089-48101-00112

AI ID: 18050

Carmeuse Americas—BUFFINGTON OPERATION
1 N. Carmeuse Lane • Gary, IN 46406
Phone: 219.944-6144 • Fax: 219.944.9812
info@carmeuse.com

July 26, 2024

Received by State of Indiana IDEM-OAQ
via email July 26, 2024 MJ-3

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, IN 46204-2251

RE: Application for Significant Source and Permit Modification
Carmeuse Lime, Inc.– Buffington Facility [Plant ID 089-00112]

To Whom It May Concern,

Carmeuse Lime, Inc. (Carmeuse) owns and operates a lime processing plant located at 1 North Carmeuse Drive in Gary, Indiana (Buffington Facility). Carmeuse is submitting this Significant Source and Permit Modification for the Buffington Facility for the installation of two lime transloading operations.

The attached application includes a complete description of the project, potential emissions calculations, regulatory applicability analyses, and application forms.

If there are any questions concerning this application, please do not hesitate to contact me at (219) 269-4747 or Mr. Tony Schroeder of Trinity Consultants at (216) 278-0500.

Sincerely,

Carmeuse Lime, Inc.

Henry Sparks

Henry Sparks
Environmental Specialist

SIGNIFICANT SOURCE AND PERMIT MODIFICATION APPLICATION

Carmeuse Lime, Inc. / Buffington Facility

Prepared By:

TRINITY CONSULTANTS
8900 Keystone Crossing
Suite 1070
Indianapolis, IN 46240
(317) 451-8100

July 2024

TABLE OF CONTENTS

1. INTRODUCTION

Carmeuse Lime, Inc. (Carmeuse) owns and operates a lime manufacturing facility located in Gary, Lake County, Indiana (Buffington facility). The Buffington facility is a Title V major source and is currently permitted to operate by the Indiana Department of Environmental Management (IDEM) under Title V Operating Permit No. 089-41162-00112, issued on December 22, 2023. Carmeuse is submitting this significant source and permit modification application for the addition of two new portable conveyors at the Buffington facility to accommodate transloading of lime from railcars to trucks.

2. PERMIT UPDATE

Carmeuse is proposing to install two new portable conveyors at the Buffington facility to perform the transloading of lime product from railcars to trucks. The new conveyors will be the only pieces of equipment (other than railcars and trucks) involved in the transloading operation and will have a maximum capacity of 300 tons of lime per hour, each. Lime material will first be dropped from the bottom of the railcar into the enclosed portable conveyors. The portable conveyors will be hydraulically compressed against the bottom of the railcar to prevent particulate matter from becoming airborne from the material drop. It is expected that the connection between the railcar and the portable conveyors will be sufficiently tight such that the transfer point can be considered enclosed. As such, the drop point from the railcar to the conveyors is not included in the emission calculations for the transloading operation included in Appendix B. Once the lime has been received from the railcar, the lime will be conveyed upward on the enclosed conveyors and then ejected through a loading spout into an enclosed truck. The particulate generated from dropping lime material from the portable conveyors into the trucks will be primarily captured by onboard dust collection systems.

Based on the design of the system, it is expected that the dust collectors will capture all of the particulate emissions generated by the transloading operation. However, to conservatively estimate emissions, Carmeuse has assumed a capture efficiency of 99.9% for the dust collectors. As such, Carmeuse is proposing that both fugitive emission points and a stack emission points be added to the permit for the transloading operation.

The transloading conveyors rely upon onboard diesel engines to generate power. This power is used for locomotion of the portable conveyors, operation of the onboard dust collectors, and for movement of the conveyor belts to transfer the lime product. The transloading conveyors are portable and will be moved around the Buffington facility to accommodate transloading in different areas. As such, the onboard diesel engines will be nonroad engines and should not be regulated as stationary sources.

Carmeuse requests IDEM add the following lime transloading operation to the Lime Storage and Loadout portion of Section A.2 of the Buffington facility's permit:

One (1) Lime Transloading Operation consisting of two (2) lime transloaders; identified as EU-37 and EU-38; with maximum capacities of 300 tons of lime per hour, each; each including one conveyor with emissions controlled by baghouses CE-37 and CE-38, respectively; exhausting to stack S-37 and S-38, respectively.

