INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
Northwest Regional Office • 330 W. US Highway 30, Suite F • Valparaiso, IN 46385
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Eric J. Holcomb, *Governor*
Brian C. Rockensuess, *Commissioner*

November 4, 2022

VIA ELECTRONIC MAIL:
Sarah Langeliers
Carmeuse Lime, Inc.
1 North Carmeuse Drive
Gary, Indiana 46406-1279
sarah.langeliers@carmeuse.com

Re: Inspection Summary/Enforcement Action Letter
Carmeuse Lime, Inc.
Source ID 089-00112
Gary, Lake County

Dear Sarah Langeliers:

On October 24, 2022, a representative of the Indiana Department of Environmental Management (IDEM), Northwest Regional Office (NWRO), conducted an inspection of Carmeuse Lime, Inc., located at 1 North Carmeuse Drive in Gary, Indiana. This inspection was conducted pursuant to IC 13-14-2-2. For your information, and in accordance with IC 13-14-5, a summary of the inspection is provided below:

Inspection Type: Commitment
Inspection Results: Violations were observed and will result in an enforcement referral

At the time of the inspection, the following violations were noted:

1) Pursuant to the permit's Conditions D.2.9 and D.2.10, visible emission notations of the stack exhaust from facilities EU-33, EU-15a, EU-35, and EU-36 should be performed once per week during normal daylight operations and once per week during normal daylight whenever T-1, T-6, and T-1B are being loaded.

   Carmeuse Lime, Inc. failed to perform once per-week visible emission notations of the stack exhaust from facilities EU-35 and whenever T-1, T-6, and T-1B are being loaded, in violation of the permit's Conditions D.2.9 and D.2.10.

2) Pursuant to the permit's Condition D.2.14(b), to document the compliance status with the permit's Condition D.2.9 and D.2.10, the Permittee should maintain records of the weekly visible emission notations of the stack exhausts from facilities EU-15a, EU-35, EU-36, T-1, T-6, and T-1B.

   Carmeuse Lime, Inc. failed to maintain records of the weekly visible emission notations of the stack exhausts from facilities EU-35, T-1, T-6, and T-1B, in violation of the permit's Condition D.2.14(b).

3) Pursuant to the permit's Condition D.2.11, the Permittee should record the pressure drop across the baghouses, used in conjunction with facilities EU-25, EU-17, EU-16, EU-15, EU-14, EU-6, EU-24, EU-28, EU-7, EU-8, EU-11, EU-12, EU-13, EU-32, and EU-43 at least once per day when the associated facilities are in operation.

   Carmeuse Lime, Inc. failed to record the pressure drop across the baghouses used in conjunction with facilities EU-6, EU-24, EU-12, and EU-13 at least once per day when the associated facilities have been in operation since September 8, 2022, in violation of the permit's Condition D.2.11.

4) Pursuant to the permit's Condition D.2.14(c), the Permittee should maintain a daily record of the pressure drop across the baghouses controlling facilities, as required by the permit's Condition D.2.11.

   Carmeuse Lime, Inc. failed to maintain a daily record of the pressure drop across the baghouses controlling facilities EU-6, EU-24, EU-12, and EU-13, in violation of the permit's Condition D.2.14(c).

5) Pursuant to the permit's Condition D.3.2(a)(3) and 326 IAC 8-3-2(a)(3), the Permittee should ensure the degreaser cover is closed whenever parts are not being handled in the degreaser.

   Carmeuse Lime, Inc. failed to follow control equipment and operating requirements for the maintenance shop cold cleaner degreasing unit and close the degreaser cover when parts were not being handled in the degreaser, in violation of the permit's Condition D.3.2(a)(3) and 326 IAC 8-3-2(a)(3).

6) Pursuant to the permit's Condition D.5.6 and 326 IAC 6.8-8-7, visible emission notations of the bin vents (CE-52 and CE-53) exhausts should be performed once per day during normal daylight operations.

   Carmeuse Lime, Inc. failed to perform daily visible emission notations of the bin vents (CE-52 and CE-53) exhausts, in violation of the permit's Condition D.5.6 and 326 IAC 6.8-8-7.

7) Pursuant to the permit's Condition D.5.9, to document the compliance status with the permit's Condition D.5.6, the Permittee should maintain records of daily visible emission notations of the bin vent CE-52 stack exhausts and the bin vent CE-53 stack exhausts.

   Carmeuse Lime, Inc. failed to maintain records of daily visible emission notations of the bin vent CE-52 stack exhausts and the bin vent CE-53 stack exhausts, in violation of the permit's Condition D.5.9.

This matter will be referred for formal enforcement action. IDEM Office of Air Quality would like to take this opportunity to encourage discussions concerning the facts of the case, any additional information that may be available, and to provide you with information concerning the enforcement process.

An enforcement case manager will contact you to discuss and schedule an informational meeting concerning this matter. In the meantime, please direct any questions to Sasa Dunovic, Compliance Inspector, at 219-252-3566 or by email at sdunovic@idem.in.gov.

Sincerely,

Martin H. Yeates for

Rick Massoels, Deputy Director
Northwest Regional Office
Indiana Department of Environmental Management

ACES ID: 276365, 276367

ENCLOSURE

cc: Sasa Dunovic, Northwest Regional Office (NWRO)
sdunovic@idem.in.gov
Lake County Health Department
doffinx@lakecountyin.org
Mr. David McIver, Compliance and Enforcement Branch, Office of Air Quality
dmciver@idem.in.gov

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
FIELD INSPECTION REPORT

SOURCE INFORMATION	
SOURCE NAME	Carmeuse Lime, Inc.
SOURCE LOCATION	1 North Carmeuse Drive, Gary, Indiana Lake County
MAILING ADDRESS	1 North Carmeuse Drive, Gary, Indiana 46406-1279
PLANT ID	089-00112
PERMIT INFORMATION	Permit Type: TVOP Permit Number: 089-40929-00112 & 089-40148-00112 Permit Expiration Date: December 3, 2019 VFC Document No.(hyperlink): 82834629 & 82643543
ATTAINMENT STATUS	☐ Attainment for all criteria pollutants ☒ Nonattainment for ☐SO_2 ☐CO ☒O_3 ☐NO_2 ☐Pb ☐PM_{10} ☐$PM_{2.5}$
SOURCE STATUS	☒ PSD Major (326 IAC 2-2) ☒ Major Source of HAPs ☒ Emission Offset (326 IAC 2-3) ☐ Area Source of HAPs ☐ Acid Rain (326 IAC 21)
SOURCE DESCRIPTION	The Permittee owns and operates a stationary lime manufacturing plant.

INSPECTION INFORMATION			
INSPECTED BY	Sasa Dunovic		
INSPECTION DATE AND TIME	October 24, 2022	TIME IN: 9:30 a.m.	TIME OUT: 3:30 p.m.
REPORTED BY	Sasa Dunovic	REPORT DATE: October 28, 2022	
COMPLIANCE PERIOD REVIEWED	October 2020 to October 2022		
INSPECTION NOTIFICATION	☒ Unannounced ☐ Announced: N/A		
INSPECTION OBJECTIVE(S)	☒ Compliance Monitoring Strategy (CMS) ☐ Commitment ☐ Mega-Site: ☐ FCE ☐ PCE ☐ Complaint ☐ Other: N/A ☐ Surveillance		
ACES TRACKING NUMBER(S)	Inspection: 276365	Complaint: N/A	Violation/Warning: 276367
RM TRACKING NUMBER(S)	Complaint: N/A		
INSPECTION BACKGROUND	The Carmeuse Lime Inc. facility was last inspected on October 21, 2020, with violations determined at the time of the inspection. An Inspection Summary / Enforcement Action Letter was issued on November 12, 2020.		

SOURCE PERSONNEL INTERVIEWED			
Name	*Title*	*Phone Number*	*Email Address*
Sarah Langeliers	Area Environmental Manager	219-293-2684	sarah.langeliers@carmeuse.com
Brandon Villanueva	Process Engineer	N/A	brandon.villanueva@carmeuse.com
Ilija Pejoski	Production Supervisor	N/A	ilija.pejoski@carmeuse.com

INSPECTION AND COMPLAINT HISTORY (PREVIOUS 5 YEARS)			
Date	*Inspection/Complaint Type*	*Result*	*Comments*
October 21, 2020	Commitment	Violations Noted	Multiple performance testing and monitoring violations.
September 5, 2019	CMS	Violations Noted	Multiple performance testing and monitoring violations.
September 28, 2017	CMS	Violations Noted	The sampling and analysis requirements for limestone, engineered fuel (EF), and coal are not being met for each shipment.

COMPLIANCE HISTORY (PREVIOUS 5 YEARS)		
Informal Enforcement Actions		
Date Issued	*Action Taken*	*Describe Violation(s)*
2/25/2022	Violation Letter	Violations of the monitoring and recordkeeping requirements.
12/3/2021	Violation Letter	Violations of the monitoring and recordkeeping requirements.
8/24/2021	Violation Letter	Violations of the monitoring and recordkeeping requirements.
5/15/2020	Violation Letter	Violations of the production lime limits.
5/1/2020	Violation Letter	Violations of the monitoring and recordkeeping requirements.
11/14/2019	Violation Letter	Violations of the monitoring and recordkeeping requirements.
12/5/2017	Violation Letter	The Permittee failed to retest the kiln EU-1 and the kiln EU-2 for PM10 in a period of thirty (30) months from the date of the most recent valid compliance demonstration. Stack test extension response was issued on 12/15/17.
8/28/2019	Violation Letter	Violations of the monitoring and recordkeeping requirements.
2/18/2019	Violation Letter	Violations of the monitoring and recordkeeping requirements.
11/6/2017	Violation Letter	Violation of the sampling and analysis requirements for limestone, engineered fuel (EF), and coal.

