Owens, Mike

From: Eric Olsen [eolsen@deseretpower.com]
Sent: Thursday, April 03, 2014 2:56 PM
To: Owens, Mike
Cc: Rothery, Deirdre; Laumann, Sara; Dave Crabtree; Gene Grindle
Subject: RE: Compliance Assurance Monitoring
Attachments: Bonanza CAM Plan-Draft (4-3-14).pdf

Mike,

Per your request and pursuant to 40 CFR 64, I've attached a draft copy of our proposed CAM Plan. Please confirm receipt.

Let me know if you have any questions or comments.

Thanks,

Eric C. Olsen, P.E.
Environmental Compliance and Process Superintendent
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Bonanza Power Plant
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From: Owens, Mike [mailto:Owens.Mike@epa.gov]
Sent: Wednesday, February 26, 2014 1:58 PM
To: Eric Olsen
Cc: Rothery, Deirdre; Laumann, Sara
Subject: Compliance Assurance Monitoring

Eric,

This is to inform you that, after further considering applicability of the Compliance Assurance Monitoring (CAM) rule at 40 CFR part 64, EPA has determined that the Bonanza plant is subject to CAM with respect to particulate matter and PM10 emission limits for Unit 1. Those limits are 0.0297 lb/MMBtu for particulate matter and 0.0286 lb/MMBtu for PM10.

Please see the attached letter that our office wrote to Deseret Power on March 30, 1999. The letter requests that Deseret Power examine 40 CFR 64.2 to determine applicability of the CAM rule and, if subject, submit the information required under 40 CFR 64.4, which we typically refer to as a "CAM plan." 40 CFR 64.5(a) states that the information required under 40 CFR 64.4 must be submitted as part of the Part 71 permit application, if the application has not been filed by April 30, 1998, or has not yet been determined complete by the permitting authority by that date. Deseret Power first submitted a Part 71 permit application to EPA in March of 2000. The application did not include a CAM plan.

The updated Part 71 permit application submitted by Deseret Power on April 3, 2012 also did not include a CAM plan. Instead, the application states that Part 64 does not apply to Unit 1 because it is exempted from CAM under 40 CFR 64.2(b)(iii) and 64.2(b)(vi). (These citations should actually be 64.2(b)(1)(iii) and (vi).) The first exemption, at 64.2(b)(1)(iii), says the requirements of Part 64 shall not apply to any of the emission limitations or standards under the Acid Rain Program. For Bonanza Unit 1, Acid Rain Program emission limitations or standards exist only for SO2 and NOx,

not for particulate matter or PM10. The second exemption, at 64.2(b)(1)(vi), says the requirements of Part 64 shall not apply to any emission limitations or standards for which the Part 71 permit specifies a continuous compliance determination method. For Bonanza Unit 1, continuous compliance determination methods are specified in the draft 2002 Part 71 permit only for SO2 and NOx, not for particulate matter or PM10. No requirements have come into effect since 2002 that specify continuous compliance determination methods for particulate matter or PM10 at Bonanza Unit 1.

The three criteria for determining whether a pollutant-specific emitting unit (PSEU) is subject to Part 64 are laid out in 64.2(a). For particulate matter and PM10, Bonanza Unit 1 meets all three criteria. Therefore, it will be necessary for Deseret Power to submit a CAM plan for particulate matter and PM10 emissions from Bonanza Unit 1. Please do so if at all possible within the next 30 days. If there is any reason why you need more time, please notify me. If you would like some orientation on the CAM rule or examples of CAM plans, please feel free to let me know. You might find the CAM Guidance Document to be helpful as well. It has some examples. It's at www.epa.gov/ttn/emc/cam.html.

Thank you for your cooperation.

Mike Owens
Environmental Engineer
Air Program
EPA Region 8
303-312-6440

Appendix ___ Bonanza Unit 1 Particulate Compliance Assurance Monitoring Plan

1. Background:

a. Emissions Unit Identification

Deseret Generation & Transmission Co-operative
Bonanza Station – Unit 1
Uintah County, Utah
Emission Unit ID 1-1 (10100201)

b. Applicable Regulations, Emission Limits, and Monitoring Requirements

(i) Applicable Regulation: 40 CFR Part 60, Appendix A, Methods 1-5 and 19 (PSD-UO-0001-2000, 40 CFR 60.42a(a)(1)); 40 CFR 60 appendix A, Methods 1, 2, 3, 4, 201, 201a and 19 or other methods approved by the administrator (PSD-UO-0001-2000, 40 CFR 60.42a(a)(1)).

(ii) Emission Limit: 0.0297 lb/mmBtu for particulate matter and 0.0286 lb/mmBtu for PM10

(iii) Compliance Method: 3-run RM5 Test (particulate matter)* (see requirement to install PM CEMS set forth in Part 2 of this Appendix ___ below).

c. Control Technology Description

Flyash and other particulates created by the coal combustion are removed by a fabric filter baghouse. The baghouse consists of two separate sections with twelve compartments each. Each compartment has 450 bags for a total of 10,800 bags. Ducting in the baghouse allows for use of any combination of compartments at any time and under normal circumstances both section of the baghouse are in use at the same time and all compartments other than those undergoing maintenance or repair are on line.

2. Particulate CAM Plan Approach and Performance Indicators

Opacity

Opacity is a key performance indicator for assuring compliance with the PM limit. Opacity is measured on a continuous basis by an opacity monitor installed in two ducts between the baghouses and the ID fans. Opacity is monitored at these duct locations due to the wet stack. Data from the two opacity monitors are used to calculate the stack opacity to demonstrated compliance. Annual performance testing is conducted to calculate filterable PM, which consists of three Reference Method 5 performance tests. These three tests are typically conducted within 48 hours.

