Valdez, Heather

From: Valdez, Heather
Sent: Tuesday, August 27, 2013 2:04 PM
To: Sally McLeod; Hunter, Jeffrey (Perkins Coie); Michael Short; Rosburg, John; Chris Kennedy
Cc: Hedgpeth, Zach; Jones, Toni; Pavitt, John

Categories: Pogo FOIA

Hi Sally, This is to follow up on the meeting we had last week. It was good to meet with you all and I think a lot was accomplished. I hope you enjoyed your time in Seattle and had a safe journey home.

I wanted to provide you with Zach's detailed recommendations for modifications to the petition informally, by email to be as quick as possible, so that you had those in writing to review as you prepare a new petition. As we discussed acting quickly on this will help to give me time needed to route an official response to the petition in time for the next planned source test.

Here are the things that we discussed that should be addressed:

1. *Waste composition.* The petition states that the facility keeps records of the weights of each type of waste loaded during each burn cycle in order to demonstrate compliance with 40 CFR 60.2145(d), which requires that "you must burn only the same types of waste used to establish operating limits during the performance test." Quantified limits on the proportional composition of waste in each charge, or over a reasonable averaging period, should be included as an operating parameter under the NSPS. Waste composition is one of the most significant factors impacting incinerator performance, and limits ensuring that the incinerator continues to be operated in a manner similar to its operation during the performance test should include specific waste composition limits. Since the facility already collects and records the weight of each type of waste included in each charge to the incinerator, the data collection described should be sufficient to calculate the proportion of each charge comprised of each type of waste by weight. The range of waste compositions in each charge during testing would be used to establish the acceptable ranges for each waste stream. Specific waste categories should be established which include descriptions of each waste stream and identification of the types or sources of waste which are included in each.
2. *Data collected during June 28-30, 2013 testing must be provided.* As stated in the opening paragraph to the revised petition cover letter, Pogo relied upon and incorporates data collected during the recent emission testing in the revised petition, yet none of the emissions or parametric data collected during the testing has been provided. A rigorous review of the petition is not possible without this data.
    a. *Relationship between proposed parameters and emissions.* The revised petition includes only limited information addressing the requirements of 40 CFR 60.2115(b) and (c), which require that the petition include information discussing the relationship between the proposed operating parameters and emissions, including how the proposed limits on these parameters will serve to limit emissions of regulated pollutants and how the acceptable ranges or minimum/maximum values for the parameters were set. Considering that the recent testing conducted June 28-30, 2013 forms a significant portion of the basis for the proposed operating parameters and limits, submittal of detailed information and data collected during the June testing which documents the proposed parameters and their values during the testing, along with measured emission values would constitute a

significant body of information addressing the requirements in these sections. Pogo must submit the emissions and parametric data collected during the June testing, along with an explanation of how the data was used to develop the proposed parameters and associated limits.

b. *Context of Initial Compliance Testing was not provided.* Since Pogo has not provided the results of the unofficial emission testing conducted at the end of June, the specific context within which the initial compliance testing for purposes of the NSPS is unclear. Since Pogo has submitted a revised petition, it appears that the June test results indicate that the incinerator may be able to comply with the NSPS limits without add-on air pollution control equipment; however, this is an assumption. Pogo should provide the data from the June testing and clearly state their expected path forward and clarify the context within which the initial compliance test will be conducted.

3. *Management of parametric data.* The petition does not explicitly state which method will be used to record, process, and store the parametric data used to establish compliance with the parametric operating parameter minimum and/or maximum values. The petition should state whether the data will be manually recorded or whether an automatic data acquisition and recordkeeping system is proposed or currently in use. Use of an automated data acquisition system for the parameters proposed under the NSPS is strongly preferable to manual recording, which cannot realistically meet the requirement for continuous monitoring. The specific details regarding data management, specifically including data collection frequency and calculation of averages over specific periods of time should be addressed.

4. *Terminology for maximum/minimum parameter values.* On the third page, the revised petition describes the proposed minimum and/or maximum values for each parameter using the language from the NSPS, specifically describing minimum values as "lower" values and maximum values as "higher" values. The NSPS terminology appears to envision the establishment of acceptable ranges for operating parameters, thus the use of the terms "lower" and "higher". When establishing a single value which will function as a minimum or maximum value for an operating parameter, use of the "lower" and "higher" terminology can be confusing. The petition should be revised to clearly establish each parametric value which is not part of a range as a "minimum" or "maximum" value for clarity.

