From: Gray, Ashley P - DNR
To: Andrea Russell
Cc: Mario Diaz; Mark Meurette; Joseph Baregi; Shelley Koehn; Connor Doede; Troy Jordan; Seeber, Andrew R - DNR; Hon, David F - DNR; Matty, Randall S - DNR
Subject: RE: Request for Additional Information CEM Excess Emission Report 3M
Date: Tuesday, February 8, 2022 2:03:33 PM
Attachments: image004.png
image010.png

Andrea,

I have reviewed the information submitted by 3M in response to my request for additional information.

The data from #4 (The date and starting and ending time of any period during which the process being monitored was inoperative) is confusing to me as I am not sure how to make sense of it compared to the calibration information provided. For example, the record provided in response to #4 states that the process was down from 12/11/2021 through 12/16/2021. The calibration record states that the process was online within this period.

12/07/2021	08:35	12/07/2021	08:54
12/11/2021	05:53	12/16/2021	13:12
12/16/2021	13:17	12/16/2021	13:30
12/16/2021	13:35	12/16/2021	13:54

12/11/2021 09:21	0.0	0.0	0.0	20.8	20.6	0.2	4.0	DIFF	Passed	
12/12/2021 09:21	0.0	0.1	0.1	20.8	20.7	0.1	4.0	DIFF	Passed	
12/13/2021 09:21	0.0	0.0	0.0	20.8	20.6	0.2	4.0	DIFF	Passed	
12/15/2021 13:20	0.0	16.8	16.8	50.0	2.1	47.9	4.0	DIFF	Failed	Yes
12/15/2021 13:25	0.0	2.1	2.1	20.8	2.1	18.7	4.0	DIFF	Failed	Yes
12/15/2021 13:29	0.0	2.1	2.1	20.8	2.1	18.7	4.0	DIFF	Failed	Yes
12/15/2021 13:33	0.0	3.0	3.0	20.8	20.2	0.6	4.0	DIFF	Maint Limit	Yes
12/15/2021 13:36	0.0	2.1	2.1	20.8	-0.1	20.9	4.0	DIFF	Failed	Yes
12/15/2021 13:40	0.0	5.7	5.7	20.8	1.9	18.9	4.0	DIFF	Failed	Yes
12/15/2021 15:22	0.0	10.2	10.2	20.8	11.2	9.6	4.0	DIFF	Failed	Yes
12/15/2021 23:31	0.0	8.9	8.9	50.0	13.1	36.9	4.0	DIFF	Failed	No

In order to understand the process, I am requesting the following information:

- All of the data used to create the downtime values (start and end times and dates of all downtime periods, the reason for downtime and the steps taken).
- An explanation of how the process downtime log matches up with the calibration log, indicating the process is online.
- The time in which autocalibration is to occur
- The process for a failed calibration (how does 3M find out, what steps are taken)
- The datalogger type and model number
- Identification of the datalogger inputs

This information is requested in accordance with s. NR 439.03(1), Wis. Adm. Code and must be submitted to this office by February 15, 2022. If you have any questions regarding this request, please let me know.

I have also provided responses to you questions below in green.

Ashley

We are committed to service excellence.
Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Ashley Gray
Cell: (715) 218-0471
ashley.gray@wisconsin.gov

From: Andrea Russell <arussell4@mmm.com>
Sent: Monday, February 7, 2022 4:42 PM
To: Gray, Ashley P - DNR <Ashley.Gray@wisconsin.gov>
Cc: Mario Diaz <mdiaz@mmm.com>; Mark Meurette <mmeurette@mmm.com>; Joseph Baregi <jrbaregi@mmm.com>; Shelley Koehn <skoehn2@mmm.com>; Connor Doede <cjdoede@mmm.com>; Troy Jordan <tjordan@mmm.com>
Subject: Request for Additional Information CEM Excess Emission Report 3M

CAUTION: This email originated from outside the organization.
Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Ashley: Thank you for the great discussion today. Please find below the information required for the full excess emission report for Q4 2021 for our Greystone Plant. Please let me know if you have any questions or need any additional information.