Formal Enforcement Actions			
Case Number	*Enforcement Type*	*Civil Penalty*	*Describe Violation(s)*
2022-28978-A	Formal Enforcement	$ TBD	Failure to perform PM_{10} and SO_2 testing of the kilns EU-1, EU-2, EU-3, EU-4, and EU-5 at least once every thirty (30) months from the date of the most recent valid compliance demonstration.
2021-27796-A	Formal Enforcement	$ TBD	Failure to test the Lime Handling System #1 (EU-6) and Lime Storage System (New Side)(EU-24), both controlled by baghouse CE-14 ALG 310 at least once every five (5) years from the date of the last valid compliance demonstration.
2020-27508-A	Formal Enforcement	$ TBD	Multiple performance testing and monitoring violations.
2019-26681-A	Formal Enforcement	$ 6,250.00	PM-10 Emission Exceedance - Lime Loadout #3 (East Bay) EU-25
2019-26530-A	Formal Enforcement	$ 17,000.00	Multiple performance testing and monitoring violations.
2017-24807-A	Formal Enforcement	$ TBD	Kiln 1 SO2 stack test exceedance and failure to retest within 75 days.

Other Relevant Actions	
Action Taken	*Comments*

Administrative Consent Order EPA-5-18-113(a)-IN-01	By no later than September 24, 2020, Carmeuse must install, operate, maintain, calibrate, and certify a continuous emission monitoring system (CEMS) to measure and determine NOx emissions from Kiln 3.
EPA's Request to provide information	On January 18, 2017, the USEPA issued a request to provide information according to Title 42 of the United States Code, Chapter 85, Subchapter I, Part A, Section 7414.
Commissioner's Order No 2016-04	On November 16, 2016, the IDEM issued a Commissioner's Order No 2016-04 required Carmeuse Lime to comply with SO2 requirements from Kilns EU-1 through EU-5.

PERMIT SECTION D.1 Lime Production

Emission Units and Control Devices:

(a) One (1) Allis Chalmers Rotary Kiln equipped with a hot face dam and a Contact Cooler; identified as EU-1; constructed in 1966, modified in 2010, 2014, and 2016; with a maximum heat input capacity of 213 MMBtu/hr, a rated maximum natural gas heat input capacity of 213 MMBtu/hr, a maximum capacity of 8.2 tons of coal per hour, 4.46 tons of glycerin per hour, 5.74 tons of engineered fuel (EF) per hour, and a maximum production rate of 24 tons of lime per hour, emissions controlled by baghouse CE-1; exhausting to stacks S-1A through S-1F.

(b) One (1) Allis Chalmers Rotary Kiln equipped with a Contact Cooler; identified as EU-2; constructed in 1966, modified in 2014 and 2016; with a maximum heat input capacity of 213 MMBtu/hr, a rated maximum natural gas heat input capacity of 213 MMBtu/hr, a maximum capacity of 8.2 tons of coal per hour, 4.46 tons of glycerin per hour, 5.74 tons of engineered fuel (EF) per hour, and a maximum production rate of 23.3 tons of lime per hour; emissions controlled by baghouse CE-2; exhausting to stacks S-2A through S-2F.

(c) One (1) Allis Chalmers Rotary Kiln equipped with a Contact Cooler; identified as EU-3; constructed in 1968, modified in 2014 and 2016; with a maximum heat input capacity of 213 MMBtu/hr, a rated maximum natural gas heat input capacity of 213 MMBtu/hr, a maximum capacity of 8.2 tons of coal per hour, 4.46 tons of glycerin per hour, 5.74 tons of engineered fuel (EF) per hour, and a maximum production rate of 23.3 tons of lime per hour; emissions controlled by baghouse CE-3; exhausting to stacks S-3A through S-3F.

(d) One (1) Allis Chalmers Rotary Kiln equipped with a Contact Cooler; identified as EU-4; constructed in 1972, modified in 2014 and 2016; with a maximum heat input capacity of 213 MMBtu/hr, a rated maximum natural gas heat input capacity of 213 MMBtu/hr, a maximum capacity of 8.2 tons of coal per hour, 4.46 tons of glycerin per hour, 5.74 tons of engineered fuel (EF) per hour, and a maximum production rate of 23.3 tons of lime per hour; emissions controlled by baghouse CE-4; exhausting to stacks S-4A through S-4F.

(e) One (1) Allis Chalmers Rotary Kiln equipped with a Contact Cooler; identified as EU-5; constructed in 1972, modified in 2014 and 2016; with a maximum heat input capacity of 213 MMBtu/hr, a rated maximum natural gas heat input capacity of 213 MMBtu/hr, a maximum capacity of 8.2 tons of coal per hour, 4.46 tons of glycerin per hour, 5.74 tons of engineered fuel (EF) per hour, and a maximum production rate of 23.3 tons of lime per hour; emissions controlled by baghouse CE-5; exhausting to stacks S-5A through S-5F.

Pollutants with Emission Limits or Applicable Standards:

☒ SO_2 ☒ NO_X ☒ CO ☒ VOC ☒ PM ☒ PM_{10} ☒ $PM_{2.5}$ ☒ HAPS

Applicable Rules:

- Lake County PM_{10} Emission Requirements [326 IAC 6.8-2-22][326 IAC 6.8-8]
- Lake County SO_2 Emission Limitations [326 IAC 7-4.1-6]
- Volatile Organic Compounds (VOC) [326 IAC 8-7]
- Preventive Maintenance Plan [326 IAC 2-7-5(12)]
- Testing Requirements [326 IAC 2-1.1-11][326 IAC 3-6]
- SO_2 Emissions [326 IAC 7-4.1-2][326 IAC 3-7][326 IAC 2-7-6]
- Opacity Monitoring / Visible Emission Monitoring [326 IAC 6.8-8-5]

PERMIT SECTION D.1 Lime Production

- Monitoring for Baghouses CAM [40 CFR 64]
- Baghouse Inspections [326 IAC 6.8-8-7]

Requirement:	Applicable	Violation Noted
Emission Limitations and Standards	☒ Yes ☐ No	☐ Yes ☒ No
Preventive Maintenance Plan	☒ Yes ☐ No	☐ Yes ☒ No
Compliance Determination Requirements	☒ Yes ☐ No	☐ Yes ☒ No
Testing Requirements	☒ Yes ☐ No	☐ Yes ☒ No
Compliance Monitoring Requirements	☒ Yes ☐ No	☐ Yes ☒ No
Recordkeeping Requirements	☒ Yes ☐ No	☐ Yes ☒ No
Types of Records Reviewed: Records of the sampling and analysis of raw materials and fuels, certifications, other documentation, and the equations; the daily visible emission notations of the lime kiln stack exhausts (S-1 through S-5); a daily record of the pressure drop across the baghouses used in conjunction with kilns EU-1 through EU-5; a copy of the Continuous Compliance Plan (CCP) and the records required by it; the hourly input of limestone to each kiln and the type of limestone input as it corresponds to the lime produced for each hour for each kiln; the amount of each fuel input (natural gas, coal, engineered fuel (EF), and glycerin) for each hour for each kiln; the natural gas heat input percent (%) for each kiln for each hour; the monthly calculated emission rate of CO for each kiln in ton per month; the emissions of CO (tons) per year.		
Reporting Requirements	☒ Yes ☐ No	☐ Yes ☒ No

Observations and Comments:

Upon arrival at the property, outside surveillance of the source was conducted from the public right-of-way. No violations were noted. Upon entering the terminal, I was greeted by Ms. Sarah Langeliers, Area Environmental Manager, and Mr. Brandon Villanueva, Process Engineer. I informed them of the nature of my visit and conducted an opening conference, records review, site inspection, followed by a closing conference.

As part of the introductory conference, Ms. Langeliers indicated that all kilns were in service except kiln, identified as EU-2. Mr. Villanueva said that kiln #2 was temporarily out of service for regular maintenance.

After the introductory conference, I conducted the records review for all the emissions units noted in section D.1 of the company's permit. I reviewed the daily visible emission notations of the lime kiln stack exhausts (S-1 through S-5), a daily record of the pressure drops across the baghouses used in conjunction with kilns EU-1 through EU-5, and production records. These records were complete and satisfactory. I reviewed the preventive maintenance plan (PMP) for the kilns and control devices, described in section D.1 of the permit. The PMP was present at the site and found to be adequate. Additionally, Ms. Langeliers provided me with the monthly calculated emission rate of CO for each kiln in tons per month and the emissions of CO (tons) per year. Also Ms. Langeliers provided me with baghouse inspection records. From the baghouse inspection records I observed that the kilns' baghouses are inspected by an external contractor, C.P. Environmental.

The rest of the records required by this section of the permit were maintained complete and satisfactory.

After the records review, Ms. Langeliers and Mr. Ilija Pejoski, Production Supervisor, gave me a tour of the facility. At the time of the inspection, I observed the lime production area including the five (5) rotary kilns. During the inspection, all kilns were operational, except Kiln #2. Ms. Langeliers indicated that they do not use engineered fuel temporarily since it does not fulfill the required specification and that all kilns have been fired only by coal and natural gas.

From the control room, I observed the following operational status for the kilns:

Unit	Fuel / rates	Product	Temperature (^{0}F)	O_2 (%)	Baghouse IN operation
Kiln EU-1	Coal – 1.35 tons/hr Natural gas – 2075 scf/hr	High Calcium	850	5.8	Yes

PERMIT SECTION D.1 Lime Production

Kiln EU-2	N/A	N/A	N/A	N/A	N/A
Kiln EU-3	Coal –1.65 tons/hr Natural gas – 2311 scf/hr	High Calcium	552	11.9	Yes
Kiln EU-4	Coal – 1.55 tons/hr Natural gas – 2174 scf/hr	High Calcium	719	0.7	Yes
Kiln EU-5	Coal – 1.30 tons/hr Natural gas – 1879 scf/hr	Dolomite	900	5.6	Yes

At the time of the inspection, baghouses associated with Kilns 2, 3, 4, and 5 were in service and controlled particulate emissions from these kilns. From the control room, I observed the following operational status for the baghouses:

Emission Unit or Control Device	*Parameter*	*Permitted Value/Range* (inches of water)	*Observed* (inches of water)
Baghouse CE-1	Pressure drop	Permitted: 1.0 - 7.0	4.0
Baghouse CE-2	Pressure drop	Permitted: 1.0 - 7.0	N/A
Baghouse CE-3	Pressure drop	Permitted: 1.0 - 7.0	3.9
Baghouse CE-4	Pressure drop	Permitted: 1.0 - 7.0	2.9
Baghouse CE-5	Pressure drop	Permitted: 1.0 - 7.0	5.7

The inside of the lime production facility appeared well maintained. No visual observations of any lime dust plumes were noted inside the building. No emissions were observed escaping from the kiln or the baghouse stacks at the time of the inspection.

