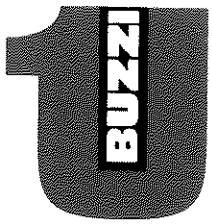
AI #13457 T33-48021-00002



HC
LG

Significant Permit Modification
For
Part 70 Permit T133-33667-00002

Submitted By:
Lone Star Industries, Inc.
dba Buzzi Unicem USA
3301 S. County Road 150 West
Greencastle, IN 46135

Submitted To:
Indiana Department of Environmental Management
Office of Air Quality
Air Permits Administration
100 North Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251

June 2024

Prepared By:
SPECTRUM
Environmental Sciences, Inc.

Buzzi Unicem USA

June 27, 2024

Indiana Department of Environmental Management
Office of Air Quality – Air Permitting Group
100 N. Senate Avenue – IGCN 1003
Indianapolis, IN 46204

Re: Lone Star Industries, Inc., dba Buzzi Unicem USA
Significant Permit Modification
Part 70 Permit: T133-41298-00002
Greencastle, IN – Putnam County

Dear Air Permitting Group,

Lone Star Industries, Inc. is submitting the following application to add a new Clinker Storage Silo system and a Clinker Reclaim system in our permit. These new units will tie directly in to our existing Clinker Storage Silo system.

There is no increase in throughput and the existing throughput limits should serve to address emissions from the new units as well.

If you have any questions or need any additional information, please feel free to contact me at 765-655-0428 / miriam.press@buzziunicemusa.com

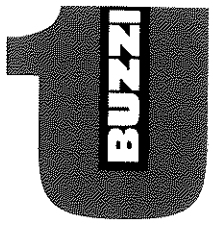
Sincerely,
Lone Star Industries, Inc.

Miriam Press

Miriam Press
Environmental Engineer

cc: Tim Menke; Plant Manager
Paul Schell; Senior Corporate Environmental Manager

Buzzi Unicem USA
Greencastle Plant
3301 S. County Road 150
Greencastle, IN 46135



Significant Permit Modification
For
Part 70 Permit T133-33667-00002

Submitted By:
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June 2024

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SPECTRUM
Environmental Sciences, Inc.

Table of Contents

1.0 Introduction

This Part 70 Operating Permit Significant Modification Application (Application) is being submitted to the Indiana Department of Environmental Management (IDEM), Office of Air Quality - Air Permits Administration to request a permit modification of the Part 70 Operating Permit T133-33667-00002 issued to Lone Star Industries, Inc. dba Buzzi Unicem USA (Lone Star), for their Portland cement manufacturing plant located in Greencastle, Indiana.

Lone Star is requesting a permit modification to construct a new clinker storage silo with associated conveyors and a hopper. The proposed changes will include the addition of eight new sources, each with a corresponding baghouse to control particulate emissions. Pursuant to 326 IAC 2-7-12(b)(1), these proposed changes require a permit modification.

2.0 Project Description

Lone Star is proposing to construct a new clinker storage silo directly east of the existing clinker storage silos to allow for additional operational flexibility in the quantity of clinker that can be stored at any one time as well as reduce the amount of clinker stored outside and subsequently re-introduced to the silos through the existing outside clinker reclaim system. No increase in the production throughput of clinker is proposed for this project, it is simply to allow for greater storage capabilities and to protect the clinker quality.

The new equipment and modifications associated with the project include the new clinker storage silo itself and new conveyor belts to feed clinker to, and transfer clinker from, the silo to the Finish Mills. All equipment associated with the project will be equipped with baghouses for the control of particulate emissions.

The following is an overview of the proposed changes:

- Silo 8 (nominal capacity 50,000 tons) will be installed to store clinker in addition to the existing Silos 1-7 (nominal capacity 5,000 tons each).
- Existing Belt 510V which currently transfers clinker to the existing Silos 1-7 will be extended to transfer clinker to a new bucket conveyor, Belt GC509723. The transfer point from Belt 510V to Belt GC509723 will be equipped with Baghouse GC509715.
- Belt GC509273 will be installed to transfer the clinker from Belt 510V into Silo 8. The transfer point from the bucket conveyor into the silo will be equipped with Baghouse GC509801.
- Two parallel pan conveyors, Belt GC509773 (south) and Belt 509785 (north), will be installed in a tunnel constructed below Silo 8 to transfer clinker out of Silo 8. There will be two pick-up points for each conveyor, one on the west side of the silo and one on the east side of the silo. Each pickup point will have a separate baghouse.
  - For Belt GC509773, the west side pickup point will be equipped with Baghouse GC509767 and the east side pickup point will be equipped with Baghouse GC509769.
  - For Belt GC509785, the west side pickup point will be equipped with Baghouse GC509787 and the east side pickup point will be equipped with Baghouse GC509789.
- Belt GC509749 will be installed to transfer clinker from both Belts GC509773 and GC509785 to existing Belt 511V. The transfer point to Belt GC509749 will be equipped with Baghouse GC509729.
- Existing Belt 511V which transfers clinker from the existing silos to the finish mills will be extended to pick up clinker from Belt GC509749. The pickup point onto Belt 511V will be equipped with Baghouse GC509737.

