Owens, Mike

From: Owens, Mike
Sent: Friday, April 11, 2014 4:54 PM
To: 'Eric Olsen'
Cc: Rothery, Deirdre
Subject: RE: Compliance Assurance Monitoring

Eric,

I sent your proposed CAM plan to our CAM experts at EPA's Office of Air Quality Planning & Standards and received some comments, which I am passing on to you. I would appreciate your response as soon as possible:

1. The proposed CAM plan does not indicate whether the emission limits are only for the filterable portion of PM.

EPA comment: Since the limits in conditions 24.A and 24.B of the 2001 PSD permit are only for the filterable portion (i.e., there is no requirement in those conditions to test for condensable particulate matter), the CAM plan should indicate that the emission limits are for filterable PM and filterable PM10. We note that RM5 and PM CEMS only measure the filterable portion.

2. The proposed CAM plan identifies opacity as the key performance indicator, prior to installation of PM CEMS.

EPA comment: EPA is concerned that the correlation data in the CAM plan do not support the choice of opacity as the key indicator prior to installation of PM CEMS. EPA acknowledges the apparent high margin of compliance for PM (highest PM level is 3.3 times lower than the limit), but EPA is reluctant to have the CAM plan rely on COMS information as the sole indicator of emission compliance, prior to installation of PM CEMS, particularly when the correlation between opacity and mass PM is low ($r^2 = 0.15$), opacity values increase more than six times for the same PM emissions level (0.006), and the opacity trigger level (20%) is 2.5 times higher than the highest test value. Moreover, a linear relationship obtained from the test data suggests that opacity levels drop as PM emissions increase. See the graph at the bottom of this email. EPA questions whether some other monitoring parameter might be better (e.g., number of baghouse compartments in service, or wet scrubber parameters).

3. The proposed CAM plan defines an excursion, after installation of the PM CEMS, as "any time 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."

EPA comment: 0.0297 is the emission limit for total PM, but the emission limit for PM10 is lower, at 0.0286. Since PM CEMS does not differentiate particle size, EPA does not see how PM CEMS can be used to also assure compliance for PM10 unless everyone agrees that total PM = PM10. Given this situation, the CAM plan would need to define an excursion as a PM CEMS reading in excess of 0.0286 lb/MMBtu, not 0.0297 lb/MMBtu. Also, there is no explanation why a continuous period of 90 minutes was chosen. This should be explained. Also, the phrase about excluding malfunctions should be deleted. A key objective of CAM monitoring is to identify periods when the control equipment is malfunctioning, so that it can be restored to its normal or usual manner of operation as expeditiously as practicable. Excluding control equipment malfunctions from the definition of an excursion is contrary to that objective.

4. The proposed CAM plan says that "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."

EPA comment: EPA does not agree. Performance Specification 11 (PS11), not Reference Method 5, explains how a correlation can be developed. We would normally expect PS11 to be specified. It is not clear why Deseret Power does not want to rely on PS11. No explanation has been provided.

5. The proposed CAM plan says "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."

EPA comment: EPA disagrees with this statement. No explanation has been provided why Deseret Power does not want to rely on PS11. As we stated above, PS11 explains how a correlation can be developed. We would normally expect PS11 to be specified. This statement about not being subject to PS11 should be deleted.

6. The proposed CAM plan says "If the average of the three runs differs from the PM CEMS reading by more than 25% of the PM or PM10 emission limit, then the PM CEMS shall be biased plus or minus to match the RM5 test average."

EPA comment: EPA does not see why this needs to be done. If the PM CEMS is correlated per PS11, this situation will not occur. If the PM CEMS is used as a PM CPMS (per the MATS rule), then the use of a scaling factor, where appropriate, would be allowed. Why do something different here?

7. The proposed CAM plan says "If the PM CEMS still shows an excursion existing after the verification and/or adjustment of the PM CEMS, the PM CEMS will be replaced or repaired to read accurately in order to comply with this plan."

EPA comment: This language is unclear. Replace with what? Another PM CEMS? Or give up on PM CEMS entirely and install something else? Is there some misconception that PM CEMS cannot be relied upon to work? Previous paragraphs in the proposed CAM plan already provide for calibration and adjustment of the PM CEMS. If the PM CEMS is still showing excursions, why shouldn't the baghouse be checked again to see if something is wrong with it, rather than just assume that something is wrong with the PM CEMS? We recommend this sentence in the CAM plan be deleted.

8. The proposed CAM plan indicates that annual performance testing for filterable PM consists of three RM5 performance tests, but does not indicate the duration of the performance test.

EPA comment: The duration of the test runs should be indicated.

9. The last two paragraphs of the proposed CAM plan contain statements that appear to be certain types of savings clauses about "... purposes of settlement and/or avoidance of potential issues(s) in dispute... " as well as "... shall not be construed as an admission or deemed to be an acceptance..." as well as a statement about the prospect that EPA might determine "that the data generated from the PM CEMS are no longer a useful component of the Bonanza CAM Plan."

