/7/06): allowed 5,000 tons of bottom ash to be stockpiled for thirty days. This waiver is no longer in effect.

Waiver AP-5830 (2/15/07): allows the permittee to test the effectiveness of alternative flue gas conditioning methods. Conditions of the waiver are included in the operating permit. Authorization to test the alternative flue gas conditioning methods is valid through May 2008.

Waiver AP-6641 (8/29/07): allows operation of a Perkins emergency diesel generator. The engine must be EPA Tier 2 certified, is limited to 200 hours of operation a year, and must be equipped with an hour meter (or equivalent device).

Applicable Requirements:

Applicable requirements include the conditions from the permits and waivers listed above, and the WAQSR Ch 3, Sec 2 visible emission limits. Only the weigh scale baghouse (source 19) is subject to the requirements found in 40 CFR 60, Subpart Y. The boilers are subject to the visible, particulate, SO_2 and NO_X standards of WAQSR Ch 3, Sections 2, 3, and 4. All three boilers are subject to Acid Rain requirements of 40 CFR Parts 72, 73, 75, 76, 77, and 78.

This facility is subject to the requirements of 40 CFR Part 63, Subpart ZZZZ, for Reciprocating Internal Combustion Engines (RICE). Affected sources under this subpart are any existing, new or reconstructed stationary RICE with a site rating of more than 500 hp. The 896 hp Caterpillar engine, once installed, is an emergency stationary RICE and therefore only has to meet the initial notification requirements of §63.6645(d).

Periodic Monitoring:

PacifiCorp installed continuous emission monitoring (CEM) systems on units 1, 2, and 3 to measure emissions of SO_2, CO_2, O_2, NO_X, and stack gas flow to satisfy the Title IV Acid Rain provisions of the 1990 Clean Air Act Amendments. Continuous opacity monitors (COMs) were installed on units 1 and 2. On 2/19/04 EPA granted exemption from the COM requirement for unit 3. For periodic opacity monitoring on unit 3, a Method 9 certified opacity observer is required to evaluate visible emissions from the stack daily and conduct a Method 9 observation if emissions approach the limit for this source. A Method 9 observation is required at least once per quarter.

Units 1, 2, and 3 are Phase II units under the Acid Rain Program and must operate in compliance with an Acid Rain Phase II Permit Application. The Acid Rain Permit provides NO_X limits and SO_2 allowances for each unit, and monitoring, recordkeeping, and reporting requirements are included in the Acid Rain Permit Application which is attached as an Appendix to the permit. Certified CEMs produce SO_2 and NO_X data for the Clean Air Marketing Division of EPA, and the State. All three units are included in PacifiCorp's NO_X averaging plan.

Weekly visible emissions observations will be conducted to monitor allowable emissions from the coal handling baghouse not subject to CAM (unit 7). Periodic monitoring for the diesel fired emergency equipment consists of annual Method 9 observations and monitoring and maintenance according to the plan attached as an Appendix to the permit.

Compliance Assurance Monitoring:

Compliance assurance monitoring (CAM) is required for particulate emissions from each of the boilers. For units 1 and 2, the certified COMs will be used as an indicator of compliance with the opacity limit and as an indicator of compliance with particulate emission limits under CAM. For unit 3, quarterly Method 9 observations and daily observations will serve as monitoring for stack gas opacity. Continuous parameter monitoring of the power input to the ESP will serve as an indicator of compliance with the particulate emission limit under CAM. Daily visible emission observations will be conducted for the coal handling facility baghouses subject to CAM.

Amendement:

According to an e-mail from Jim Doak of PacifiCorp dated November 13, 2007, Unit 3 commenced construction in 1969. The opacity limit for Unit 3 reflects this date.

Amendment:

The permit is being re-noticed because of changes to the NO_X averaging plan.