



GRETCHEN WHITMER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY
GAYLORD DISTRICT OFFICE



PHILLIP D. ROOS
DIRECTOR

July 20, 2023

Mr. Jeffrey Scott
Holcim (US) Inc.
1435 Ford Avenue
Alpena, Michigan 49707

SRN: B1477, Alpena County

Dear Jeffrey Scott:

VIOLATION NOTICE

On 14 June 2023, the Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), conducted an investigation of a recent complaint, which was received on 7 June 2023, regarding fugitive dust and to determine if the dust was attributable to Holcim (US) Inc.'s quarry operation. The purpose of this investigation was to determine Holcim (US) Inc.'s compliance with the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the Air Pollution Control Rules.

During the inspection, staff observed the following:

Process Description	Rule/Permit Condition Violated	Comments
Quarry Operations	R 336.901R 901	Fallout of fugitive Calcite originating from Holcim (US) Inc.'s quarry operation.

During the investigation, AQD Staff collected samples of particulate matter that deposited on private property.

The samples were submitted to EGLE's contract laboratory for microscopic analysis. A copy of the analytical laboratory report is enclosed. It concludes, in part, "Stereomicroscopic observations and polarized light microscopy (PLM) of these samples showed the following:

Merit Number: S50024.01 contains the following particles: Calcite (CaCO₃)-70%, Quartz (sand)-5%,

Pollen-10%, Insect and plant fibers-5%, and magnetic iron containing particles-<1%.

Merit Number: S50024.02 contains the following particles: Calcite (CaCO₃)-60%, Quartz (sand)-5%, Pollen-10%, Insect and plant fibers-15%, and magnetic iron containing particles-<1%."

Further discussion of the results, in part, "Both samples contain an extraordinary amount of Calcite (CaCO₃), which strongly suggests an industrial source. If the suspected source of this dust is a cement producer, dust from Calcium Hydroxide (CaOH₂) can rapidly convert to Calcite upon exposure to CO₂ in air. If the source is a quarry, it would likely be a limestone quarry which is CaCO₃."

Jeffrey Scott
Holcim (US) Inc.
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In the professional judgement of the AOD staff, the fallout which was observed and collected on private property constitutes a violation of Rule 901 of the administrative rules promulgated under Act 451.

Please initiate actions necessary to correct the cited violation and submit a written response to this Violation Notice by August 10, 2023 (which coincides with 21 calendar days from the date of this letter). The written response should include the date the violation occurred; an explanation of the cause and duration of the violation; whether the violation is ongoing; a summary of the actions that have been taken and are proposed to be taken to correct the violation and the dates by which these actions will take place; and what steps are being taken to prevent a recurrence.

Please submit the written response to EGLE, AOD, Gaylord District, 2100 W M32, Gaylord, MI 49735 an submit a copy to Ms. Jenine Camilleri, Enforcement Unit Supervisor at EGLE AOD, P.O. Box 30260, Lansing, MI, 48909-7760.

If Holcim (US) Inc. believes that the observations or statements are inaccurate or do not constitute violations of the applicable legal requirements cited, please provide appropriate factual information to explain your position.

Thank you for your attention to resolving the violation cited above. If you have any questions regarding the violation or the actions necessary to bring this facility into compliance, please contact me at the number listed below.

Sincerely,



David Bowman
Environmental Quality Analyst
Air Quality Division
989-395-6298

Enclosure

cc/enc: Annette Switzer, EGLE
Christopher Ethridge, EGLE
Brad Myott, EGLE
Jenine Camilleri, EGLE
Shane Nixon, EGLE



Analytical Laboratory Report

Report ID: S50024.01(01)
Generated on 07/19/2023

Report to

Attention: Dave Bowman
EGLE Air Quality Division
3058 W. Grand Blvd. Suite 2-300
Detroit, MI 48202

Phone: 989-395-6298 FAX:
Email: bowmand7@michigan.gov

Report produced by

Merit Laboratories, Inc.
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Contacts for report questions:
John Lavery (johnlavery@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

Report Summary

Lab Sample ID(s): S50024.01-S50024.02
Project: B6134
Collected Date(s): 06/14/2023
Submitted Date/Time: 06/20/2023 11:00
Sampled by: Unknown
P.O. #:

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Maya Murshak
Technical Director



Analytical Laboratory Report

General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.

Methods may be modified for improved performance.

Results reported on a dry weight basis where applicable.

'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).

When MDL results are provided, then 'Not detected' indicates that parameter was not found at a level equal to or greater than the MDL.

40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples for acrolein and acrylonitrile, and 2-chloroethylvinyl ether need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.

QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.

Full accreditation certificates are available upon request. Starred (*) analytes are not NELAP accredited.

Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.

Report shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc.

