

Ask CAMD Webinar
September 18, 2018
1:30-3:00 pm

On Tuesday, September 18, 2018, the Clean Air Markets Division (CAMD) held an informational webinar to discuss emission monitoring and reporting (40 CFR part 75) and the Emissions Collection and Monitoring Plan System (ECMPS). The purpose of the webinar was to provide industry with an opportunity to ask CAMD staff any questions they may have about the regulation or the reporting software.

The webinar was led by Jeremy Schreifels. Other CAMD presenters included Charlie Frushour, Jenny Jachim, Jason Kuhns, Louis Nichols, Edgar Mercado, Andrew Reighart, Kenon Smith, and Chris Worley.

I. Introduction

Jeremy Schreifels, Branch Chief of the Emissions Monitoring Branch, welcomed the attendants and gave an overview of the goals of the session. The goals included providing an update on current and future CAMD activities and programs, and starting a dialogue between industry stakeholders and CAMD staff where industry can raise issues and have their questions answered.

1. CAMD/EMB Update on Current and Future Projects

CAMD is working to update the field audit manual. This document is an available resource for states and sources. The updates will include specific checklists for different monitoring methods. CAMD encourages sources to self-audit using the field audit manual as a guide.

CAMD is working on changes to the feedback reports from submissions made via ECMPS. In the 2018Q1 release the word “error” was removed from non-critical messages and some messages were reclassified. More changes will come in future releases to reorganize the feedback report and include more helpful informational messages.

The reporting of MATS PDFs via ECMPS has been extended through July 1st, 2020. When the proposed rule for streamlined E-reporting is finalized, CAMD will implement changes to ECMPS to allow the reporting of all MATS data in XML format.

CAMD is working towards making ECMPS easier for industry to use. An IT contractor – 18F – will begin conducting interviews with DAHS vendors and industry users to determine what challenges exist and how those might be addressed. Anyone who is interested in being interviewed or otherwise providing input should contact Chris Worley (worley.christopher@epa.gov). There are also plans for a session to gather user feedback at the EPRI CEMS User Group Conference in May 2019.

CAMD plans to have more ECMPS training available in the future. This will include a session at the EPRI CEMS User Group Conference in May 2019.

CAMD is working on updates to parts 72 through 78 of the code of federal regulations to better reflect the current state of the industry. These updates will include a clean-up of out-of-date provisions, eliminate the need for petitions for some monitoring methods and activities, and provide clarifications in some sections. The changes will be proposed and open for public comment before they are finalized.

The EPA Office of the Inspector General has begun an audit of CAMD's quality assurance activities. This includes a close look at both the quality assurance checks in ECMPS, the internal quality assurance analyses CAMD performs on submitted data, and field audit activities from EPA and state agencies.

2. Available Resources

There are several resources available online for industry and state stakeholders. The CAMD webpage (<https://www.epa.gov/airmarkets>) contains links to technical information, such as the field audit manual and white papers, in addition to the rule and reporting instructions. The ECMPS Support website (<https://ecmps.camdsupport.com/>) contains reporting documentation, tutorials, and information about future updates and known issues.

II. Participant Questions and Comments

Participants were given the opportunity to submit questions prior to the Ask CAMD session. CAMD staff addressed submitted questions first, then took questions from the chatbox within the webinar and from the phone.

Pre-submitted Questions:

1. For the flow-to-load checks, the reporting instructions state that records should not be reported for redundant backup systems not used for reporting during the quarter. If this approach is taken and the redundant backup flow monitoring system is used (without an unbroken chain of quarterly usages post-RATA), ECMPS generates an informational message that QA status cannot be determined with respect to the flow-to-load tests. Would it just be easier to allow reporting of flow-to-load records for all flow monitoring systems for a given QA operating quarter, regardless of whether a given flow monitoring system was actually used during the quarter? It seems like this would eliminate the informational message, which must then be explained the DR/ADR during the quarterly EDR review process.

