

CORRECTED EE Written Report

1 message

Glaza, Rachel M (Mason City) USA <rachel.glaza@heidelbergmaterials.com>

Fri, Nov 3, 2023 at 3:28 PM

To: "Knoll, David" <david.knoll@dnr.iowa.gov>

Cc: Mark Fields <mark.fields@dnr.iowa.gov>, "Jost, Kathryn (Allentown) USA" <kathryn.jost@heidelbergmaterials.com>

David,

You are correct. Please see the attached corrected EE report for your records. I included more hour data and some comments. Let me know if you have any questions or concerns.

Thank you,

Rachel



From: Knoll, David <david.knoll@dnr.iowa.gov>

Sent: Tuesday, October 31, 2023 4:05 PM

To: Glaza, Rachel M (Mason City) USA <rachel.glaza@heidelbergmaterials.com>

Cc: Mark Fields <mark.fields@dnr.iowa.gov>

Subject: [WARNING: ATTACHMENT UNSCANNED]Written EE Report 10-30-2023

Rachel,

I received the updated written EE report in the mail yesterday and have a couple comments. The report has a couple typos on the dates the emissions were observed. DNR staff first observed the opacity issue at about 2 PM on the 17th rather than the 16th. The follow-up observation when emissions appeared to be normal again was on the afternoon of the 18th rather than the 17th.

The table provided in the updated report only shows the CPMS data through 9 AM on the 17th exceeded the limit. The original information you provided showed excess emissions occurring for stretches throughout the whole day on the 17th, such as from 1 PM to 6 PM, which would correlate with our visual observations. Please explain and/or update as needed. Thanks.



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DAVID KNOLL • Environmental Specialist Senior
Environmental Services Division, Field Office 2 *Iowa Department of Natural Resources*
Office 641-424-4073 | Cell 641-903-1985
2300 15th Street SW, Mason City, IA 50401





Heidelberg Materials North America
300 E. John Carpenter Fwy
Irving, TX 75062

November 2, 2023

Compliance Unit Supervisor
Air Quality Bureau
Iowa Department of Natural Resources
Wallace Bldg., 502 E. 9th St
Des Moines, IA 50319

Iowa Department of Natural Resources
Attn: David Knoll
Field Office #2
2300 15th St. SW
Mason City, IA 50401

Subject: CORRECTED Excess Emissions Reports October 2023

Dear Compliance Unit Supervisor and Mr. Knoll,

Heidelberg Materials f/k/a Lehigh Cement Company LLC is resubmitting this written report of excess emissions as required by IAC 567—24.1(3). There were multiple instances of excess emissions: one occurrence on 10/12/2023 when the 30-day rolling average was exceeded, and 7 hours on 10/12/2023, one hour on 10/16/2023 and 7 hours on 10/17/2023. The Excess Emissions was confirmed 10/19/2023 by email. A 48-hour notification was submitted to DNR and EPA on October 13, 2023 indicating the 30-day rolling average was exceeded and stack testing is scheduled for November 1 and November 2, 2023.

- a) **Equipment** - EU25 Kiln/Calciner/Preheater, EP25
- b) **Quantity of Excess Emissions** – This was an exceedance of the 15% (1-hr average) opacity limit as monitored by the continuous parametric monitoring system (CPMS). The monitored values are shown below with dates and times. There is an established limit of 13.0 mA, per the Title V permit, 04-TV-001R2, Continuous Emission Monitoring, Section A. This limit is required to demonstrate compliance with the opacity standard, not the PM lb/ton values. Therefore, there is no correlation or calculation to determine the lb/ton PM values from this mA limit.

c) **Time and Duration of Excess Emissions** – An email sent on Oct 19, 2023, at 6:18AM had different PM mA numbers, due to data not being pulled from the DAS. After a review, the corrected dates and times are below.

Date/Time (Timestamp is one hour behind due to daylight savings)	KILN: PM_MA (MA) Part 60 - General Value	Comments
10/12/2023 15:00	16.3	Excess Emissions and 30 Day Rolling Average of Main Kiln PM-mA 7.9 exceeded. EPA and DNR notified. Stack test planned for November 1 and 2, 2023.
10/12/2023 16:00	19.4	
10/12/2023 17:00	19.8	
10/12/2023 18:00	20.0	
10/12/2023 19:00	20.0	
10/12/2023 20:00	19.9	
10/12/2023 21:00	19.0	
10/12/2023 22:00	12.4	No excess emission of PM-mA response.
10/12/2023 23:00	10.6	
10/13/2023 00:00	9.7	
10/13/2023 01:00	9.2	
10/13/2023 02:00	9.0	
10/13/2023 03:00	9.4	
10/13/2023 04:00	9.6	
10/13/2023 05:00	8.9	
10/13/2023 06:00	6.9	
10/13/2023 07:00	6.4	
10/13/2023 08:00	6.8	
10/13/2023 09:00	7.2	
10/13/2023 10:00	7.8	
10/13/2023 11:00	8.8	
10/13/2023 12:00	12.9	
10/13/2023 1:00:00 PM - 10/16/2023 02:00	0.0	Kiln shut down for internal inspections.
10/16/2023 02:00	0.0	
10/16/2023 03:00	4.0	Kiln Restart
10/16/2023 04:00	4.0	
10/16/2023 05:00	4.0	
10/16/2023 06:00	4.0	
10/16/2023 07:00	4.1	
10/16/2023 08:00	4.1	