Limits for drinking water samples, are listed as the MCL Limits (Maximum Contaminant Level Concentrations)

PFAS requirement: Section 9.3.8 of U.S. EPA Method 537.1 states "If the method analyte(s) found in the Field Sample is present in the

FRB at a concentration greater than 1/3 the MRL, then all samples collected with that FRB are invalid and must be recollected and reanalyzed."

Samples submitted without an accompanying FRB may not be acceptable for compliance purposes.

Wisconsin PFAs analysis: MDL = LOD; RL = LOQ. LOD and LOQ are adjusted for dilution.

Report Narrative

There is no additional narrative for this analytical report



Analytical Laboratory Report

Laboratory Certifications

Authority	Certification ID
Michigan DEQ	#9956
DOD ELAP & ISO/IEC 17025:2017	#69699
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Pennsylvania DEP	#68-05884
Wisconsin DNR	FID# 399147320

Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
B	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
H	Sample submitted and run outside of holding time
I	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
O	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
T	No correction for total solids
X	Elevated reporting limit due to matrix interference
Y	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
e	Reported value estimated due to interference
j	Analyte also found in associated method blank
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
x	Preserved from bulk sample

Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods
LN	Linear
BR	Branched



Analytical Laboratory Report

Sample Summary (2 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S50024.01	5276 Bucket Lid N. of house	Solid	06/14/23 09:30
S50024.02	5276 Trash Bin East	Solid	06/14/23 09:30



Analytical Laboratory Report

Lab Sample ID: S50024.01

Sample Tag: 5276 Bucket Lid N. of house

Collected Date/Time: 06/14/2023 09:30

Matrix: Solid

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Petri Dish	None	No	RT	IR

Other / Misc.

Method: , Run Date: 07/18/23 12:00, Analyst: MGG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Misc. Special Project*	Completed				1		1

1-See Summary of Results.



Analytical Laboratory Report

Lab Sample ID: S50024.02

Sample Tag: 5276 Trash Bin East

Collected Date/Time: 06/14/2023 09:30

Matrix: Solid

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Petri Dish	None	No	RT	IR

Other / Misc.

Method: , Run Date: 07/18/23 12:00, Analyst: MGG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Misc. Special Project*	Completed				1		1

1-See Summary of Results.

Merit Laboratories Login Checklist

Lab Set ID:S50024

Client:EGLEAIR (MI Dept. of Environment, Great Lakes, and Energy)

Project: B6134

Submitted:06/20/2023 11:00 Login User: MMC

Attention: Dave Bowman

Address: EGLE Air Quality Division
3058 W. Grand Blvd. Suite 2-300
Detroit, MI 48202

Phone: 989-395-6298 FAX:

Email: bowmand7@michigan.gov

Selection	Description	Note
Sample Receiving		
01.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Samples are received at 4C +/- 2C Thermometer # RT
02.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Received on ice/ cooling process begun
03.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Samples shipped USPS
04.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Samples left in 24 hr. drop box
05.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Are there custody seals/tape or is the drop box locked
Chain of Custody		
06.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	COC adequately filled out
07.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	COC signed and relinquished to the lab
08.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Sample tag on bottles match COC
09.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Subcontracting needed? Subcontracted to:
Preservation		
10.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Do sample have correct chemical preservation
11.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Completed pH checks on preserved samples? (no VOAs)
12.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Did any samples need to be preserved in the lab?
Bottle Conditions		
13.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	All bottles intact
14.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Appropriate analytical bottles are used
15.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Merit bottles used
16.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Sufficient sample volume received
17.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Samples require laboratory filtration
18.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Samples submitted within holding time
19.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Do water VOC or TOX bottles contain headspace

Corrective action for all exceptions is to call the client and to notify the project manager.

Client Review By: _____ Date: _____



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2680 EAST LANSING DRIVE
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Summary of Results

For

Merit No.: S50024.01 Tag: 5276 Bucket Lid N. of house

Merit No.: S50024.02 Tag: 5276 Trash Bin East

Conclusion:

Both samples contain an extraordinary amount of Calcite (CaCO_3), which strongly suggests an industrial source. If the suspected source of this dust is a cement producer, dust from Calcium Hydroxide (CaOH_2) can rapidly convert to Calcite upon exposure to CO_2 in air. If the source is a quarry, it would likely be a limestone quarry which is CaCO_3 .

Discussion:

Stereomicroscopic observations and polarized light microscopy (PLM) of these samples showed the following:

Merit No.: S50024.01 contains the following particles: Calcite (CaCO_3)-70%, Quartz (sand)-5%, Pollen-10%, Insect and plant fibers-5%, and magnetic iron containing particles-<1%.

Merit No.: S50024.02 contains the following particles: Calcite (CaCO_3)-60%, Quartz (sand)-5%, Pollen-10%, Insect and plant fibers-15%, and magnetic iron containing particles-<1%.

The presence of Calcite in both samples was verified with 3M HCl, which caused a violent burst of effervescence when exposed to the samples.



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