Answer: The reporting instructions state that a flow-to-load check from a redundant backup flow monitor should not be reported unless data from that analyzer are used in the emissions file for that quarter. The approach suggested in the question may require a rule change and would require programming changes since only one data stream per parameter is reported in an hour.

2. Please clarify the GCV sampling (Section 2.3.7(c)(1)) as it applies to multiple samples per month. The rule states "if the actual monthly value is to be used in the calculations and only one sample is taken, apply the results starting from the date on which the sample was taken. If multiple samples are taken and averaged, apply the monthly average GCV value to the

entire month.” We get the daily GCV values from the PNG vendor and calculate for the arithmetic average for the month. So if we have the monthly average for March, do we apply this March GCV value for the entire month of March or for April? We obtain the full month results after the end of each month.

Answer: The arithmetic average should be applied to the month in which the samples were taken. In this example, the arithmetic average would be applied to the month of March.

3. SO₂ Emission Factor for Natural Gas - can we use the default SO₂ emissions factor of 0.0006 lb/MMBTU for natural gas?

Answer: Any gaseous fuel may use the default SO₂ emission factor of 0.0006 lb/mmBtu provided it meets the definition of pipeline natural gas found in 40 CFR 72.2. Sources should note that in addition to the differences between the definitions of natural gas and pipeline natural gas with regards to sulfur content (i.e., less than or equal to 5 grains of sulfur per 100 standard cubic feet for pipeline natural gas, and less than or equal to 20 grains of sulfur per scf for natural gas) they should keep in mind the first part of the definition of pipeline natural gas which states it is a “naturally occurring fluid mixture of hydrocarbons...produced in geological formations beneath the Earth's surface.”

4. If daily sulfur content is obtained from the natural gas vendor, can we wait for the whole year to be completed and use the 365 daily sulfur results to determine if the gas qualifies for pipeline natural gas or natural gas? For example, for 2017, can we wait until Jan 2018 and use all 365 days of sulfur analysis to determine if fuel falls under pipeline natural gas or natural gas?

Answer: This approach would not work because each quarterly report must be submitted within thirty days after the end of each calendar quarter. Daily sampling is not required; PNG and NG both require a minimum of one sample annually, or a sample whenever the fuel supply changes. If a source intends to conduct daily sampling, and each daily sample in a given calendar quarter meets the sulfur content requirements for PNG, then the default SO₂ value of 0.0006 lb/mmBtu can be applied. Otherwise, the source could apply the results of each daily sample and calculate the default to be used per equation D-1h found in Section 2.3.2.1.1 of Appendix D from the hour of the sample to the next subsequent daily sample.

5. Part 60 subpart Da states that a part 75 quality assured SO₂ CEMS is acceptable for part 60 monitoring; however, the part 75 Policy manual says that we still may need to perform CGAs when a low range monitor is exempted from linearity checks.

Answer: CEMS with a span of less than 30 ppm are exempt from linearity checks according to part 75. However, some permitting authorities still require part 60 CGAs for CEMS that have spans of less than 30 ppm. These CGAs should not be reported using ECMPS regardless of whether they are passed or failed. Sources should work with their permitting authorities to determine whether the part 60 CGA is required for their CEMS with spans of less than 30 ppm.

6. What are the procedures for a fuel flow meter change-out?

Answer: The electronic monitoring plan in ECMPS should be updated and submitted with the end date of the former component ID and the begin date of the new component ID. Sources should note that the quality assurance requirements are found in part 75 appendix D 2.1.6(a). The accuracy of the component should be tested prior to initial use and once every four fuel flowmeter QA operating quarters. The accuracy test may be extended for up to twenty calendar quarters with fuel flowmeter checks. However, sources should keep in mind that time ‘on the shelf’ counts towards the 20 calendar quarters.