During our call, you had mentioned a "checkmark" on the Dec. 2021 Daily Calibration Record e-mailed to you and David on January 14th that indicated whether the dryer is online or not. I think you were referring to the "Online" column (see the attached Dec. 2021 Daily Calibration record for reference, unchanged from the January 14th submittal to DNR). You had mentioned this was irrelevant data. Per EPA guidance on Excess Emission Reports, CEMS/COMS downtime does not need to be reported when the associated process is not running (please see pdf page 25, near the bottom of the attached "EER Review"….). For that purpose, I think it's relevant information to have available while preparing Excess Emission Reports. Can you confirm that you agree that COMS downtime during process downtime is not included in Excess Emission Reports? That's how the updated Q4 2022 Excess Emissions Report has been created, so please let me know ASAP if you disagree with this. Was there another reason you thought the data was irrelevant? I want to make sure we're not missing or misinterpreting anything.

COMS downtime during process downtime is not considered downtime for reporting excess emissions. I am confused why the process being online is relevant during the calibration or to the calibration log.

Also in the same EPA guidance document (page 29 of the pdf), it is stated to not include daily zero and span calibration elapsed time in COMS downtime totals. I've prepared the revised Q4 2021 Excess Emission Report as such. Could you please provide the regulatory reference that states we should include daily zero and span calibration times in COMS downtime totals? If they are required to be included, I can revise the report and resubmit a third time and include them going forward, but I'd like to be sure on that from a regulatory standpoint as it may dictate changes elsewhere at other plants, and I see nothing to indicate inclusion is required in either the Federal or State Regulations.

The instructions on the EER form that 3M uses requires that the total minutes of downtime in the quarter due to QA/QC calibration be listed. The picture below is taken from 3M's revised submittal.

PART III. CAUSES OF CEMS DOWNTIME*

% of Operating Time Per Category: Take the downtime (mins) per category and divide by the total operating minutes in the quarter; then multiply by 100.

Monitor Equipment Malfunction: List the total minutes of downtime in the quarter due to monitor equipment malfunction.

Non-Monitor Equipment Malfunction: List the total minutes of downtime in the quarter due to non-monitor equipment malfunction.

QA/QC Calibration: List the total minutes of downtime in the quarter due to QA/QC calibration.

Other Known Causes: List the total minutes of downtime in the quarter due to other known causes.

Unknown Causes: List the total minutes of downtime in the quarter due to unknown causes.

Total CEMS Downtime: Add A...E (mins) to get the total minutes of CEMS downtime. Add A...E (% operating time) to get the total CEMS % downtime.

*CEMS downtime is not chargeable if it occurs during source downtime, but it does include out-of-control periods.

You had also mentioned that the Dec. 2021 Daily Calibration Record provided to you and David on January 14th indicated out of control periods that were not included as COMS downtime. My understanding of what out of control periods are with respect to excess emission reporting is the time during the operation of the associated process between a failed calibration and a successful calibration. You'll note a successful zero and span calibration on December 10th at 9:21 AM. On December 11th at 5:53 AM, P32 was shut down and was not restarted until 1:12 PM on December 16th. Earlier on December 16th, at 10:25 AM, the COMS failed calibration. The unit auto-calibrated appropriately at 2:00 PM on December 16th. For this instance, I counted the time from start-up at 1:12 PM until the successful calibration at 2:00 PM (48 minutes). Similarly, on 12/30/21 a failed calibration occurred at 3:07 PM. P32 was started up at 3:24 PM and ran through the next successful calibration at 3:07 PM on 12/31/2021, for a total of 1423 minutes of downtime. I have updated the Report accordingly. Please let me know if your understanding of out of control periods as COMS downtime is different than this.

After a failed calibration, it is downtime until the next passed calibration (for all periods when the process was operating).

The updated and certified Q4 2021 EER will be uploaded to Switchboard once Mark obtains Mario's signature, and a hard wet ink copy will be mailed to your attention at the DNR as I don't see an option for Mario to electronically sign this category of report. Mark and Mario, e-mail on that coming after this one.

Please let me know if you would like to set up a call to discuss.