3. REGULATORY REVIEW

This section summarizes the various air regulatory requirements that potentially apply to the facility. The applicability of New Source Review (NSR), New Source Performance Standards (NSPS), and National Emission Standards for Hazardous Air Pollutants (NESHAP) are addressed below.

3.1 Major New Source Review Applicability

Major NSR applicability is based on a stationary source's PTE. The PTE of a source can account for the effects of a proposed air pollution control device (APCD). As such, the PTE from this facility is calculated accounting for the proposed baghouses. The increase in controlled emissions of Particulate Matter (PM), Particulate Matter with an aerodynamic diameter of less than 10 microns (PM10), and Particulate Matter with an aerodynamic diameter of less than 2.5 microns (PM2.5) from the lime transloading operation is not considered a significant modification as PM, PM10, and PM2.5 increases are each less than the significant emission rates found in 326 IAC 2-2-1(ww), as shown in the emission calculations in Appendix B. As the emissions from the project are below significant modification thresholds for all pollutants, the facility is not subject to major new source review for any applicable pollutant.

3.2 New Source Performance Standards

NSPS, promulgated in 40 CFR 60, require new, modified, or reconstructed sources to control emissions to the level achievable by the best-demonstrated technology as specified in the applicable provisions.

3.2.1 Standards of Performance for Nonmetallic Mineral Processing Plants (Subpart OOO)

NSPS Subpart OOO regulates PM emissions from each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, and enclosed truck or railcar loading operation at a nonmetallic mineral processing plant constructed, reconstructed, or modified after August 31, 1983. Pursuant to 40 CFR 60.671, a nonmetallic mineral processing plant means any combination of equipment that is used to crush or grind any nonmetallic mineral wherever located except as provided in 40 CFR §60.670 (b) and (c). Lime is not included in the list of nonmetallic minerals covered by NSPS Subpart OOO. Furthermore, EPA has confirmed in applicability determination memos that NSPS Subpart OOO does not apply to lime handling operations.[1] Because the new portable conveyors will only handle lime product, NSPS Subpart OOO does not apply to the transloading operation.

3.2.2 Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (Subpart IIII)

NSPS Subpart IIII for Stationary Compression Ignition Internal Combustion Engines (40 CFR 60, Subpart IIII) applies to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) as specified in 40 CFR 60.4200(a). The proposed lime transloading conveyors will be equipped with onboard diesel engines. The engines will be on portable pieces of equipment, thereby meeting the definition of a nonroad engine per 40 CFR 1068.30. NSPS IIII applies to stationary engines; therefore, since the engines will be considered nonroad engines and not stationary internal combustion

[1] U.S. Environmental Protection Agency, Applicability Determination Index, Control Number: 0400016, "Subpart OOO and UUU Applicability to Lime Plants", November 18, 2003

engines as defined in 40 CFR 60.4219, the engines associated with the proposed lime transloading conveyors will not be subject to the requirements of NSPS Subpart IIII.

3.3 National Emission Standards for Hazardous Air Pollutants

National Emissions Standards for Hazardous Air Pollutants (NESHAPs) apply to sources in specifically regulated industrial source classifications (Clean Air Act Section 112(d)) or on a case-by-case basis (Clean Air Act Section 112(g)) for facilities not regulated as a specific industrial source type. Pollutant specific NESHAPs may also be applicable. NESHAPs are primarily developed for industrial source categories. Therefore, the potential applicability of a particular NESHAP to a facility can be readily ascertained based on the industrial source category covered.

3.3.1 Stationary Reciprocating Internal Combustion Engines (Subpart ZZZZ)

As previously stated, the engines associated with the proposed lime transloading conveyors will be considered nonroad engines and not stationary reciprocating internal combustion engines as defined in 40 CFR 63.6675; therefore, the engines will not be subject to the requirements of NESHAP ZZZZ.

3.4 Indiana Regulatory Program

State rules potentially applicable to this project are discussed below.