7. Are there any major changes coming to ECMPS? Will any of the NSPS reporting go from CEDRI to reporting in ECMPS?

Answer: There are no plans to move NSPS reporting (e.g. subpart Da) to ECMPS. Such an effort would require one or more rule changes. Currently, CAMD’s priorities are the updates to part 75 mentioned earlier in the session, making enhancements to ECMPS to better serve reporters, and to add MATS reporting in XML format rather than PDF. There are not any “major” initiatives in the works, i.e. no new reporting formats or data elements are planned.

Some other planned improvements to ECMPS include changing how ECMPS tracks and evaluates data from systems and components across quarter and yearly boundaries. This is a multiphase approach that will begin with how ECMPS processes and stores the emissions data. The preliminary work for this is already underway, and will not be visible to users. The next step is some changes to the EPA host system and synchronization process. Again, this would not impact users. The final phase will include changes to checks and error messages. These will not be new requirements, but instead a more granular way of evaluating the data which will provide a better evaluation and could result in the elimination of the need to report certain claim records.

Another initiative CAMD is working on is the analysis of ECMPS mentioned in the opening remarks. CAMD is looking for users to participate in interviews and provide feedback. CAMD is working with EPRI and may have a session to gather feedback in conjunction with the EPRI CEM User Group Conference in May 2019.

8. What are the latest ECMPS updates as of Q2 2018 and moving forward?

Answer: The answer provided to the question above applies to this question as well.

9. How do we find out about ECMPS software issues? How do we report issues?

Answer: The ECMPS Support website (<https://ecmps.camdsupport.com/>) has a link under the Help column on the right to the list of [current known issues](#). This list is updated as needed throughout each reporting period and whenever a major issue is found. This list may not always include every issue, if the impact is limited to a few users then those users are

assisted directly. Users can also contact Chris Worley (worley.christopher@epa.gov) or the ECMPS Support staff to inquire about known issues or to report an issue.

10. How can I suggest changes that could be made in ECMPS to streamline manual entries in the LME monitoring plans and the LME default testing records?

Answer: Suggestions can be sent to Chris Worley (worley.christopher@epa.gov) or any of the [CAMD analysts](#) at any time. Emails with suggestions can also be sent to the ECMPS Support staff.

11. What resources are available to provide a refresher on electronic reporting with ECMPS?

Answer: Tutorials are available on the ECMPS Support website. Some of them are old but the content is still valid. As previously mentioned, CAMD is working to schedule an “ECMPS 101” session as part of the EPRI CEM User Group Conference in May 2019. Details on the session will be sent out as they become available.

12. What review is performed on data submitted through ECMPS? What or when would any feedback be given on data submitted if questionable content was found. Does every source get audited every quarter? Does every “apparent” violation of the CO₂-to-load ratio get audited?

Answer: Every ECMPS submission is checked electronically by the software before the data are submitted to EPA. The checks can be found in the list of reporting documentation on the ECMPS Support website. In general, the checks look for completeness, formatting, math, consistency with the rule, and consistency with the monitoring plans. It is important for sources to be aware of the standards and to remember that the lack of error messages does not always mean there are no issues. Data with critical errors may be submitted but is not loaded on the EPA Host. Sources that submit emissions data with a critical error have another thirty days after the end of the submission period to submit a corrected, critical error-free file. After data has been submitted, CAMD staff run automated data checks to look for unusual or inconsistent data. CAMD acknowledges that there are usually good reasons for unusual or inconsistent data, so analysts carefully review the results from the automated checks to determine if a desk audit or on-site field audit of the facility is warranted.

One example of these types of checks is the probe leak check mentioned in the question. The methodology is described in a [white paper](#) on our web site (in the monitoring section of epa.gov/airmarkets). This check is not done in ECMPS because it requires more than a single quarterly submission of emissions data along with the most recent RATA results. When a monitoring system is flagged by this check, the analysts review the data and, if CAMD cannot explain the change in emissions rate, a message is sent to the facility notifying them of what was found. This does not mean there is a problem with the data, but only that CAMD cannot explain the data and would like the facility to do some research and verify if a probe leak was found and, if so, resubmit the data using the missing data procedures.