Opacity has never exceeded 20% during a Bonanza Unit 1 PM compliance test that demonstrated compliance with the particulate emission standard; therefore, it is appropriate to use a 20% daily opacity

indicator as assurance that the unit is in compliance with applicable PM emission limits. Previous PM stack test results are as follows:

Year	Filterable Method 5 (lb/mmBtu)	Opacity (%)
2004	0.006	1.2
2005	0.009	3.1
2006	0.006	7.3
2007	0.006	3.2
2008	0.005	5.3
2009	0.004	6.1
2010	0.004	3.5
2011	0.005	5.6
2012	0.009	3.1
2013	0.006	2.8

The annual performance tests have indicated that the PM standard is met whenever opacity is 20% or less. On this basis, the PM standard is considered met when opacity is ≤20%, except for one six-minute period per hour of not more than 27% opacity, as determined by the COMS equipment. EPA Method 9 (50 CFR 60, Appendix A) may be used when the opacity COM equipment is not operating. (PSD-UO-0001-2000, 40 CFR 60, 42a(b)). Opacity levels in excess of 20% due to malfunction of the control equipment shall be treated as a malfunction for purposes of the PM CAM Plan.

Operator shall adhere to the conditions of the Title V Operating Permit for opacity monitoring, maintenance, calibration, and record keeping.

The Opacity COMS shall be used to demonstrate compliance with the particulate emissions limitations contained in the Title V Operating Permit, subject to the following provisions of this Bonanza Unit 1 Particulate CAM Plan.

Particulate Monitoring

Notwithstanding the foregoing, within 12 months after the effective date of the Title V Operating Permit for Bonanza Unit 1, a system of continuous or virtually continuous emissions monitoring equipment for particulate matter (the "PM CEMS") shall be installed and maintained at Bonanza Unit 1 for the limited purpose of providing another performance indicator to the Bonanza Unit 1 Particulate Compliance Assurance Monitoring Plan.

1. The PM CEMS shall be installed according to the manufacturer's standards.

2. An initial calibration/correlation test shall be performed on the PM CEMS prior to finalizing the installation using three Reference Method 5 runs in similar fashion as the annual RM5 Test. Correlation means the primary mathematical relationship for correlating the

output from the PM CEMS to a PM concentration, as determined by the PM reference method. The correlation is expressed in the measurement units that are consistent with the measurement conditions (e.g., lbs/mmBtu) of the PM CEMS.

3. For purposes of the Bonanza Unit 1 PM CAM Plan, after the installation of the PM CEMS, a CAM Plan excursion is defined as anytime the average PM reading from the PM CEMS exceeds 0.0297 lb/mmBtu (particulate matter) over a continuous period of 90 minutes, excluding intervals and events when the control equipment experiences a malfunction.

4. A zero and span check/calibration of the PM CEMS shall be performed daily. The PM CEMS will be adjusted, if needed, according to manufacturer's standards. Also, this check/calibration and/or adjustment could be a corrective action as defined in number 6 and must be accomplished after any PM CEMS maintenance activity.

5. On an annual basis, the calibration of PM CEMS shall be verified using Reference Method 5 (three runs). If the average of the three reference runs differs from the PM CEMS by plus or minus 25% or more of the CAM Plan excursion limit, then the PM CEMS will be biased plus or minus to match the reference tests average. No RM5 testing shall be required to be completed during winter months, inclement weather conditions, at time(s) when the unit is offline, or under any conditions that could pose unnecessary or unreasonable risk to personnel conducting such test(s).

6. If a CAM Plan excursion is shown by the PM CEMS, as defined in number 3, corrective action will be taken immediately to correct the excursion. The corrective actions are not limited and could include a calibration and adjustment as mentioned in number 4. If an excursion still exists after corrective actions are taken, a mandatory Reference Method 5 test (three runs) shall be conducted under unit operating conditions representative of the CAM Plan excursion as soon as possible to verify the PM CEMS. The verification testing enumerated in item number 5 above will then be undertaken without undue delay at a time when conditions (including weather conditions) permit. If the excursion still exists after the verification and/or adjustment of the PM CEMS, the unit will be taken out of service until the operator determines that the issue is resolved and it can comply with this plan.

The operator will maintain records of its PM CEMS monitoring data and maintenance. Once PM CEMS has been added as another performance indicator to the Bonanza Unit 1 Particulate CAM Plan, DGT agrees to provide to EPA, upon EPA's request, PM CEMS data for Bonanza Unit 1 with measurements in lb/mmBtu averaged daily for the requested time period. If EPA requests this data to be submitted continuously, it will be submitted with the Part 60 quarterly report by the 30th of the month following the end of the quarter.

This use of PM CEMS as an additional Bonanza Unit 1 Particulate CAM Plan performance indicator shall not be subject to EPA Performance Specification 11 for PM CEMS.

Installation and use of PM CEMS as a Particulate CAM Plan performance indicator at Bonanza Unit 1 is proposed and will be done for purposes of settlement and/or avoidance of potential issue(s) in dispute between the operator and EPA, and such use in this Bonanza Unit 1 Particulate CAM Plan is not required under Title 40 CFR or "pursuant to other authority under the Clean Air Act or state or local law," as addressed in 40 CFR § 64.3(d). The foregoing statement shall not be construed as an admission or deemed to be an acceptance by the EPA that PM CEMS are not otherwise required at Bonanza Unit 1.

If EPA or Deseret determines in connection with a future proposed operating permit modification or renewal that the data generated from PM CEMS are no longer a useful component of the Bonanza CAM Plan, Deseret may propose a CAM Plan revision and nothing in this CAM Plan shall be construed to prevent or prohibit Deseret or EPA from adopting any such modification.