3.4.1 Part 70 Permits, Source Modification (326 IAC 2-7-10.5)

Pursuant to 326 IAC 2-7-10.5(a), a Title V source proposing to construct new emission units, modify existing emission units, or otherwise modify the source as described in 326 IAC 2-7-10.5, must submit an application for source modification approval unless the proposed project is exempt under 326 IAC 2-1.1-3. PTE calculations are included in Appendix B. As shown in Table 3-1 below, the uncontrolled PTE from the project is greater than the significant source modification thresholds in 326 IAC 2-7-10.5(g); therefore, a significant source modification is required for this project.

Table 3-1. Uncontrolled PTE (tpy)

Emission Unit	PM	PM10	PM2.5	SO2	NOx	VOC	CO	HAPs	Worst Single HAP
Lime Transloading Operation	1,603.08	1,603.08	1,603.08	-	-	-	-	-	-
Total	**1,603.08**	**1,603.08**	**1,603.08**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Significant Source Modification Lower Thresholds	25	25	25	25	25	25	100	25	10
Significant Source Modification Required?	Yes	Yes	Yes	No	No	No	No	No	No

3.4.2 Permit Modification (326 IAC 2-7-12)

A permit modification is required for any revision to a Title V permit that cannot be accomplished under the provisions for administrative permit amendments contained in 326 IAC 2-7-11. Pursuant to 326 IAC 2-7-12(b)(1), a minor permit modification may be used if certain criteria are satisfied. Carmeuse requests the proposed lime transloading operation be incorporated into the Buffington facility's Title V permit through a significant permit modification.

3.4.3 Particulate Emission Limitations for Manufacturing Processes (326 IAC 6-3)

326 IAC 6-3 establishes emission limitations for particulate emissions from manufacturing processes located anywhere in the state. Pursuant to 326 IAC 6-3-1(c)(3), the rule does not apply if a particulate matter

emission limitation is established in 326 IAC 6.8. Since the Buffington facility is subject to the requirements of 326 IAC 6.8, the facility is not subject to the requirements of 326 IAC 6-3.

3.4.4 Fugitive Particulate Matter Limitations for Lake County (326 IAC 6.8-10)

The Buffington facility is a source specifically listed in 326 IAC 6.8-10-1(a)(2)(K); therefore, the facility is subject to the requirements of 326 IAC 6.8-10. Emission and opacity limitations are established in 326 IAC 6.8-10-3 for various sources, including material transfer operations and dust handling equipment. Carmeuse will ensure that the proposed lime transloading operation comply with the emission and opacity limitations of this rule by controlling fugitive particulate emissions in accordance with the fugitive dust control plan provided as Appendix A of the Buffington facility's Title V operating permit.

.

APPENDIX A. STATE FORMS

AIR PERMIT APPLICATION COVER SHEET

State Form 50639 (R4 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of this cover sheet is to obtain the core information needed to process the air permit application. This cover sheet is required for all air permit applications submitted to IDEM, OAQ. Place this cover sheet on top of all subsequent forms and attachments that encompass your air permit application packet.
- Submit the completed air permit application packet, including all forms and attachments, to **IDEM Air Permits Administration** using the address in the upper right hand corner of this page.
- IDEM will send a bill to collect the filing fee and any other applicable fees.
- Detailed instructions for this form are available on the Air Permit Application Forms website.

FOR OFFICE USE ONLY

PERMIT NUMBER: 089-48101-00112

DATE APPLICATION WAS RECEIVED:

Received by State of Indiana IDEM-OAQ
via email July 26, 2024 MJ-3

1. Tax ID Number:

PART A: Purpose of Application

Part A identifies the purpose of this air permit application. For the purposes of this form, the term "source" refers to the plant site as a whole and NOT to individual emissions units.