Pursuant to the Permit's Condition D.1.7(a) the Permittee should perform PM_{10} and SO_2 testing of the kilns EU-1, EU-2, EU-3, EU-4, and EU-5 utilizing methods approved by the Commissioner at least once every thirty (30) months from the date of the most recent valid compliance demonstration. This testing is required to demonstrate compliance with 326 IAC 6.8-2-22, 326 IAC 7-4.1-6, and Commissioner's Order 2016-04. Pursuant to Commissioner's Order 2016-04, testing should be conducted for both dolomitic limestone and high calcium limestone if the kiln is used or is anticipated to be used to process both. Currently, only kilns EU-1, EU-2, and EU-5 are used to process both and they are tested during production of High Calcium and Dolomitic Lime. The following are dates of the most recent successful tests:

- The most recent PM_{10} and SO_2 testing of Kiln EU-1 (High Calcium Lime) was performed on July 12, 2022; testing of Kiln EU-1 (Dolomitic Lime) was performed on July 13, 2022.
- The most recent PM_{10} and SO_2 testing of Kiln EU-2 (High Calcium Lime) was performed on June 28, 2022; testing of Kiln EU-2 (Dolomitic Lime) was performed on June 30, 2022.
- The most recent PM_{10} and SO_2 testing of Kiln EU-3 (High Calcium Lime) was performed on August 30, 2022.
- The most recent PM_{10} and SO_2 testing of Kiln EU-4 (High Calcium Lime) was performed on April 12, 2022.
- The most recent PM_{10} and SO_2 testing of Kiln EU-5 (High Calcium Lime) was performed on April 21, 2022; testing of Kiln EU-5 (Dolomitic Lime) was performed on April 19, 2022.

All the above testes were late retests (conducted past thirty (30) months from the date of the most recent valid compliance demonstration) except the testing of Kiln EU-5 (Dolomitic Lime). A Document Review / Enforcement Action Letter was issued on September 19, 2022, addressing the late retests.

Permit Section Compliance Status:

☒ No violations were observed or determined for this permit section at the time of the inspection.

☐ The following violations were determined for this permit section at the time of the inspection:
N/A

PERMIT SECTION D.2

Emission Units and Control Devices:

Lime Processing and Handling

(g) One (1) Lime Grinder Handling System; identified as EU-15; constructed in 1972; a maximum capacity of 80 tons of lime per hour; emissions controlled by baghouse CE-6 (ALG400); exhausting to stack S-6.

(h) One (1) Grinding Mill Material Transfer Operation, identified as EU-15a, controlled by one (1) dust collector,CE-15a (ALG440), approved in 2013 for construction, exhausting to stack S-16, and consisting of the following:

(1) One (1) lime tank, identified as Lime Tank 1, installed in 1966, with a maximum capacity of 224 tons.

(2) Two (2) conveyors, installed in 1972 and replaced in 2011, with a maximum throughput of 80 tons/hr.

(3) Two (2) weigh belts, installed in 2011, with a maximum throughput of 80 tons/hr.

(4) One (1) surge bin, installed in 1972 and modified in 2011, with a maximum capacity of 46 tons.

(5) One (1) bucket elevator, installed in 2011, with a maximum throughput of 100 tons/hr.

(i) One (1) Grinding Mill #1; identified as EU-13; constructed in 1972; a maximum capacity of 40 tons of lime per hour; emissions controlled by baghouse CE-8 (ALG450); exhausting to stack S-8.

(j) One (1) Grinding Mill #2; identified as EU-12; constructed in 1972; a maximum capacity of 40 tons of lime per hour; emissions controlled by baghouse CE-7 (ALG460); exhausting to stack S-7.

(k) One (1) Lime Handling System #1 (302 Belt); identified as EU-6; constructed in 1972; a maximum capacity of 100 tons of lime per hour; emissions controlled by baghouse CE-14 (ALG310); exhausting to stack S-14.

(l) One (1) Lime Handling System #2 (301 Belt); identified as EU-7; constructed in 1966; a maximum capacity of 100 tons of lime per hour; emissions controlled by baghouse CE-15 (ALG300); exhausting to stack S-15.

(m) [RESERVED]

(n) One (1) Lime Transfer System #2, identified as EU-42/43, approved for construction in 2006, with a maximum capacity of 80 tons of lime per hour, consisting of a hopper, piping and storage tank T1B, for transporting lime using high pressure pneumatic conveyance methods, with emissions controlled by bin vent filters, and exhausting to stacks S-42 (ALG470) and S-43 (ALG410), respectively.

(o) One (1) engineered fuel (EF) feed and pneumatic delivery system, identified as EU-33, approved in 2014 for construction, with maximum capacity of 159 tons/hour, consisting of the following equipment:

(1) One (1) EF Receiving Station, approved in 2014 for construction with a maximum capacity of 159 tons/hr, emissions vent inside the building.

(2) Four (4) main storage bins with a maximum total capacity of 656 tons, each controlled by a dust vent filter.

(3) Four (4) screw conveyors with a maximum capacity of 45 tons/hour each.

(4) Five (5) storage bins, each with a maximum capacity of 50 tons ~~each~~, each controlled by a dust vent filter.

(5) Five (5) weigh feeders with a maximum capacity of 5.74 tons/hour each.

PERMIT SECTION D.2

Lime Storage and Loadout

(p) One (1) Lime Storage System (New Side); identified as EU-24; constructed prior to 1977; consisting of lime storage tanks 11, 12, 13, 15 and 16; emissions controlled by baghouse CE-14 (ALG310); exhausting to stack S-14.

(q) One (1) Lime Storage System (Old Side); identified as EU-14; constructed prior to 1977; consisting of lime storage tanks 1, 1B, 2, 3, 5, 6, 7, and 14; emissions controlled by baghouse CE-6 (ALG400); exhausting to stack S-6; and baghouse CE-13 (ALG320) exhausting to stack S-13.

(r) One (1) Lime Loadout #2A (Center Bay); identified as EU-8; constructed in 1972; a maximum capacity of 200 tons of lime per hour; emissions controlled by baghouse CE-13 (ALG320); exhausting to stack S-13.

(s) One (1) Truck Flue Dust Loadout #2; identified as EU-16; constructed in 1966; a maximum capacity of 28 tons of dust per hour; emissions controlled by baghouse CE-9 (AKG450); exhausting to stack S-9.

(t) One (1) Truck Flue Dust Loadout #1; identified as EU-17; constructed in 1966; a maximum capacity of 32 tons of dust per hour; emissions controlled by baghouse CE-10 (AKG141); exhausting to stack S-10.

(u) One (1) Center Bay Loadout; identified as EU-28; constructed in 1972; a maximum capacity of 30 tons of lime per hour; emissions controlled by baghouse CE-13 (ALG320); exhausting to stack S-13.

(v) One (1) Lime Loadout #1 (West Bay); identified as EU-11; constructed prior to 1977; a maximum capacity of 200 tons of lime per hour; emissions controlled by baghouse CE-25 (ALG600); exhausting to stack S-25.

(w) One (1) Lime Loadout #2 (East Bay); identified as EU-25; constructed in 1996 and modified in 2010; a maximum capacity of 200 tons of lime per hour; emissions controlled by baghouse CE-25 (ALG600); exhausting to stack S-25.

(x) One (1) Truck Transfer Station Reclaim Hopper; identified as EU-32; constructed in 1972 and modified in 2003; a maximum capacity of 100 tons of lime per hour; emissions controlled by baghouse CE-32 (ALG606CA); exhausting to stack S-32.

(y) One (1) pneumatic lime transfer system #1, approved in 2016 for construction, with a maximum capacity of 30 tons of lime per hour, consisting of the following equipment:

(1) One (1) lime hopper, identified as EU-35, constructed in 2006, fed by Tank 16, which is one (1) of the five (5) lime storage tanks collectively identified as EU-24, using a dust collector CE-35 (ALG490) as control, exhausting to atmosphere.

(2) Tank 1, which is one (1) of the eight (8) lime storage tanks making up EU-14, constructed prior to 1977, fed by the lime hopper (EU-35), and controlled by a bin vent filter.

(z) One (1) pneumatic lime transfer system #2, approved in 2016 for construction, with a maximum capacity of 30 tons of lime per hour, consisting of the following equipment:

(1) One (1) vented inlet, fed by the re-screen, identified as L702, both part of EU-28, using a dust collector CE-13 (ALG320) as control, exhausting to atmosphere. The vented inlet feeds pneumatic lime transfer system #2 directly from the rotary valve with a cavity air purge.

(2) Tanks 1 and 6, which are two (2) of the eight (8) lime storage tanks making up EU-14, constructed prior to 1977, fed by the lime hopper, and each equipped with a bin vent filter.

Pollutants with Emission Limits or Applicable Standards:

☐ SO_2 ☐ NO_X ☐ CO ☐ VOC ☒ PM ☒ PM_{10} ☒ $PM_{2.5}$ ☐ HAPS

Applicable Rules:

PERMIT SECTION D.2

- Particulate Matter Emissions [326 IAC 6.8-1-2]
- Lake County PM_{10} Emission Requirements [326 IAC 6.8-2-22] [326 IAC 6.8-8]
- Preventative Maintenance Plan [326 IAC 2-7-5(12)]
- Testing Requirements [326 IAC 2-1.1-11] [326 IAC 3-6]
- Visible Emissions Notations [40 CFR 64]
- Baghouse Inspections [326 IAC 6.8-8-7]

Requirement:	Applicable	Violation Noted
Emission Limitations and Standards	☒ Yes ☐ No	☐ Yes ☒ No
Preventive Maintenance Plan	☒ Yes ☐ No	☐ Yes ☒ No
Compliance Determination Requirements	☒ Yes ☐ No	☐ Yes ☒ No
Testing Requirements	☒ Yes ☐ No	☐ Yes ☒ No
Compliance Monitoring Requirements	☒ Yes ☐ No	☒ Yes ☐ No
Recordkeeping Requirements	☒ Yes ☐ No	☒ Yes ☐ No
Types of Records Reviewed: Records of the daily visible emission notations of the stack exhaust; records of the weekly visible emission notations of the stack exhaust from facilities EU-15a, EU-35, EU-36, T-1, T-6 and T-1B; a daily record of the pressure drops across the baghouses controlling facilities; records of the results of the inspections.		
Reporting Requirements	☒ Yes ☐ No	☐ Yes ☒ No

Observations and Comments:

After the tour of the production area, we proceeded to the lime processing, handling, storage, and loadout areas of the facility.