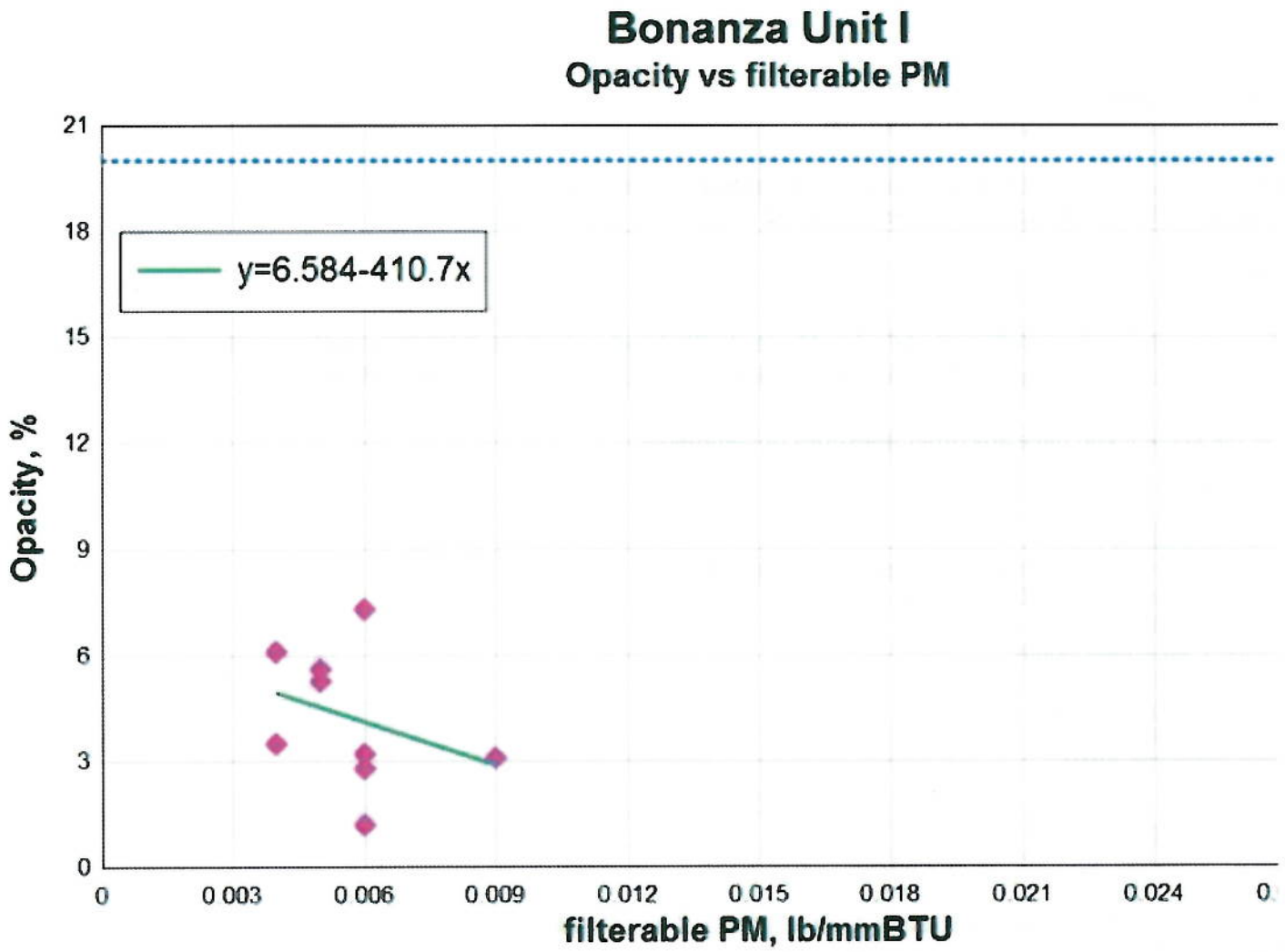
EPA comment: These statements have no bearing on what CAM requirements need to go into the title V operating permit. The requirements that need to go into the permit are laid out in 40 CFR 64.6(c). We recommend these two paragraphs be deleted from the CAM plan, but in any event what we include in the permit will be as laid out in 40 CFR 64.6(c).

Finally, to simplify things, we recommend that the MATS rule be examined for PM monitoring requirements that might also satisfy CAM purposes. The MATS rule requires demonstration of compliance with metals (or PM) limits. Although we recognize there may be some lag time before the MATS requirements go into effect, perhaps that monitoring or testing could be incorporated into the CAM plan.

Feel free to call me to discuss. I would like to resolve any issues by late April, so that we can get a draft title V operating permit out to public comment by May 1.

Mike Owens
Environmental Engineer

Air Program
EPA Region 8
303-312-6440



From: Eric Olsen [mailto:eolsen@deseretpower.com]
Sent: Thursday, April 10, 2014 2:36 PM
To: Owens, Mike
Cc: Rothery, Deirdre; Laumann, Sara; Dave Crabtree; Gene Grindle
Subject: RE: Compliance Assurance Monitoring

Mike,

Per your request, I've incorporated some language from 40 CFR 64.7(d)(1) to Bonanza Unit 1's CAM Plan. Please confirm receipt of this revision.

Let me know if you have any other questions or comments.

Thanks,
Eric C. Olsen, P.E.
Environmental Compliance and Process Superintendent
Deseret Power Electric Cooperative

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From: Eric Olsen
Sent: Wednesday, April 09, 2014 4:01 PM
To: 'Owens, Mike'
Cc: 'Rothery, Deirdre'; 'Laumann, Sara'; 'Dave Crabtree'; Gene Grindle
Subject: RE: Compliance Assurance Monitoring

Mike,

Per your voicemail you left me last Friday, I have clarified and revised the CAM Plan section you questioned. The revised copy is attached and supersedes the one I emailed you on April 3, 2014. Please confirm receipt.

Let me know if you have any other questions or comments.

Thanks,
Eric C. Olsen, P.E.
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From: Eric Olsen
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

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.
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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
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