2. Source / Company Name:	Carmeuse Lime, Inc.	**3. Plant ID:**	089 – 0112
4. Billing Address:	1 North Carmeuse Drive		
City:	Gary	**State:** IN	**ZIP Code:** 46406 –

5. Permit Level: ☐ Exemption ☐ Registration ☐ SSOA ☐ MSOP ☐ FESOP ☒ TVOP ☐ PBR

6. Application Summary: *Check all that apply. Multiple permit numbers may be assigned as needed based on the choices selected below.*

☐ Initial Permit
☐ Renewal of Operating Permit
☐ Asphalt General Permit
☐ Review Request
☐ Revocation of Operating Permit
☐ Alternate Emission Factor Request
☐ Interim Approval
☐ Relocation of Portable Source
☐ Acid Deposition (Phase II)
☐ Site Closure
☐ Emission Reduction Credit Registry

☐ Transition (between permit levels) *From:* *To:*

☐ Administrative Amendment:
☐ *Company Name Change*
☐ *Change of Responsible Official*
☐ *Correction to Non-Technical Information*
☐ *Notice Only Change*
☐ *Other (specify):*

☒ Modification:
☐ *New Emission Unit or Control Device*
☐ *Modified Emission Unit or Control Device*
☐ *New Applicable Permit Requirement*
☐ *Change to Applicability of a Permit Requirement*
☐ *Prevention of Significant Deterioration*
☐ *Emission Offset*
☐ *MACT Preconstruction Review*
☐ *Minor Source Modification*
☒ *Significant Source Modification*
☐ *Minor Permit Modification*
☒ *Significant Permit Modification*
☐ *Other (specify):*

7. Is this an application for an initial construction and/or operating permit for a **"Greenfield" Source**? ☐ Yes ☒ No

8. Is this an application for construction of a new emissions unit at an **Existing Source**? ☒ Yes ☐ No

Continued on Next Page

PART B: Pre-Application Meeting

Part B specifies whether a meeting was held or is being requested to discuss the permit application.

9. Was a meeting held between the company and IDEM prior to submitting this application to discuss the details of the project?

☒ No ☐ Yes: *Date:*

10. Would you like to schedule a meeting with IDEM management and your permit writer to discuss the details of this project?

☒ No ☐ Yes: *Proposed Date for Meeting:*

PART C: Confidential Business Information

Part C identifies permit applications that require special care to ensure that confidential business information is kept separate from the public file.

Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in the Indiana Administrative Code (IAC). To ensure that your information remains confidential, refer to the IDEM, OAQ information regarding submittal of confidential business information. For more information on confidentiality for certain types of business information, please review IDEM's Nonrule Policy Document Air-031-NPD regarding Emission Data.

11. Is any of the information contained within this application being claimed as **Confidential Business Information**?

☒ No ☐ Yes

PART D: Certification Of Truth, Accuracy, and Completeness

Part D is the official certification that the information contained within the air permit application packet is truthful, accurate, and complete. Any air permit application packet that we receive without a signed certification will be deemed incomplete and may result in denial of the permit.

For a Part 70 Operating Permit (TVOP) or a Source Specific Operating Agreement (SSOA), a "responsible official" as defined in 326 IAC 2-7-1(34) must certify the air permit application. For all other applicants, this person is an "authorized Individual" as defined in 326 IAC 2-1.1-1(1).

☒ *I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate, and complete.*

Bruce Hudson
Name *(typed)*

Site Operations Manager
Title

Bruce Hudson
Signature

7/26/2024
Date

OAQ GENERAL SOURCE DATA APPLICATION
GSD-01: Basic Source Level Information

State Form 50640 (R5 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

Received by State of Indiana IDEM-OAQ
via email July 26, 2024 MJ-3

NOTES:

- The purpose of GSD-01 is to provide essential information about the entire source of air pollutant emissions. GSD -01 is a required form.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out i n 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for public inspection.