During the inspection, I observed the following operational status for the control equipment and its associated processes:

Process	**Process IN operation**	**Control Equipment**	**Control Equipment IN operation**
Lime Storage System (New Side); EU-24	Yes	Baghouse CE-14 (ALG310)	Yes
Lime Handling System #1 (302 Belt); EU-6	Yes		
Lime Handling System #2 (301 Belt); EU-7	Yes	Baghouse CE-15 (ALG300)	Yes
Lime Transfer System #2; EU-42/43	No	Bin vent filters (ALG470)	No
Pneumatic lime transfer system #2	Yes	Baghouse CE-13 (ALG320)	Yes
Center Bay Loadout; EU-28	Yes		
Lime Loadout #2A (Center Bay); EU-8	Yes		
Lime Storage System (Old Side); EU-14	Yes		
Lime Grinder Handling System; EU-15	Yes	Baghouse CE-6 (ALG400)	Yes
Grinding Mill Material Transfer Operation, EU-15a	Yes	Dust collector CE-15a (ALG440)	Yes
Truck Flue Dust Loadout #1; EU-17	Yes	Baghouse CE-10 (AKG141)	Yes
Truck Flue Dust Loadout #2; EU-16	Yes	Baghouse CE-9 (AKG450)	Yes
Grinding Mill #1; EU-13	Yes	Baghouse CE-8 (ALG450)	Yes
Grinding Mill #2; EU-12	Yes	Baghouse CE-7 (ALG460)	Yes
Pneumatic lime transfer system #1 - Lime hopper, identified as EU-35	N/A	Dust collector CE-35 (ALG490)	The system was decommissioned
Lime Loadout #1 (West Bay); EU-11	Yes	Baghouse CE-25 (ALG600)	Yes
Lime Loadout #2 (East Bay); EU-25	Yes		
Truck Transfer Station Reclaim Hopper; EU-32	Yes	Baghouse CE-32 (ALG606CA)	Yes
Tank 1	Yes	Bin vent filters (ALG410)	Yes
Engineered fuel (EF) feed storage bins	Yes	Dust vent filters (AF 840)	Yes

PERMIT SECTION D.2

No emissions were observed escaping from the drop points, tanks, or conveyors during the time of the inspection. The following table summarizes the pressure drop readings during the inspection.

Emission Unit or Control Device	*Parameter*	*Permitted Value/Range* (inches of water)	*Observed* (inches of water)
Baghouse CE-6 (ALG400)	Pressure drop	Permitted: 2.0 - 8.0	3.3
Bin vent filters (ALG470) and (ALG410)	N/A	N/A	N/A
Dust collector CE-15a (ALG440)	Pressure drop	Permitted: 2.0 - 8.0	3.2
Baghouse CE-8 (ALG450)	Pressure drop	Permitted: 2.0 - 8.0	2.6
Baghouse CE-7 (ALG460)	Pressure drop	Permitted: 2.0 - 8.0	0.0
Baghouse CE-14 (ALG310)	Pressure drop	Permitted: 2.0 - 8.0	Was not accessible
Baghouse CE-15 (ALG300)	Pressure drop	Permitted: 2.0 - 8.0	2.6
Baghouse CE-13 (ALG320)	Pressure drop	Permitted: 2.0 - 8.0	Was not operating
Baghouse CE-9 (AKG450)	Pressure drop	Permitted: 2.0 - 8.0	4.1
Baghouse CE-10 (AKG141)	Pressure drop	Permitted: 2.0 - 8.0	4.2
Baghouse CE-25 (ALG600)	Pressure drop	Permitted: 2.0 - 8.0	6.0
Baghouse CE-32 (ALG606CA)	Pressure drop	Permitted: 2.0 - 8.0	3.4
Dust collector CE-35 (ALG490)	Pressure drop	Permitted: 2.0 - 8.0	Decommissioned

During the inspection, I observed that the baghouse CE-7 (ALG460) Magnehelic differential pressure gauge did not show any pressure drop. Mr. Pejoski, immediately instructed the maintenance personnel to take corrective actions.

During the inspection Lime Loadout #1 (West Bay), identified as EU-11, and the Lime Loadout #2 (East Bay), identified as EU-25, were operational, and I observed trucks loading lime. The Center Bay Loadout, identified as EU-8 and EU-28, was not used during the inspection. Likewise, the baghouse CE-13 (ALG320), which controls emissions from this loading bay was not in service during the inspection. Mr. Villanueva indicated that the central bay and its baghouse were out of service for regular maintenance.

During the inspection conducted in 2015, dust was escaping from the lime loadout #2 (East Bay) doors and crossing the property line onto NIPSCO property. During this inspection, I observed that the vertical bay strip curtains on all three loading bays were in good condition and managed to keep lime dust inside the loadouts, eliminating dust from leaving the facility's property. No visible emissions were seen from east or west bay doors for the trucks leaving the facility.

Before the site tour, I reviewed the records for all the emissions units noted in section D.2 of the company's permit. During the records review, I concluded that the Permittee does not comply with all monitoring and record-keeping requirements outlined in section D.2 of the company's permit, and the records were not complete.

Visible emission notations of the bin vent stack exhaust should be performed once per week during normal daylight whenever T-1, T-6, and T-1B are being loaded and visible emission notations of the stack exhaust from facilities EU-33, EU-15a, EU-35 and EU-36 should be performed once per week during normal daylight operations. Additionally, the Permittee should maintain records of the weekly visible emission notations of the stack exhaust from facilities EU-15a, EU-35, EU-36, T-1, T-6, and T-1B. During the records review, I determined that the Permittee does not perform weekly visible emission notations of the bin vent stack exhaust from EU-35, T-1, T-6, and T-1B.

Additionally, the Permittee should record the pressure drops across the baghouses used in conjunction with facilities EU-25, EU-17, EU-16, EU-15, EU-14, EU-6, EU-24, EU-28, EU-7, EU-8, EU-11, EU-12, EU-13, EU-32, and EU-43 at least once per day when the associated facilities are in operation. During the inspection, Ms. Langeliers indicated that a representative of the Mine Safety and Health Administration (MSHA) has restricted access to the lime floor, where baghouse CE-14 (ALG310), used in conjunction with facilities EU-6 and EU-24, is located, and that they cannot record the pressure drop across this baghouse. Access to baghouses CE-8 (ALG450) and CE-7 (ALG460) was not restricted during the site tour.

PERMIT SECTION D.2

The rest of the reviewed records indicated the baghouses listed in section D.2 are inspected regularly and the instruments used for determining the pressure drop are calibrated or replaced at least once every six (6) months.

The company's performance testing history, tested pollutants, and utilized methods indicate that the Permittee successfully performed all required PM_{10} testing and retesting.

Permit Section Compliance Status:

☐ No violations were observed or determined for this permit section at the time of the inspection.
☒ The following violations were determined for this permit section at the time of the inspection:

1) Carmeuse Lime, Inc. failed to perform once per-week visible emission notations of the stack exhaust from facilities EU-35 and whenever T-1, T-6, and T-1B are being loaded, in violation of the permit's Conditions D.2.9 and D.2.10.

2) Carmeuse Lime, Inc. failed to maintain records of the weekly visible emission notations of the stack exhausts from facilities EU-35, T-1, T-6, and T-1B, in violation of the permit's Condition D.2.14(b).

3) Carmeuse Lime, Inc. failed to record the pressure drop across the baghouses used in conjunction with facilities EU-6, EU-24, EU-12, and EU-13 at least once per day when the associated facilities have been in operation since September 8, 2022, in violation of the permit's Condition D.2.11.

4) Carmeuse Lime, Inc. failed to maintain a daily record of the pressure drop across the baghouses controlling facilities EU-6, EU-24, EU-12, and EU-13, in violation of the permit's Condition D.2.14(c).

PERMIT SECTION D.3

Emission Units and Control Devices:

Raw Material and Lime Storage and Handling (Fugitive)

(aa) One (1) Coal Storage Pile, consisting of two (2) coal storage tents and one (1) coal pile, one tent constructed in 2009 and the second constructed in 2014; identified as EU-22; a capacity of greater than 7 acres; a source of fugitive emissions.

(bb) One (1) coal storage pile, approved in 2014 for construction, identified as EU-21, with a capacity of 1 acre, a source of fugitive emissions.

(cc) Two (2) Limestone Storage Piles; identified as EU-23 and EU-29; each a capacity of greater than 9.5 acres; a source of fugitive emissions.

(dd) Coal Unloading and Processing operations; identified as EU-30; consisting of truck, barge/boat and rail unloading and assorted conveyors; a source of fugitive emissions.

(ee) Limestone Unloading and Processing operations; identified as EU-31; consisting of barge or boat unloading and assorted conveyors; a source of fugitive emissions.

(ff) One (1) coal loading system, identified as EU-34, consisting of the following equipment:

(1) One (1) loader hopper loaded by a frontend loader from EU-22, constructed in 2014, identified as EU-34a, with a maximum capacity of 25 tons.

(2) One (1) long conveyor moving coal from EU-34a to EU-34d, constructed in 2014, identified as EU-34c, with a maximum capacity of 300 tons of coal per hour.

PERMIT SECTION D.3

(3) One (1) 3-way gate moving coal to EU-34e and Coal Bin #2, constructed in 2014, identified as EU-34d, with a maximum capacity of 300 tons of coal per hour.