10/16/2023 09:00	4.1	
10/16/2023 10:00	11.8	
10/16/2023 11:00	6.1	
10/16/2023 12:00	4.3	
10/16/2023 13:00	4.4	
10/16/2023 14:00	4.4	
10/16/2023 15:00	4.1	
10/16/2023 16:00	4.3	
10/16/2023 17:00	4.5	
10/16/2023 18:00	4.6	
10/16/2023 19:00	4.2	
10/16/2023 20:00	4.5	
10/16/2023 21:00	12.4	
10/16/2023 22:00	13.8	Excess Emission
10/16/2023 23:00	9.4	
10/17/2023 00:00	11.3	
10/17/2023 01:00	11.4	
10/17/2023 02:00	10.0	
10/17/2023 03:00	13.5	Excess Emission
10/17/2023 04:00	19.8	Excess Emission
10/17/2023 05:00	18.6	Excess Emission
10/17/2023 06:00	20.0	Excess Emission
10/17/2023 07:00	20.0	Excess Emission
10/17/2023 08:00	20.0	Excess Emission
10/17/2023 09:00	20.0	Excess Emission
10/17/2023 10:00	20.0	Excess Emission
10/17/2023 11:00	0.0	PM-mA Analyzer in Maintenance Mode for cleaning and inspection.
10/17/2023 12:00	0.0	
10/17/2023 13:00	20.0	Excess Emission
10/17/2023 14:00	20.0	DNR Observation Confirmed Excess Emissions with visual observation from stack. 10/17/2023 at 2PM or 1400 hours.
10/17/2023 15:00	20.0	
10/17/2023 16:00	13.6	Excess Emission
10/17/2023 17:00	12.3	
10/17/2023 18:00	11.7	
10/17/2023 19:00	12.1	
10/17/2023 20:00	12.4	
10/17/2023 21:00	12.3	
10/17/2023 22:00	13.3	Excess Emission

10/17/2023 23:00	14.6	Excess Emission
10/18/2023 00:00	11.5	
10/18/2023 01:00	10.5	
10/18/2023 02:00	11.8	
10/18/2023 03:00	10.8	
10/18/2023 04:00	11.9	
10/18/2023 05:00	12.1	
10/18/2023 06:00	8.7	
10/18/2023 07:00	8.6	
10/18/2023 08:00	8.8	
10/18/2023 09:00	9.5	
10/18/2023 10:00	9.5	
10/18/2023 11:00	9.2	
10/18/2023 12:00	8.0	
10/18/2023 13:00	7.2	DNR second observation of Main Kiln stack. Excess Emission have ceased.
10/18/2023 14:00	6.9	
10/18/2023 15:00	6.0	
10/18/2023 16:00	6.3	
10/18/2023 17:00	7.1	
10/18/2023 18:00	7.5	
10/18/2023 19:00	7.2	
10/18/2023 20:00	6.9	
10/18/2023 21:00	7.3	Kiln and ESP appear to be stabilized. No excess emission of PM-mA response.
10/18/2023 22:00	7.5	
10/18/2023 23:00	7.9	
10/19/2023 00:00	8.0	
10/19/2023 01:00	5.5	
10/19/2023 02:00	5.2	
10/19/2023 03:00	6.7	
10/19/2023 04:00	6.2	
10/19/2023 05:00	6.9	
10/19/2023 06:00	6.4	
10/19/2023 07:00	6.5	
10/19/2023 08:00	6.5	
10/19/2023 09:00	6.1	
10/19/2023 10:00	5.9	
10/19/2023 11:00	6.0	
10/19/2023 12:00	5.9	
10/19/2023 13:00	6.1	
10/19/2023 14:00	6.3	

- d) DNR Field Office #2 staff observed visible emissions from the stack on 10/17/2023 at 2PM. The data above confirms DNR observations with excess emissions.
- DNR conducted a second observation on 10/18/2023, in which no excess emissions were observed.
- e) **Cause of Excess Emissions** – Initial inspection of the ESP operations did not show any concerns with the ESP. Therefore, it was assumed there was something wrong with the PM-mA monitor. The monitor was cleaned and recalibrated to confirm it was reading accurately. A more detailed inspection, including internals, was performed and additional work was done on the ESP. On 10/17/2023 a motor for one of the rappers on top of the second field was replaced in the ESP. On 10/18/2023 one of the rotary valves under the ESP was repaired.
- f) **Steps Taken to Remedy the Excess Emission** – Inspections and additional repairs to the ESP.
- g) **Steps Taken to Limit Excess Emissions During the Interim Period** – Kiln clinker production was reduced.

Please let me know if you have any questions or concerns.

Sincerely,



Rachel Glaza
Environmental Manager

Heidelberg Materials
700 25th ST NW
Mason City, IA 50401