Thanks,

Andrea

From: Gray, Ashley P - DNR <Ashley.Gray@wisconsin.gov>
Sent: Monday, January 31, 2022 12:34 PM
To: Mario Diaz <mdiaz@mmm.com>
Cc: Mark Meurette <mmeurette@mmm.com>; Matty, Randall S - DNR <Randall.Matty@wisconsin.gov>; Seeber, Andrew R - DNR <Andrew.Seeber@wisconsin.gov>
Subject: [EXTERNAL] Request for Additional Information CEM Excess Emission Report 3M

Mario,

Thank you for submitting the excess emissions summary report on 01/28/2022. The report states it is for the 3rd quarter of 2021. Is this accurate? *No, the report is for Q4 2021. We did not find where this error had been made in the report; we did find it in the cover letter. The revised cover letter and Report (see 3. below) are attached for reference and will be uploaded to Switchboard as soon as possible following this e-mail.*

In order to better understand how 3M is calculating downtime, I am requesting that 3M submit the full excess emission report for 4th quarter 2021. The full excess emission report as identified in NR 439.09(10)(a) should include:

1. The date and starting and ending times or duration of each period of excess emissions and the magnitude of the emissions. *There were no periods of excess emissions during 4th Quarter 2021*

2. The periods of excess emissions that occur during startups, shutdowns, sootblowing, control equipment malfunction, process malfunction, fuel problems, other known causes or for unknown causes. The report shall identify the cause of any malfunction and the measures taken to reduce excess emissions. *There were no periods of excess emissions during 4th Quarter 2021*

3. The date and starting and ending time of any period during which the monitoring system was inoperative for any reason or causes, including monitor malfunction or calibration, except for zero and span checks. The report shall identify the repairs or adjustments made to the system. *Assuming the intention of this request is to identify time periods when the monitor was down <u>while the associated process is running</u>, see below. The Q4 2022 S14 Excess Emission Report submitted to DNR on 01/28/2022 erroneously included daily zero*

and span calibration time in a total of 497 minutes of QA-QC related monitor downtime. 3M revised the Q4 2022 S14 Excess Emission Report to not include daily zero and span calibration times in the QA-QC downtime category. Resulting Q4 2021 monitor downtime while P32 was running was 114 minutes due to the semi-annual attenuator calibration required by 40 CFR 60 App. B, Section 7.1(2). The revised Report will be uploaded to Switchboard as soon as possible following this e-mail.

Date	Start	End	Duration	Cause
10/8/21	10:38 AM	12:32 PM	114 mins	Semi-annual calibration of attenuators

4. The date and starting and ending time of any period during which the process being monitored was inoperative. *Please see the attached .pdf summarizing P32 inoperative times during Q4 2021.*

5. When no period of excess emissions occurred during the quarter and the monitoring system had no period of downtime, an excess emissions report shall be filed stating such information. (n/a)

This information is requested in accordance with s. NR 439.03(1), Wis. Adm. Code and must be submitted to this office by February 7, 2022. If you have any questions regarding this request, please let me know.

Thank you.

Ashley

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Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Ashley Gray
Cell: (715) 218-0471
ashley.gray@wisconsin.gov

From: DNRAMCOMPLIANCEEXTERNALSUBMISSION@Wisconsin.gov <DNRAMCOMPLIANCEEXTERNALSUBMISSION@Wisconsin.gov>
Sent: Friday, January 28, 2022 2:54 PM
To: mmeurette@mmm.com
Cc: Gray, Ashley P - DNR <Ashley.Gray@wisconsin.gov>; mmeurette@mmm.com
Subject: Continuous Emissions Monitor (CEM) Excess Emissions Report Received. 3M CO GREYSTONE PLT

Your Continuous Emissions Monitor (CEM) Excess Emissions Report has been successfully uploaded to the WDNR Air program database. Thank you.

It has been given the file name CEM_REPORT_QUARTERLY_2021_04_01282022_737078870.pdf and has been filed for: FID: 737078870 3M CO GREYSTONE PLT.

LINK TO DOCUMENT

** DO NOT REPLY TO THIS EMAIL, if you have questions please contact your assigned compliance inspector **