(4) Two (2) shorter reversible conveyors moving coal to Coal Bin #1 and Coal Bin #3, constructed in 2014, identified as EU-34e, with a maximum capacity of 300 tons of coal per hour.

(5) Coal grinding operations, identified as EU-34f, constructed prior to 1970, consisting of the following equipment that is enclosed within a building:

(i) Three (3) Coal Bins**,** identified as Coal Bins 1, 2, and 3, each with a maximum capacity of 750 tons

(ii) Five (5) coal mills fed by one of the coal bins and pneumatically transfers the pulverized coal to one of the five (5) Kilns, identified as Coal Mills 1, 2, 3, 4, and 5 each with a maximum capacity is 10.15 tons of coal per hour

(gg) One (1) Kiln 1 exhaust dust chamber, identified as EU-44, consisting of two (2) enclosed drop points, modified in 2012 directed to Truck Flue Dust Loadout #1's (EU-17) tank, and one (1) unenclosed drop point for removal of lime dust from kiln exhaust (a source of fugitive emissions).

(ff) One (1) Kiln 2 exhaust dust chamber, identified as EU-45, consisting of two (2) enclosed drop points, modified in 2012 directed to Truck Flue Dust Loadout #1's (EU-17) tank, and one (1) unenclosed drop point for removal of lime dust from kiln exhaust (a source of fugitive emissions).

(ii) One (1) Kiln 3 exhaust dust chamber, identified as EU-46, consisting of two (2) enclosed drop points for removal of lime dust from kiln exhaust; a source of fugitive emissions, with the following equipment approved for construction in 2013:

(1) One (1) dust hopper and grizzly screen, identified as EU-46a, with a maximum capacity 1 ton/hr, approved in 2013, with a rotary valve and material transfer pneumatic piping system to direct the material to the Dust Tank D-2 (EU-16) tank.

(jj) One (1) Kiln 4 exhaust dust chamber, identified as EU-47, consisting of two (2) drop points for removal of lime dust from kiln exhaust (one (1) drop point is a source of fugitive emissions); one of these drop points is equipped with a dust collection system consisting of one (1) enclosed hopper, one (1) pressure blower, and pneumatic piping to flue dust tank #2 (EU-16).

(kk) One (1) Kiln 5 exhaust dust chamber, identified as EU-48, consisting of two (2) drop points for removal of lime dust from kiln exhaust; a source of fugitive emissions, with the following equipment:

(1) One (1) grizzly screen, hopper, rotary valve and crusher, identified as EU-48a, with a maximum capacity of 1 ton/hr, approved in 2014, with a material transfer pneumatic piping system to direct the material to Dust Tank D-2 (EU-16) tank.

(2) One (1) dust hopper and grizzly screen, identified as EU-48b, with a maximum capacity of 1 ton/hr, approved in 2013, with a rotary valve and material transfer pneumatic piping system to direct the material to the Dust Tank D-2 (EU-16) tank.

(ll) One (1) lime dust storage pile, identified as EU-49, with a capacity of 18,000 tons, a source of fugitive emissions.

Specifically Regulated Insignificant Activities

(a) Vehicular traffic on paved and unpaved roads, and parking lots with public access. [326 IAC 6-4] [326 IAC 6.8-10]

PERMIT SECTION D.3

(b) Two (2) diesel fuel storage tanks, one (1) 10,000-gallon stationary tank and one (1) 300-gallon portable tank, both installed prior to 2001, handling less than or equal to three thousand five hundred (3,500) gallons, each with a capacity less than ten thousand five hundred (10,500) gallons [326 IAC 8-9-6(b)];

(c) One (1) 550-gallon gasoline storage tank, installed prior to 2007, handling less than or equal to one thousand three hundred (1,300) gallons per day, with a capacity less than ten thousand five hundred (10,500) gallons [326 IAC 8-9-6(b)]; and

(d) Two (2) parts washers without a remote solvent reservoir, installed May 2012, using solvents with vapor pressure less than two (2) kPa measured at thirty-eight degrees Centigrade (38^0C) [326 IAC 8-3-2] [326 IAC 8-3-8].

(e) Five (5) emergency diesel pony engines, each with an output rating of 60 KW (80.5 hp) and 3.87 liter cylinder displacement volume, to provide torque to rotate the kiln in an emergency, operating no more than 500 hrs per year and venting to the atmosphere; emergency diesel pony engines, EG-1 and EG-2, were installed in 1966 for Rotary Kiln EU-1 and EU-2, respectively; emergency diesel pony engine EG-3 was installed in 1968 for Rotary Kiln EU-3, and; emergency diesel pony engines, EG-4 and EG-5, were installed in 1972 for Rotary Kiln EU-4 and EU-5, respectively; [40 CFR 63, Subpart ZZZZ]

(f) One (1) natural gas-fired emergency generator engine (4SRB), identified as EG-NG1, permitted in 2017, with an output rating of 302 hp, operating no more than 500 hrs per year, and venting to the atmosphere. Under 40 CFR 60, Subpart JJJJ this is an affected unit. Under 40 CFR 63, Subpart ZZZZ this is a new affected unit.

(g) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.

Location	Quantity	MMBTU/ hr
Main Office	1	0.200
Maintenance	1	0.038
Maintenance Gas Heaters	2	0.300
Maintenance Gas Heaters	1	0.175
Receiving	1	0.125
Furnace Break Room	1	0.165
Mens Locker Room Furnace	1	0.500
Lab Furnace	1	0.100
Boathouse	1	0.250
Conveyor	1	0.450
Tunnel	1	0.175
Stone Feed Floor	5	1.250

To the extent that any of the above listed operations, or any part of the above listed operations, are processed stone handling (PSH) operations, as defined in 40 CFR 63.7082(g) and 40 CFR 63.7143, then under 40 CFR Part 63, Subpart AAAAA, these facilities are considered an existing affected facility.

(h) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors, and electrostatic precipitators with a design grain loading of less than or equal to three one-hundredths (0.03) grains per actual cubic foot and a gas flow rate less than or equal to four thousand (4,000) actual cubic feet per minute.

Pollutants with Emission Limits or Applicable Standards:

PERMIT SECTION D.3

☒ SO_2 ☒ NO_X ☒ CO ☒ VOC ☒ PM ☒ PM_{10} ☒ $PM_{2.5}$ ☒ HAPS

Applicable Rules:

- Particulate Matter Emissions [326 IAC 6.8-1-2]
- Cold Cleaner Degreaser Control Equipment and Operating Requirements [326 IAC 8-3-2]
- Material Requirements for Cold Cleaner Degreasers [326 IAC 8-3-8]

Requirement:	Applicable	Violation Noted
Emission Limitations and Standards	☒ Yes ☐ No	☒ Yes ☐ No
Preventive Maintenance Plan	☐ Yes ☒ No	☐ Yes ☐ No
Compliance Determination Requirements	☒ Yes ☐ No	☐ Yes ☒ No
Testing Requirements	☐ Yes ☒ No	☐ Yes ☐ No
Compliance Monitoring Requirements	☐ Yes ☒ No	☐ Yes ☐ No
Recordkeeping Requirements	☒ Yes ☐ No	☐ Yes ☒ No
Types of Records Reviewed: A map or diagram showing the location of all emission sources controlled, including the location, identification, length, and width of roadways; records for each application of water or chemical solution to roadways, the name and location of the roadway controlled, application rate, time of each application, width of each application, identification of each method of application, total quantity of water or chemical used for each application, for each application of chemical solution, the concentration and identity of the chemical, the material data safety sheets for each chemical; records for application of physical or chemical control agents (the name of the agent, location of application, application rate, total quantity of agent used, concentration, the material data safety sheets for each chemical; a log recording incidents when control measures were not used and a statement of explanation; records for each purchase of solvent used in the cold cleaner degreasing operations, the name and address of the solvent supplier, the date of purchase, the type of solvent purchased, the total volume of the solvent purchased, the true vapor pressure of the solvent; records of the vessel identification number, the vessel dimensions, and the vessel capacity for the two (2) insignificant diesel storage tanks and the one (1) insignificant gasoline storage tank.		
Reporting Requirements	☒ Yes ☐ No	☐ Yes ☒ No

Observations and Comments:

During the tour of the raw material and limestone storage and handling areas of the facility, I visually observed the coal storage piles (EU-22 & EU-21) and the limestone storage piles (EU-23 & EU-29). Emissions were not observed escaping from the piles. The coal unloading and processing operations were not in operation at the time of the inspection. The limestone unloading and processing operations were not in operation at the time of the inspection.

The Kiln's #1, 2, 3, 4, and 5 exhaust chambers were all operational, except Kiln #2, which was out of service. No emissions were observed escaping from the process. The lime dust storage pile EU-49 was observed during the inspection with no visible emissions observed escaping. Water and sweeper trucks were running along the paved and unpaved roads during the entire inspection duration. There were no dust issues observed during the inspection.

The two parts washers were observed during the inspection. Conspicuous labels were placed on the units. However, the lid of the parts washer in the maintenance shop was open while the unit was not being used.

The Permittee uses Crystal Clean 142 Mineral Spirits Solvent. The Safety Data Sheet (SDS) provided a vapor pressure of less than 1.0 mm of mercury measured at twenty degrees (20°) Celsius.

Emission Unit or Control Device	*Parameter*	*Permitted Value/Range*	*Observation*
N/A	N/A	N/A	N/A

PERMIT SECTION D.3

Crystal Clean last serviced the parts washers on August 1, 2022. A manifest provided the name and address of the solvent provider, date of purchase, solvent purchased, and the volume of the solvent purchased.

The five (5) emergency diesel pony engines were not running during the time of the inspection. The emergency diesel pony engine, EG-2, was out of service together with Kiln #2. The natural gas-powered backup generator was not running during the time of the inspection.

Non-resettable hour meters were located on the units, which indicated the unit has operated for the following hours.

Engines	Hours	Maintenance dates
EG-1	48.0	October 4, 2022
EG-2	Out of service	
EG-3	183.5	
EG-4	248.5	
EG-5	268	
Natural gas-fired emergency generator engine (4SRB), identified as EG-NG1	92.7	August 14, 2022

Two (2) diesel fuel storage tanks, and one (1) 550-gallon gasoline storage tank were not in use during the inspection, and no odors were present. The areas around these tanks were clean. No spills were visually observed on the floor near the tanks.