089-48101-00112

PART A: Source / Company Location Information

1. **Source / Company Name**: Carmeuse Lime, Inc. — 2. **Plant ID**: 089 – 00112
3. **Location Address**: 1 North Carmeuse Drive
   City: Gary — **State**: IN — **ZIP Code**: 46406 –
4. **County Name**: Lake — 5. **Township Name**: North
6. **Geographic Coordinates**:
   Latitude: 87:24:29 — **Longitude**: 41:38:26
7. **Universal Transferal Mercadum Coordinates** *(if known)*:
   Zone: — **Horizontal**: — **Vertical**:
8. **Adjacent States**: Is the source located within 50 miles of an adjacent state?
   ☐ No ☒ Yes – *Indicate Adjacent State(s):* ☒ Illinois (IL) ☒ Michigan (MI) ☐ Ohio (OH) ☐ Kentucky (KY)
9. **Attainment Area Designation**: Is the source located within a non-attainment area for any of the criteria air pollutants?
   ☐ No ☒ Yes – *Indicate Nonattainment Pollutant(s):* ☐ CO ☐ Pb ☐ NO_x ☒ O_3 ☐ PM ☐ PM_{10} ☐ $PM_{2.5}$ ☐ SO_2
10. **Portable / Stationary**: Is this a portable or stationary source? ☐ Portable ☒ Stationary

PART B: Source Summary

11. **Company Internet Address** *(optional)*: http://www.carmeuse.com/
12. **Company Name History**: Has this source operated under any other name(s)?
    ☐ No ☒ Yes – *Provide information regarding past company names in Part I, Company Name History.*
13. **Portable Source Location History**: Will the location of the portable source be changing in the near future?
    ☒ Not Applicable ☐ No ☐ Yes – *Complete Part J, Portable Source Location History, and Part K, Request to Change Location of Portable Source.*
14. **Existing Approvals**: Have any exemptions, registrations, or permits been issued to this source?
    ☐ No ☒ Yes – *List these permits and their corresponding emissions units in Part M, Existing Approvals.*
15. **Unpermitted Emissions Units**: Does this source have any unpermitted emissions units?
    ☒ No ☐ Yes – *List all unpermitted emissions units in Part N, Unpermitted Emissions Units.*
16. **New Source Review**: Is this source proposing to construct or modify any emissions units?
    ☐ No ☒ Yes – *List all proposed new construction in Part O, New or Modified Emissions Units.*
17. **Risk Management Plan**: Has this source submitted a Risk Management Plan?
    ☒ Not Required ☐ No ☐ Yes → Date submitted: EPA Facility Identifier: – –

Continued on Next Page

PART C: Source Contact Information

IDEM will send the original, signed permit decision to the person identified in this section. This person MUST be an employee of the permitted source.

18. Name of Source Contact Person: Henry Sparks		
19. Title *(optional)*: Environmental Specialist		
20. Mailing Address: 1 North Carmeuse Drive		
City: Gary	**State**: IN	**ZIP Code**: 46406 –
21. Electronic Mail Address *(optional)*: henry.sparks@carmeuse.com		
22. Telephone Number: (219) 269 – 4747	**23. Facsimile Number** *(optional)*: ( ) –	

PART D: Authorized Individual/Responsible Official Information

IDEM will send a copy of the permit decision to the person indicated in this section, if the Authorized Individual or Responsible Official is different from the Source Contact specified in Part C.

24. Name of Authorized Individual or Responsible Official: Bruce Hudson		
25. Title: Site Operations Manager		
26. Mailing Address: 1 North Carmeuse Drive		
City: Gary	**State**: IN	**ZIP Code**: 46406 –
27. Telephone Number: (219) 290 – 5055	**28. Facsimile Number** *(optional)*: ( ) –	

29. Request to Change the Authorized Individual or Responsible Official: Is the source officially requesting to change the person designated as the Authorized Individual or Responsible Official in the official documents issued by IDEM, OAQ? *The permit may list the title of the Authorized Individual or Responsible Official in lieu of a specific name.*

☐ No ☒ Yes – ***Change Responsible Official to***: Bruce Hudson

PART E: Owner Information

30. Company Name of Owner: Carmeuse Lime, Inc.		
31. Name of Owner Contact Person:		
32. Mailing Address: 11 Stanwix Street 21st Floor		
City: Pittsburgh	**State**: PA	**ZIP Code**: 15222 –
33. Telephone Number: (412) 995 – 5500	**34. Facsimile Number** *(optional)*: ( ) –	