CAMD is continuously evaluating these checks and, when necessary, adjusting them to reduce false positives. The goal with these systems is to improve data quality and ensure that emissions are not underreported.

- 13.** Is there a plan to make startup/shutdown flags for Hg sorbent trap data a requirement?
Currently, not having that flag shows up as an informational error. I've been working with the DAHS vendor to get this data into our EDRs in order to stop seeing the informational error, but I want to know if not having the flag will eventually cause a fatal error, and if so, when will that change be made?

Answer: The startup/shutdown flag is required per the MATS rule. There are no plans at this time to make this check result a critical error.

- 14.** When does an informational message become a critical error and how far in advance is it determined?

Answer: CAMD attempts to telegraph to users when informational messages will be changed to critical errors. If CAMD finds a data discrepancy that results in a new check, the error severity is set to informational when the check is first implemented. After the check has been included in an update, CAMD evaluates the check to ensure that the check is performing properly and no false positives appear. Also, CAMD reviews the number of submissions made that have the new check result. When it seems the check is working as intended and sources have made corrections to limit the number of files submitted with the informational messages, the severity is increased if warranted. CAMD will continue to be proactive in communicating severity level changes to industry by using the ECMPS News, Release Notes, etc.

- 15.** What steps should be taken to resolve errors in an ECMPS submission?

Answer: Sources should review the reporting instructions, Part 75 Policy Manual, and the regulatory text to gain an understanding of the issue. If users still have questions, or do not understand after reviewing the available resources, they should contact ECMPS Support and/or their [CAMD analyst](#). If the error message is difficult to understand, sources should feel free to contact CAMD with a description of what is unclear, and can include suggestions for how to change the wording to make the message more easily understood.

- 16.** How is the ECMPS database backed up and purged?

Answer: There is a Configuration Utility tutorial on the ECMPS Support website that describes how to back up a standalone database and instructions for how to purge a standalone database. Sources should note that just performing a purge will not shrink the database size. The backup process will shrink the database. Users with shared databases should have a database administrator perform these types of tasks. Users should feel free to contact ECMPS Support with any questions.

17. How do the various reporting requirements and systems interact?

Answer: We can look at that question from two perspectives. The first is streamlining reporting by using part 75 data to meet other reporting requirements. There are several federal and state programs that accept part 75 data for most or all of the reporting obligation for a part 75 reporter. Some examples include EPA's Greenhouse Gas Reporting Program (GHGRP) and the Regional Greenhouse Gas Initiative (RGGI). The GHG program copies over part 75 data and prefills the e-GRRT emission reports with that data. RGGI copies over the CO₂ emissions data to meet the reporting obligation for most sources. The second way to look at it is the interactions of the reporting tools. The only notable integration between the various reporting systems that exist is the transmission of MATS PDF reports to CEDRI.

In 2008, there was a considerable effort to harmonize part 75 and part 60 to reduce the monitoring and reporting burden on reporters.

Questions Posed During the Session:

1. Can you provide a timeline for EPA CAMD to evaluate if any CSAPR state is subject to the assurance provisions for CY 2017?

Answer: The assurance provisions were not triggered for any of the CSAPR programs for the 2017 control periods. If the assurance provisions are triggered for any of the programs for a future control period, EPA will follow the process and schedule as outlined in the CSAPR regulations. For example, for the CSAPR NO_x Annual program, EPA would follow the process and schedule under 40 CFR 97.425. This process includes the publication of a Notice of Data Availability, by June 1 of the year following the control period, which would identify the states for which the assurance provisions have been triggered.