During the time of the inspection, I observed vehicular traffic on paved and unpaved roads, and parking lots, but they were not causing visible emissions. When I asked, Ms. Langeliers stated that they apply only water on roads, parking lots, and service areas and that they do not use any chemical agents for this purpose.

Permit Section Compliance Status:

☐ No violations were observed or determined for this permit section at the time of the inspection.
☒ The following violations were determined for this permit section at the time of the inspection:

1) Carmeuse Lime, Inc. failed to follow control equipment and operating requirements for the maintenance shop cold cleaner degreasing unit and close the degreaser cover when parts were not being handled in the degreaser, in violation of the permit's Condition D.3.2(a)(3) and the requirement of 326 IAC 8-3-2(a)(3).

PERMIT SECTION D.4

Emission Units and Control Devices:

(mm) EU-100, consisting of the following:

(1) One (1) railcar unloading machine and conveyor, identified as T-100, approved in 2015 for construction, with a maximum throughput capacity of 200 tons per hour, controlled by baghouse ALG-1000, and exhausting to stack S-100.

(2) One (1) belt conveyor, identified as T-101, approved in 2015 for construction, with a maximum throughput capacity of 200 tons per hour, controlled by baghouse ALG-1000, and exhausting to stack S-100.

(3) One (1) surge bin, identified as Bin 101, approved in 2015 for construction, with a maximum storage capacity of 5 tons, controlled by baghouse ALG-1000, and exhausting to stack S-100.

PERMIT SECTION D.4

(nn) EU-101, consisting of the following:

(1) One (1) Hi-Cal large pebble storage tank, identified as Bin 200, approved in 2015 for construction, with a maximum storage capacity of one thousand (1,000) tons, controlled by baghouse ALG-2000, and exhausting to stack S-101.

(2) One (1) Hi-Cal small pebble storage tank, identified as Bin 201, approved in 2015 for construction, with a maximum storage capacity of six hundred and fifty (650) tons, controlled by baghouse ALG-2000, and exhausting to stack S-101.

(3) One (1) continuous discharge bucket elevator, identified as T-103, approved in 2015 for construction, with a maximum throughput capacity of 200 tons per hour, controlled by baghouse ALG-2000, and exhausting to stack S-101.

(4) One (1) 2-Deck 6-foot by 16-foot screen, identified as T-201, approved in 2015 for construction, with a maximum throughput capacity of 300 tons per hour, controlled by baghouse ALG-2000, and exhausting to stack S-101.

(5) One (1) belt conveyor, identified as T-202, approved in 2015 for construction, with a maximum throughput capacity of 300 tons per hour, controlled by baghouse ALG-2000, and exhausting to stack S-101.

(6) One (1) belt conveyor, identified as T-203, approved in 2015 for construction, with a maximum throughput capacity of 300 tons per hour, controlled by baghouse ALG-2000, and exhausting to stack S-101.

(oo) EU-102, consisting of the following:

(1) One (1) Hi-Cal fines storage tank, identified as Bin 202, approved in 2015 for construction, with a maximum storage capacity of one thousand (1,000) tons, controlled by bin vent ALG-2001, and exhausting to stack S-102.

(pp) EU-103, consisting of the following:

(1) One (1) Dolo small pebble storage tank, identified as Bin 302, approved in 2015 for construction, with a maximum storage capacity of six hundred and fifty (650) tons, controlled by baghouse ALG-3000, and exhausting to stack S-103.

(2) One (1) Dolo large pebble storage tank, identified as Bin 303, approved in 2015 for construction, with a maximum storage capacity of one thousand (1,000) tons, controlled by baghouse ALG-3000, and exhausting to stack S-103.

(3) One (1) continuous discharge bucket elevator, identified as T-104, approved in 2015 for construction, with a maximum throughput capacity of 200 tons per hour, controlled by baghouse ALG-3000, and exhausting to stack S-103.

(4) One (1) 2-Deck 6-foot by 16-foot screen, identified as T-301, approved in 2015 for construction, with a maximum throughput capacity of 300 tons per hour, controlled by baghouse ALG-3000, and exhausting to stack S-103.

(5) One (1) belt conveyor, identified as T-302, approved in 2015 for construction, with a maximum throughput capacity of 300 tons per hour, controlled by baghouse ALG-3000, and exhausting to stack S-103.

PERMIT SECTION D.4

(6) One (1) belt conveyor, identified as T-303, approved in 2015 for construction, with a maximum throughput capacity of 300 tons per hour, controlled by baghouse ALG-3000, and exhausting to stack S-103.

(qq) EU-104, consisting of the following:

(1) One (1) Dolo fines storage tank, identified as Bin 300, approved in 2015 for construction, with a maximum storage capacity of one thousand (1,000) tons, controlled by bin vent ALG-3001, and exhausting to stack S-104.

(rr) EU-105, consisting of the following:

(1) One (1) belt conveyor, identified as T-400, approved in 2015 for construction, with a maximum throughput capacity of 300 tons per hour, controlled by baghouse ALG-4000, and exhausting to stack S-105.

(2) One (1) North rescreen belt conveyor, identified as T-403, approved in 2015 for construction, with a maximum throughput capacity of 300 tons per hour, controlled by baghouse ALG-4000, and exhausting to stack S-105.

(3) One (1) 2-Deck 6-foot by 16-foot screen, identified as T-404, approved in 2015 for construction, with a maximum throughput capacity of 300 tons per hour, controlled by baghouse ALG-4000, and exhausting to stack S-105.

(ss) EU-106, consisting of the following:

(1) One (1) belt conveyor, identified as T-451, approved in 2015 for construction, with a maximum throughput capacity of 300 tons per hour, controlled by baghouse ALG-4500, and exhausting to stack S-106.

(2) One (1) South rescreen belt conveyor, identified as T-453, approved in 2015 for construction, with a maximum throughput capacity of 300 tons per hour, controlled by baghouse ALG-4500, and exhausting to stack S-106.

(3) One (1) 2-Deck 6-foot by 16-foot screen, identified as T-454, approved in 2015 for construction, with a maximum throughput capacity of 300 tons per hour, controlled by baghouse ALG-4500, and exhausting to stack S-106.

(tt) EU-107, consisting of the following:

(1) One (1) additive bin, identified as Bin 700, approved in 2015 for construction, with a maximum storage capacity of one and one half (1.5) tons, controlled by baghouse ALG-7000, and exhausting to stack S-107.

(2) One (1) briquette bin, identified as Bin 702, approved in 2015 for construction, with a maximum storage capacity of four hundred (400) tons, controlled by baghouse ALG-7000, and exhausting to stack S-107.

(3) One (1) belt conveyor, identified as T-712, approved in 2015 for construction, with a maximum throughput capacity of twenty-five (25) tons per hour, controlled by baghouse ALG-7000, and exhausting to stack S-107.

(4) One (1) continuous discharge bucket elevator, identified as T-713, approved in 2015 for construction, with a maximum throughput capacity of twenty-five (25) tons per hour, controlled by baghouse ALG-7000, and exhausting to stack S-107.

PERMIT SECTION D.4

(5) One (1) belt conveyor, identified as T-714, approved in 2015 for construction, with a maximum throughput capacity of twenty-five (25) tons per hour, controlled by baghouse ALG-7000, and exhausting to stack S-107.

(uu) Truck loading spouts, approved in 2015 for construction, consisting of the following:

Emission Unit(s) ID	Control Device ID	Stack ID	Maximum Throughput (tons/hour)
EU-108	T-204	S-108	300
EU-109	T-205	S-109	300
EU-110	T-206	S-110	300
EU-111	T-207	S-111	300
EU-112	T-304	S-112	300
EU-113	T-305	S-113	300
EU-114	T-306	S-114	300
EU-115	T-307	S-115	300
EU-116	T-405	S-116	300
EU-117	T-455	S-117	300

Pollutants with Emission Limits or Applicable Standards:

☐ SO_2 ☐ NO_X ☐ CO ☐ VOC ☒ PM ☒ PM_{10} ☒ $PM_{2.5}$ ☐ HAPS

Applicable Rules:

- Particulate Matter Emissions [326 IAC 6.8-1-2]
- Preventative Maintenance Plan [326 IAC 2-7-5(12)]
- Testing Requirements [326 IAC 2-1.1-11][326 IAC 3-6]

Requirement:	Applicable	Violation Noted
Emission Limitations and Standards	☒ Yes ☐ No	☐ Yes ☒ No
Preventive Maintenance Plan	☒ Yes ☐ No	☐ Yes ☒ No
Compliance Determination Requirements	☒ Yes ☐ No	☐ Yes ☒ No
Testing Requirements	☒ Yes ☐ No	☐ Yes ☒ No
Compliance Monitoring Requirements	☒ Yes ☐ No	☐ Yes ☒ No
Recordkeeping Requirements	☒ Yes ☐ No	☐ Yes ☒ No
Types of Records Reviewed: N/A		
Reporting Requirements	☒ Yes ☐ No	☐ Yes ☒ No

Observations and Comments:

No units of the Lime Terminal Operation have been constructed. Permit No. 089-35238-00112, Title V significant source modification was approved on June 11, 2015, to construct a new lime terminal operation. The permit allowed construction to begin on or after June 11, 2015, to December 11, 2016. Carmeuse Lime began some foundation work during this period and has suspended the construction at this time. All equipment listed in this section of the permit was removed in the Title V renewal, which is in the process.

PERMIT SECTION D.4

Emission Unit or Control Device	*Parameter*	*Permitted/Tested Value/Range*	*Observed*
Baghouse ALG-1000	Visible emission	None	N/A
Baghouse ALG-2000	Visible emission	None	N/A
Bin vent ALG-2001	Visible emission	None	N/A
Baghouse ALG-3000	Visible emission	None	N/A
Bin vent ALG-3001	Visible emission	None	N/A
Baghouse ALG-4000	Visible emission	None	N/A
Baghouse ALG-4500	Visible emission	None	N/A
Baghouse ALG-7000	Visible emission	None	N/A

Permit Section Compliance Status:

☒ No violations were observed or determined for this permit section at the time of the inspection.