34. Operator: Does the "Owner" company also operate the source to which this application applies?

☐ No – *Proceed to Part F below.* ☒ Yes – *Enter "SAME AS OWNER" on line 35 and proceed to Part G below.*

PART F: Operator Information

35. Company Name of Operator: Carmeuse Lime, Inc.		
36. Name of Operator Contact Person: Bruce Hudson		
37. Mailing Address: 1 North Carmeuse Drive		
City: Gary	**State**: IN	**ZIP Code**: 46406 –
38. Telephone Number: (219) 290 – 5055	**39. Facsimile Number** *(optional)*: ( ) –	

Continued on Next Page

PART G: Agent Information

40. Company Name of Agent: Trinity Consultants		
41. Type of Agent: ☒ Environmental Consultant ☐ Attorney ☐ Other (specify):		
42. Name of Agent Contact Person: Tony Schroeder		
43. Mailing Address: 3601 Green Road, Suite 102		
City: Beachwood	**State**: OH	**ZIP Code**: 44122 –
44. Electronic Mail Address *(optional)*: tschroeder@trinityconsultants.com		
45. Telephone Number: (216) 278 – 0500	**46. Facsimile Number** *(optional)*: ( ) –	
47. Request for Follow-up: Does the "Agent" wish to receive a copy of the preliminary findings during the public notice period (if applicable) and a copy of the final determination?	☐ No ☒ Yes	

PART H: Local Library Information

48. Date application packet was filed with the local library: Within 10 days of application submittal		
49. Name of Library: Gary Public Library		
50. Name of Librarian *(optional)*:		
51. Mailing Address: 220 W 5th Avenue		
City: Gary	**State**: IN	**ZIP Code**: 46402 –
52. Internet Address *(optional)*: www.garypubliclibrary.org		
53. Electronic Mail Address *(optional)*:		
54. Telephone Number: (219) 886 – 2484	**55. Facsimile Number** *(optional)*: ( ) –	

PART I: Company Name History *(if applicable)*

Complete this section only if the source has previously operated under a legal name that is different from the name listed above in Section A.

56. Legal Name of Company	**57. Dates of Use**
Marblehead Lime Company	1965 to
Carmeuse Lime, Inc.	1995 to
	to
	to
	to
	to
	to
	to
	to
	to

58. Company Name Change Request: Is the source officially requesting to change the legal name that will be printed on all official documents issued by IDEM, OAQ?

☒ No ☐ Yes – ***Change Company Name to***:

Continued on Next Page

PART J: Portable Source Location History *(if applicable)*

Complete this section only if the source is portable and the location has changed since the previous permit was issued. The current location of the source should be listed in Section A.

59. Plant ID	60. Location of the Portable Source	61. Dates at this Location
–	N/A	to
–		to
–		to
–		to
–		to
–		to
–		to
–		to
–		to
–		to
–		to
–		to
–		to
–		to
–		to
–		to
–		to
–		to
–		to
–		to

PART K: Request to Change Location of Portable Source *(if applicable)*

Complete this section to request a change of location for a portable source.

62. Current Location:

Address: N/A

City:	**State**:	**ZIP Code**: –

County Name:

63. New Location:

Address: N/A

City:	**State**:	**ZIP Code**: –

County Name:

Continued on Next Page

PART L: Source Process Description

Complete this section to summarize the main processes at the source.

64. Process Description	65. Products	66. SIC Code	67. NAICS Code
Lime Manufacturing	Quicklime	3274	32741

PART M: Existing Approvals *(if applicable)*

Complete this section to summarize the approvals issued to the source since issuance of the main operating permit.

68. Permit ID	69. Emissions Unit IDs	70. Expiration Date
41162	Title V Renewal	12/22/2028

PART N: Unpermitted Emissions Units *(if applicable)*

Complete this section only if the source has emission units that are not listed in any permit issued by IDEM, OAQ.

71. Emissions Unit ID	72. Type of Emissions Unit	73. Actual Dates		
		Began Construction	Completed Construction	Began Operation
	N/A			

PART O: New or Modified Emissions Units *(if applicable)*

Complete this section only if the source is proposing to add new emission units or modify existing emission units.