5. *Primary and secondary combustion chamber temperatures.* The revised petition proposes a minimum primary combustion chamber temperature of 1,500° F, a minimum secondary combustion chamber temperature of 1,800° F, that the temperatures be recorded roughly every 5 minutes during the burn cycle, and that compliance with the minimum temperatures be determined by calculating one-hour block average temperatures.

   a. On page 2 of the cover letter, Pogo states that the proposed operating parameters will be continuously monitored, but then attempts to define continuous monitoring as discontinuous data recording at specific intervals. This definition of continuous monitoring is not valid. In order to comply with the NSPS, the parameters must be continuously monitored, which means that each parameter has an instantaneous reading available at all times. The data reduction, processing, and recording are separate issues from continuous monitoring. Recording of temperature data every 5 minutes is reasonable, but these should reflect 5-minute average temperatures rather than "snapshot" or instantaneous temperature readings recorded every 5 minutes. Snapshot readings taken every 5 minutes can miss significant temperature swings while a 5 minute average will reflect the actual temperature variation during each 5 minute period.

b. Calculation of one-hour average temperatures reflects a change from the standard 3-hour block average specified in the NSPS. The use of a one-hour average is more appropriate for the Pogo incinerator, given the relatively short burn duration. However, it will be necessary to recognize that EPA is agreeing to a change from the NSPS standard averaging time. The monitoring approach should also use one-hour rolling average values rather than block averages.

c. Table 1 near the end of the petition lists the minimum primary combustion chamber temperature at 1,400° F, which appears to be a typographical error. The temperature should be revised to 1,500° F to be consistent with other citations in the revised petition.

6. *Primary and secondary chamber burn times.* The revised petition proposes a primary burn time of 5 hours, a secondary burn time of one hour, and that the burn times will be monitored using a digital clock. The primary burn time will begin at the time of the final waste charge, and the secondary burn time will begin at the end of the primary burn cycle. These burn times are consistent with previously submitted information. Page 1 of the petition contains a confusing statement that should be clarified or corrected. The petition states "Secondary Combustion Chamber Burn Time Limit: Minimum = 1 hour burn time = 5 hours after the end of the primary burn cycle". In order to be consistent with other statements in the revised petition and cover letter, this should say "1 hour after the end of the primary burn cycle".

7. *Waste load interval.* The revised petition proposes a waste load interval of 15 minutes and that the monitoring device will be a digital clock. Each load interval will begin when waste is charged to the primary combustion chamber and the charge door is closed, and end when the charge door is opened to admit the next load. The proposed burn interval of 15 minutes is consistent with previously submitted information. The facility should clarify the precise event that signifies the beginning of each load interval. The petition is not clear whether the load interval begins when waste is charged or when the charge door is closed. It seems reasonable that the charge interval begin when waste is charged. A specific action that may be appropriate would be activation of the charge ram.

8. *Waste load weight limit.* The revised petition proposes that the weight of each load be determined with an electronic floor scale are recorded prior to the waste being charged into the incinerator. The petition states that the proposed waste load weight limit of 60 pounds (lbs) is 40% of the manufacturer's maximum design capacity. At a charge interval of 15 minutes, this would result in a maximum design capacity of 600 lbs/hour. Information documenting the manufacturer's maximum design capacity has not been submitted. The first footnote on page 1 of the revised petition states that "in practice, Pogo limits the batch load weight to 45 lbs or less". The initial compliance testing must be conducted at the proposed maximum charge weight of 60 lbs per charge, if that is to be the maximum charge weight.

9. *Stack gas flow rate.* The revised petition explicitly excludes stack gas flow rate as an operating parameter under the NSPS. The exclusion is based on stack gas flow rate data collected during the testing conducted June 28-30, 2013 which apparently shows minimal variation over many hours. No data from the cited testing has been submitted in support of the petition, so rigorous evaluation of this issue is not possible at this time.

Thank you for your attention to these details, considering the planned timing of your test, it will be my top priority to turn around a response as soon as I receive a corrected petition. Let me know if you have any questions about these details or anything else with the process going forward.

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R10 RICE Website, Engine Compliance Assistance
http://yosemite.epa.gov/R10/airpage.nsf/Enforcement/rice_rules

Boiler Area Source Compliance Assistance
http://www.epa.gov/boilercompliance/

Department of Energy Website on Energy Assessments
http://www1.eere.energy.gov/manufacturing/tech_deployment/energy_assessment.html

Non-Hazardous Secondary Materials
http://www.epa.gov/epawaste/nonhaz/define/index.htm

Combustion Regulatory Actions
http://www.epa.gov/airquality/combustion/actions.html

Boiler TTN Page
http://www.epa.gov/ttn/atw/boiler/boilerpg.html

RICE TTN Page
http://www.epa.gov/ttn/atw/rice/ricepg.html

Combustion Portal (compliance assistance for combustion regulations)
http://www.combustionportal.org/
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