☐ The following violations were determined for this permit section at the time of the inspection:
N/A

PERMIT SECTION D.5

Emission Units and Control Devices:

Lime Storage and Handling

(vv) Lime storage bin system and associated conveying equipment at the Buffington Facility as follows:

(1) One (1) Run of Kiln (ROK) Lime Transfer System #1, identified as EU-51, approved in 2018 for construction, consisting of two (2) diverters, two (2) belt conveyors, and a bucket elevator, with a maximum capacity of 200 tons of lime per hour, emissions controlled by baghouse CE-51 (DC-620), and exhausting to stack S-51.

(2) One (1) ROK Lime Storage Bin #1, identified as EU-52, approved in 2018 for construction, with a maximum capacity of 2,000 tons, emissions controlled by a bin vent filter (CE-52), and exhausting to S-52.

(3) One (1) ROK Lime Storage Bin #2, identified as EU-53, approved in 2018 for construction, with a maximum capacity of 2,000 tons, emissions controlled by a bin vent filter (CE-53), and exhausting to S-53.

(4) One (1) ROK Lime Transfer System #2, identified as EU-54, approved in 2018 for construction, consisting of two (2) vibratory feeders and two (2) belt conveyors, with a maximum capacity of 200 tons of lime per hour, emissions controlled by baghouse CE-54 (DC-621), and exhausting to stack S-54.

Pollutants with Emission Limits or Applicable Standards:

☐ SO_2 ☐ NO_X ☐ CO ☐ VOC ☒ PM ☒ PM_{10} ☒ $PM_{2.5}$ ☐ HAPS

Applicable Rules:

- Lake County PM_{10} Fugitive Particulate Matter Requirements [326 IAC 6.8-10]
- Preventative Maintenance Plan [326 IAC 2-7-5(12)]
- Testing Requirements [326 IAC 2 1.1-11][326 IAC 3-6]
- Visible Emissions Notations [326 IAC 6.8-8-7]
- Parametric Monitoring [326 IAC 6.8-8-7]

Requirement:	Applicable	Violation Noted
Emission Limitations and Standards	☒ Yes ☐ No	☐ Yes ☒ No

PERMIT SECTION D.5		
Preventive Maintenance Plan	☒ Yes ☐ No	☐ Yes ☒ No
Compliance Determination Requirements	☒ Yes ☐ No	☐ Yes ☒ No
Testing Requirements	☒ Yes ☐ No	☐ Yes ☒ No
Compliance Monitoring Requirements	☒ Yes ☐ No	☒ Yes ☐ No
Recordkeeping Requirements	☒ Yes ☐ No	☒ Yes ☐ No
Types of Records Reviewed: Records of daily visible emission notations of the bin vent CE-52 stack exhausts and the bin vent CE-53 stack exhausts; Daily records of pressure drop across baghouse CE-51 and baghouse CE-54. Records that show the instrument used for determining the pressure are calibrated or replaced at least once every six (6) months.		
Reporting Requirements	☐ Yes ☒ No	☐ Yes ☐ No

Observations and Comments:

During the site tour, we observed the Run of Kiln lime storage bin system. The system was not in operation during the inspection. I observed from the control room ROK Lime Storage Bins #1 and #2 were almost full and there was not material moving during the inspection that would require baghouses CE-51 (DC-620) and CE-54 (DC-621) to control emissions.

Emission Unit or Control Device	*Parameter*	*Permitted/Tested Value/Range*	*Observed*
Baghouse CE-51 (DC-620)	Pressure drop	2.0 and 8.0 inches of water	Not used
Bin vent filter (CE-52)	Visible emission	None	Not used
Bin vent filter (CE-53)	Visible emission	None	Not used
Baghouse CE-54 (DC-621)	Pressure drop	2.0 and 8.0 inches of water	Not used

During the site tour, I did not observe any visual emissions escaping the process or associated control equipment.

Although, visible emission notations of the bin vents (CE-52 and CE-53) exhausts should be performed once per day during normal daylight operations, during the records review, I observed that the Permittee does not maintain records of daily visible emission notations of the bin vent CE-52 stack exhausts and the bin vent CE-53 stack exhausts. The system was commenced on February 1, 2020.

Additionally, the company's performance testing history, tested pollutants, and utilized methods indicate that the Permittee successfully performed all required PM, PM_{10}, and $PM_{2.5}$ testing of the ROK Lime Transfer System #1 (EU-51) and ROK Lime Transfer System #2 (EU-54) on April 6, 2021.

Permit Section Compliance Status:

☐ No violations were observed or determined for this permit section at the time of the inspection.
☒ The following violations were determined for this permit section at the time of the inspection:

1) Carmeuse Lime, Inc. failed to perform daily visible emission notations of the bin vents (CE-52 and CE-53) exhausts, in violation of the permit's Condition D.5.6 and 326 IAC 6.8-8-7.

2) Carmeuse Lime, Inc. failed to maintain records of daily visible emission notations of the bin vent CE-52 stack exhausts and the bin vent CE-53 stack exhausts, in violation of the permit's Condition D.5.9.

PERMIT SECTION E.1

Emission Units and Control Devices:

Lime Production

(a) One (1) Allis Chalmers Rotary Kiln equipped with a hot face dam and a Contact Cooler; identified as EU-1; constructed in 1966, modified in 2010, 2014, and 2016; with a maximum heat input capacity of 213 MMBtu/hr,

PERMIT SECTION E.1

a rated maximum natural gas heat input capacity of 170.4 MMBtu/hr, a maximum capacity of 8.2 tons of coal per hour, 4.46 tons of glycerin per hour, 5.74 tons of engineered fuel (EF) per hour, and a maximum production rate of 24 tons of lime per hour, emissions controlled by baghouse CE-1; exhausting to stacks S-1A through S-1F.

(b) One (1) Allis Chalmers Rotary Kiln equipped with a Contact Cooler; identified as EU-2; constructed in 1966, modified in 2014 and 2016; with a maximum heat input capacity of 213 MMBtu/hr, a rated maximum natural gas heat input capacity of 170.4 MMBtu/hr, a maximum capacity of 8.2 tons of coal per hour, 4.46 tons of glycerin per hour, 5.74 tons of engineered fuel (EF) per hour, and a maximum production rate of 23.3 tons of lime per hour; emissions controlled by baghouse CE-2; exhausting to stacks S-2A through S-2F.

(c) One (1) Allis Chalmers Rotary Kiln equipped with a Contact Cooler; identified as EU-3; constructed in 1968, modified in 2014 and 2016; with a maximum heat input capacity of 213 MMBtu/hr, a rated maximum natural gas heat input capacity of 170.4 MMBtu/hr, a maximum capacity of 8.2 tons of coal per hour, 4.46 tons of glycerin per hour, 5.74 tons of engineered fuel (EF) per hour, and a maximum production rate of 23.3 tons of lime per hour; emissions controlled by baghouse CE-3; exhausting to stacks S-3A through S-3F.

(d) One (1) Allis Chalmers Rotary Kiln equipped with a Contact Cooler; identified as EU-4; constructed in 1972, modified in 2014 and 2016; with a maximum heat input capacity of 213 MMBtu/hr, a rated maximum natural gas heat input capacity of 170.4 MMBtu/hr, a maximum capacity of 8.2 tons of coal per hour, 4.46 tons of glycerin per hour, 5.74 tons of engineered fuel (EF) per hour, and a maximum production rate of 23.3 tons of lime per hour; emissions controlled by baghouse CE-4; exhausting to stacks S-4A through S-4F.

(e) One (1) Allis Chalmers Rotary Kiln equipped with a Contact Cooler; identified as EU-5; constructed in 1972, modified in 2014 and 2016; with a maximum heat input capacity of 213 MMBtu/hr, a rated maximum natural gas heat input capacity of 170.4 MMBtu/hr, a maximum capacity of 8.2 tons of coal per hour, 4.46 tons of glycerin per hour, 5.74 tons of engineered fuel (EF) per hour, and a maximum production rate of 23.3 tons of lime per hour; emissions controlled by baghouse CE-5; exhausting to stacks S-5A through S-5F.

The affected facilities under 40 CFR 63, Subpart AAAAA are the five (5) rotary kilns (EU-1 through EU-5) and all processed stone handling (PSH) operations (EU-50), including all equipment associated with PSH operations beginning at the processed stone storage bin(s) or open storage pile(s) and ending where the processed stone is fed into the kiln. Affected PSH operations include man-made processed stone storage bins (but not open processed stone storage piles), conveying system transfer points, bulk loading or unloading systems, screening operations, surge bins, bucket elevators, and belt conveyors.

Pollutants with Emission Limits or Applicable Standards:

☒ SO_2 ☒ NO_X ☒ CO ☒ VOC ☒ PM ☒ PM_{10} ☒ $PM_{2.5}$ ☒ HAPS

Applicable Rule:

- General Provisions Relating to National Emission Standards for Hazardous Air Pollutants Subpart AAAAA [326 IAC 20-1] [40 CFR Part 63, Subpart A]
- Lime Manufacturing Plants NESHAP [40 CFR 63, Subpart AAAAA] [326 IAC 20-91]

Applicability Information:

The facility is subject to this subpart because it is a lime manufacturing plant (LMP) that is a major source of hazardous air pollutant (HAP) emissions.