74. Emissions Unit ID	75. NEW	76. MOD	77. Type of Emissions Unit	78. Estimated Dates		
				Begin Construction	Complete Construction	Begin Operation
			See application narrative			

APPENDIX B. EMISSION CALCULATIONS

Appendix B: Emissions Calculations
Summary

Company Name: Carmeuse Lime, Inc.
Address: 1 North Carmeuse Dr, Gary, IN 46406

Uncontrolled PTE (tpy)

Emission Unit	PM	PM10	PM2.5	SO2	NOx	VOC	CO	HAPs	Worst Single HAP
Lime Transloading Operation	1,603.08	1,603.08	1,603.08	-	-	-	-	-	-
Total	**1,603.08**	**1,603.08**	**1,603.08**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Significant Source Modification Lower Thresholds[1]	25	25	25	25	25	25	100	25	10
Significant Source Modification Required?	Yes	Yes	Yes	No	No	No	No	No	No

Controlled PTE (tpy)

Emission Unit	PM	PM10	PM2.5	SO2	NOx	VOC	CO
Transloader Operation	4.61	4.61	4.61	-	-	-	-
Total	**4.61**	**4.61**	**4.61**	**0.00**	**0.00**	**0.00**	**0.00**
Significant Emission Rates[2]	25	15	10	40	40	40	100
Major New Source Review Required?	No	No	No	No	No	No	No

Notes
1. 326 IAC 2-7-10.5(g).
2. 326 IAC 2-2-1(ww).

Appendix B: Emissions Calculations
Lime Transloading Operation

Company Name: Carmeuse Lime, Inc.
Address: 1 North Carmeuse Dr, Gary, IN 46406

Transloaders

Capture Efficiency = 99.9 %

Uncontrolled Emissions

Facility	Maximum Capacity (ton/hr)	Maximum Capacity (ton/yr)	$PM/PM_{10}/PM_{2.5}$ Emission Factor[1,2] (lb/ton)	Uncontrolled Emissions $PM/PM_{10}/PM_{2.5}$ (tons/yr)
Lime Transloader	300	2,628,000	0.61	801.54
Lime Transloader	300	2,628,000	0.61	801.54
				1,603.08

Fugitive Uncaptured Emissions

Facility	Maximum Capacity (ton/hr)	Maximum Capacity (ton/yr)	$PM/PM_{10}/PM_{2.5}$ Emission Factor[1,2] (lb/ton)	Uncaptured Emissions $PM/PM_{10}/PM_{2.5}$ (tons/yr)
Lime Loadout (enclosed truck)	300	2,628,000	0.61	0.80
Lime Loadout (enclosed truck)	300	2,628,000	0.61	0.80
				1.60

Dust Collector Controlled Emissions

Facility	Control Device	Grain Loading (gr/dscf)	Exhaust Flow Rate (dscfm)	Controlled Emissions $PM/PM_{10}/PM_{2.5}$[2] (lb/hr)	(ton/yr)
Transloading Operation	Fabric filter	0.02	2000	0.34	1.50
Transloading Operation	Fabric filter	0.02	2000	0.34	1.50
					3.00

Notes
1. Emission factor source: Product loading, enclosed truck, SCC 3-05-016-26, AP-42 Table 11.17-4 (February 1998).
2. No emission factor available for PM10 or PM2.5. PM10 and PM2.5 taken as equal to PM for a worst case analysis.

Methodology
Uncontrolled Potential to Emit (tons/yr) = Maximum Capacity (tons/yr) x Emission Factor (lb/ton) / 2,000 (lb/ton)
Fugitive Potential to Emit (tons/yr) = Maximum Capacity (tons/yr) x Emission Factor (lb/ton) / 2,000 (lb/ton) x (1 - Capture Efficiency)
Dust Collector Potential to Emit (tons/yr) = Exit Grain Loading (gr/dscf) x Exhaust Flowrate (dscfm) x 60 (min/hr) / 7,000 (lb/gr) x 8,760 (hr/yr) / 2,000 (lb/ton)