EPA developed an informational fact sheet on the assurance provisions. To view or download this fact sheet, please visit https://www.epa.gov/sites/production/files/2016-05/documents/fact_sheet_assurance_provisions_0.pdf

2. Can natural gas fuel that is mixed with refined landfill gas or "renewable natural gas" still be considered "pipeline natural gas" or "natural gas" as long as it still meets the sulfur/methane/Btu content limits? If so, is there any EPA guidance?

On a similar note, could natural gas that is mixed with ethane at different concentrations still be considered "natural gas" or "pipeline natural gas" or "natural gas" as long as the blended gas meets the definitions provided in 40 CFR 72.2?

Answer: Landfill gas may meet the sulfur limitations of the definition of pipeline natural gas, but the rest of the definition in 72.2 reads "naturally occurring fluid mixture of hydrocarbons...produced in geological formations beneath the Earth's surface." Blended ethane may no longer meet the definition because it is not "naturally occurring" as required by the definition.

3. Is a unit firing a refinery fuel gas that has variable gas sources able to use a worst case F factor or would CAMD require an alternative method through a petition?

Answer: Refinery gas is not included in Table 1 of part 75 appendix F. Any fuel that is not in that table is required to go through the petition process to determine a site-specific f-factor. Individuals can follow up with Charlie Frushour (frushour.charles@epa.gov) if there are other questions.

4. Are there any plans to require the reporting of Hg calibrator certification, similar to PGVP information for calibration gas i.e. certification date/results, QA activities being conducted per the Interim Traceability Protocol?

Answer: This would require a rule change, so there are no plans to require this data. Part 63 subpart UUUUU appendix A lists line-by-line the different elements that must be reported. Additional elements cannot be added to required reporting without also being added to the rule.

5. Are there any plans for ECMPS to check the correlation between fuel flow and load to prompt a user to evaluate a discrepancy in either dataset?

Answer: CAMD has run some ad hoc audits and found some anomalies. There are no plans to add such a check at this time. CAMD recommends sources make scatterplots to pre-screen their data, but this is not required.

6. Is there a method to move ECMPS stand-alone database information into a shared database?

Answer: Data can be moved from a stand-alone database to a shared database by taking a backup of the stand-alone database and restoring to the shared database. However, CAMD notes that ECMPS is not designed for data storage. All data that has been submitted is either synced down to the Client Tool if it is needed for future evaluations, or is available in the various reports within the Client Tool.

7. What kind of changes would require an update in the hardcopy monitoring plan?

Answer: § 75.53 categorizes what data is required to be kept up to date in the hardcopy portion of the monitoring plan.

8. Which of the comment fields in the new NSPS4T data elements are required? Is it safe to assume that if the comment does not apply, the field can be left blank?

Answer: § 60.5555(a)(2) describes the situations that require a comment. In general, sources with reporting questions related to NSPS4T should contact OAQPS.

9. Usually when a new update of ECMPS is available an email is sent out. No email was sent for the 2018 Q3 update. Was that an oversight or is this the new way of doing things?

Answer: This was an oversight. An email will be sent for the 2018 Q3 ECMPS release and will always be sent when an update is available.

10. ECMPS returns some evaluation results regarding startup/shutdown flags and the use of diluent cap values, but this data is not available for viewing in the emissions module.

Answer: The values should be displayed in ECMPS.

III. Wrap Up

Andrew Reighart thanked all the attendees for their participation and encouraged those with any other questions to send them in. There will be another Ask CAMD session in early 2019 to cover items related to auctions and allowances. He reminded the attendees that CAMD is looking for volunteers to participate in ECMPS and AMPD focus groups to discuss ways to improve the software. Individuals should contact Chris Worley (worley.christopher@epa.gov) if they are interested in participating.

CAMD plans to have more part 75 monitoring and reporting training in the future. If anyone has a request for a specific topic to have a webinar or training on they should submit the request to either Chris Worley (worley.christopher@epa.gov) or Charlie Frushour (frushour.charles@epa.gov).