Requirement:	Applicable	Violation Noted
Emission Limitations/Standards	☒ Yes ☐ No	☐ Yes ☒ No
Work Practice/Operating Requirements	☐ Yes ☒ No	☐ Yes ☐ No
Compliance Monitoring Requirements	☒ Yes ☐ No	☐ Yes ☒ No
Testing Requirements	☒ Yes ☐ No	☐ Yes ☒ No
Record Keeping Requirements	☒ Yes ☐ No	☐ Yes ☒ No

Types of Records Reviewed: A copy of each notification and report that was submitted to comply with this subpart, including all documentation supporting any Initial Notification or

PERMIT SECTION E.1		
	Notification of Compliance Status that was submitted. Performance tests, performance evaluations, and opacity and VE observations.	
Reporting Requirements	☒ Yes ☐ No	☐ Yes ☒ No
Preventive Maintenance Plan [326 IAC 1-6-3]	☐ Yes ☒ No	☐ Yes ☐ No
Observations and Comments:		
Please see Sections D.1 and D.3 for the observations and comments.		
Permit Section Compliance Status:		
☒ No violations were observed or determined for this permit section at the time of the inspection. ☐ The following violations were determined for this permit section at the time of the inspection: N/A		

PERMIT SECTION E.2		
Emission Units and Control Devices:		
(e) Five (5) emergency diesel pony engines, each with an output rating of 60 KW (80.5 hp) and 3.87 liter cylinder displacement volume, to provide torque to rotate the kiln in an emergency, operating no more than 500 hrs per year and venting to the atmosphere; emergency diesel pony engines, EG-1 and EG-2, were installed in 1966 for Rotary Kiln EU-1 and EU-2, respectively; emergency diesel pony engine EG-3 was installed in 1968 for Rotary Kiln EU-3, and; emergency diesel pony engines, EG-4 and EG-5, were installed in 1972 for Rotary Kiln EU-4 and EU-5, respectively; (f) One (1) natural gas-fired emergency generator engine (4SRB), identified as EG-NG1, permitted in 2017, with an output rating of 302 hp, operating no more than 500 hrs per year, and venting to the atmosphere.		
Pollutants with Emission Limits or Applicable Standards:		
☒ SO_2 ☒ NO_X ☒ CO ☒ VOC ☒ PM ☒ PM_{10} ☒ $PM_{2.5}$ ☒ HAPS		
Applicable Rule:		
• General Provisions Relating to National Emission Standards for Hazardous Air Pollutants Subpart ZZZZ [326 IAC 20-1] [40 CFR Part 63, Subpart A] • Stationary Reciprocating Internal Combustion Engines NESHAP [40 CFR 63, Subpart ZZZZ] [326 IAC 20-82]		
Applicability Information:		
The above emergency diesel pony engines and emergency generator engine are subject to the requirements of 40 CFR 63, Subpart ZZZZ, because this rule applies to emergency engines located in a major or area source of HAP emissions.		
Requirement:	Applicable	Violation Noted
Emission Limitations/Standards	☒ Yes ☐ No	☐ Yes ☒ No
Work Practice/Operating Requirements	☒ Yes ☐ No	☐ Yes ☒ No
Compliance Monitoring Requirements	☒ Yes ☐ No	☐ Yes ☒ No
Testing Requirements	☐ Yes ☒ No	☐ Yes ☐ No
Record Keeping Requirements	☒ Yes ☐ No	☐ Yes ☒ No
Types of Records Reviewed: The occurrence and duration of each malfunction of operation; all required maintenance, hours operated.		
Reporting Requirements	☐ Yes ☒ No	☐ Yes ☐ No
Preventive Maintenance Plan [326 IAC 1-6-3]	☐ Yes ☒ No	☐ Yes ☐ No
Observations and Comments:		
The five (5) emergency diesel pony engines were not running during the time of the inspection. The emergency diesel		

PERMIT SECTION E.2

pony engine, EG-2 was out of service together with Kiln #2. The natural gas-powered backup generator was not running during the time of the inspection.

Non-resettable hour meters were located on the units, which indicated the unit has operated for following hours.

Engines	Hours	Maintenance dates
EG-1	48.0	October 4, 2022
EG-2	Out of service	
EG-3	183.5	
EG-4	248.5	
EG-5	268	
Natural gas-fired emergency generator engine (4SRB), identified as EG-NG1	92.7	August 14, 2022

Permit Section Compliance Status:

☒ No violations were observed or determined for this permit section at the time of the inspection.
☐ The following violations were determined for this permit section at the time of the inspection:
N/A

PERMIT SECTION E.3

Emission Units and Control Devices:

(f) One (1) natural gas-fired emergency generator engine (4SRB), identified as EG-NG1, permitted in 2017, with an output rating of 302 hp, operating no more than 500 hrs per year, and venting to the atmosphere.

Pollutants with Emission Limits or Applicable Standards:

☒ SO_2 ☒ NO_X ☒ CO ☒ VOC ☒ PM ☒ PM_{10} ☒ $PM_{2.5}$ ☒ HAPS

Applicable Rule:

- General Provisions Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR Part 60, Subpart A]
- Standards of Performance for Stationary Spark Ignition Internal Combustion Engines NSPS [326 IAC 12] [40 CFR Part 60, Subpart JJJJ]

Applicability Information:

The above emergency generator engine is subject to the requirements of 40 CFR Part 60, Subpart JJJJ, because this rule applies to emergency engines that are constructed after June 12, 2006, where the stationary spark ignition (SI) internal combustion engines (ICE) are manufactured on or after July 1, 2009, for emergency engines with a maximum power greater than 25 HP.

Requirement:	Applicable	Violation Noted
Emission Limitations/Standards	☒ Yes ☐ No	☐ Yes ☒ No
Work Practice/Operating Requirements	☒ Yes ☐ No	☐ Yes ☒ No
Compliance Monitoring Requirements	☒ Yes ☐ No	☐ Yes ☒ No
Testing Requirements	☐ Yes ☒ No	☐ Yes ☐ No
Record Keeping Requirements	☒ Yes ☐ No	☐ Yes ☒ No
Types of Records Reviewed: Maintenance conducted on the natural gas engine; hours operated.		
Reporting Requirements	☐ Yes ☒ No	☐ Yes ☐ No
Preventive Maintenance Plan [326 IAC 1-6-3]	☐ Yes ☒ No	☐ Yes ☐ No

PERMIT SECTION E.3

Observations and Comments:

The natural gas-powered backup generator was not running during the time of the inspection.

Emission Unit or Control Device	*Parameter*	*Permitted Value/Range*	*Observation*
N/A	N/A	N/A	N/A

Non-resettable hour meter was located on the unit, which indicated the unit has operated for 92.7 hours. The maintenance records showed that August 14, 2022, was the date of the most recent preventative maintenance conducted on the generator.

Permit Section Compliance Status:

☒ No violations were observed or determined for this permit section at the time of the inspection.

☐ The following violations were determined for this permit section at the time of the inspection:
N/A

ADDITIONAL SOURCE COMPLIANCE REVIEW:

The following reports are required and were reviewed:

☒ Annual Compliance Certification(s) ☒ Deviation & Compliance Monitoring Report(s)

☐ Annual Notification(s) ☒ Emission Statement(s)

The reports are consistent with inspection observations.	☒ Yes ☐ No ☐ N/A
The permit accurately represents emission units observed on site. No units of the Lime Terminal Operation have been constructed. Permit No. 089-35238-00112, Title V significant source modification was approved on June 11, 2015, to construct a new lime terminal operation. The permit allowed construction to begin on or after June 11, 2015, to December 11, 2016. Carmeuse Lime began some foundation work during this period and has suspended the construction at this time.	☐ Yes ☒ No ☐ N/A
Compliance assistance was provided during the inspection.	☐ Yes ☒ No ☐ N/A
The source is required to have a Risk Management Plan [40 CFR 68].	☐ Yes ☒ No
If yes, the source has a plan.	☐ Yes ☐ No ☒ N/A
If yes, the employees have been trained.	☐ Yes ☐ No ☒ N/A

Additional Information and Comments:

None

Additional Source Compliance Review Status:

☒ No violations were observed or determined for this permit section at the time of the inspection.

☐ The following violations were determined for this permit section at the time of the inspection:
None

INSPECTION FINDINGS

☐ No violations were observed or determined at the time of the inspection.

☒ The following violations were determined at the time of the inspection:

1) Carmeuse Lime, Inc. failed to perform once per-week visible emission notations of the stack exhaust from facilities EU-15a, EU-35, and EU-36 and whenever T-1, T-6, and T-1B are being loaded, in violation of the permit's Conditions D.2.9 and D.2.10.

2) Carmeuse Lime, Inc. failed to maintain records of the weekly visible emission notations of the stack exhausts from facilities EU-15a, EU-35, EU-36, T-1, T-6, and T-1B, in violation of the permit's Conditions D.2.14(b).

3) Carmeuse Lime, Inc. failed to record the pressure drops across the baghouses used in conjunction with facilities EU-6, EU-24, EU-12, and EU-13 at least once per day when the associated facilities have been in operation since September 8, 2022, in violation of the permit's Condition D.2.11.

4) Carmeuse Lime, Inc. failed to maintain a daily record of the pressures drop across the baghouses controlling facilities EU-6, EU-24, EU-12, and EU-13, in violation of the permit's Conditions D.2.14(c).

5) Carmeuse Lime, Inc. failed to follow control equipment and operating requirements for the maintenance shop cold cleaner degreasing unit and to close the degreaser cover when parts were not being handled in the degreaser, in violation of the permit's Condition D.3.2(a)(3) and 326 IAC 8-3-2(a)(3).

6) Carmeuse Lime, Inc. failed to perform daily visible emission notations of the bin vents (CE-52 and CE-53) exhausts, in violation of the permit's Condition D.5.6 and 326 IAC 6.8-8-7.

7) Carmeuse Lime, Inc. failed to maintain records of daily visible emission notations of the bin vent CE-52 stack exhausts and the bin vent CE-53 stack exhausts, in violation of the permit's Condition D.5.9.

RECOMMENDED ACTION	Issue inspection summary/enforcement action letter and refer source for enforcement.
EXIT INTERVIEW	I explained my findings, recommendations, and conclusions with Ms. Langeliers prior to exiting the facility.

From: Langeliers Sarah
To: ROBERTS, GOLDIE
Subject: Read: [EXT] Carmeuse Lime, Inc. (089-00112) Inspection Summary/Enforcement Action Letter
Date: Friday, November 04, 2022 10:11:16 AM
Importance: High

Your message
To: Langeliers Sarah
Subject: [EXT] Carmeuse Lime, Inc. (089-00112) Inspection Summary/Enforcement Action Letter
Sent: Friday, November 4, 2022 8:04:30 AM (UTC-06:00) Central Time (US & Canada)
was read on Friday, November 4, 2022 9:10:21 AM (UTC-06:00) Central Time (US & Canada).