The project also includes small clinker reclaim system which will be added to allow clinker to be returned directly to the finish mills for processing when necessary. This

system includes a hopper and a feeder belt and will discharge to Belt 509749. The hopper system will be equipped with Baghouse GC509805 to keep all equipment under negative pressure to control fugitive dust emissions.

Table 1 below provides a list of the new emission units proposed to be added associated with the project and their associated baghouses.

Table 1 - Emission Units to be Added

Stack ID	Emission Unit ID	Baghouse	Description	Flowrate (ACFM)
FF3-40	3-40	GC509715	BELT 510V TRANSFER TO BELT GC509723	3,500
FF3-41	3-41	GC509801	BELT GC509273 TRANSFER INTO SILO 8	15,000
FF3-42	3-42	GC509767	WESTERN SILO 8 TRANSFER TO BELT GC509773	850
FF3-43	3-43	GC509769	EASTERN SILO 8 TRANSFER TO BELT GC509773	850
FF3-44	3-44	GC509787	WESTERN SILO 8 TRANSFER TO BELT GC509785	850
FF3-45	3-45	GC509789	EASTERN SILO 8 TRANSFER TO BELT GC509785	850
FF3-46	3-46	GC509729	BELTS GC509773 AND GC509785 TRANSFER TO BELT GC509749	5,700
FF3-47	3-47	GC509737	BELT GC509749 TO BELT 511V	2,300
FF3-48	3-48	GC509805	RECLAIM HOPPER GC509755 TO BELT GC509743 TO BELT GC509749	8,000

The new clinker silo will have a nominal storage capacity of 50,000 tons. The annual throughput of the new clinker silo is expected to be 1,500,000 tons/year. The new silo is intended to reduce or eliminate the necessity for storing clinker outside, thereby reducing fugitive emissions from transfer in / transfer out activities and also improving the quality of stored clinker. There is no proposed increase in total clinker production or throughput associated with the project. The existing PSD limits for clinker production and clinker input to the finish mills should provide adequate assurance for the units proposed in this project as well.

Lone Star is proposing to begin construction by November 2024 and complete construction by March 2026. Lone Star may begin operation of the transfer in and storage only operations of the new Silo 8 during the December 2025 - January 2026 timeframe if needed rather than store clinker outside.

3.0 IDEM Forms

Per the IDEM Air Permits webpage, this section of the Application includes the following IDEM forms for the proposed modification.

- IDEM Form 50639 (COVER) – Application Cover Sheet
- IDEM Form 51607 (Checklist) – Forms Checklist
- IDEM Form 50640 (GSD-01) - Basic Source Level Information
- IDEM Form 51605 (GSD-02) – Plant Layout Diagram
- IDEM Form 51599 (GSD-03) – Process Flow Diagram
- IDEM Form 51606 (GSD-04) – Stack/Vent Information
- IDEM Form 51610 (GSD-05) – Emission Unit Information
- IDEM Form 51612 (GSD-06) – Particulate Emissions Summary
- IDEM Form 52543 (PI-03) – Bulk Handling Storage
- IDEM Form51904 (CE-01) – Control Equipment Summary
- IDEM Form 51953 (CE-02) – Particulate Control - Baghouse/Fabric Filter
- IDEM Form 53512 (FED-1) – Summary of Federal Requirements – NSPS & NESHAP
- IDEM Form 51905 (FED-02) – MACT Pre-Construction Review
- IDEM Form 51861 (CD-01) - Emission Unit Compliance Status
- IDEM Form 51864 (CD-04) – Compliance Schedule and Certification

AIR PERMIT APPLICATION COVER SHEET

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

AI # 13457

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: 133 – 48021 00002

DATE APPLICATION WAS RECEIVED: (Received) State of Indiana JUL 01 2024 Dept of Environmental Mgmt Office of Air Quality

HE LG

1. Tax ID Number: [redacted]

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: Lone Star Industries, Inc. dba Buzzi Unicem USA **3. Plant ID:** 133 – 00002

4. Billing Address: 3301 South County Road 150 West

City: Greencastle **State:** IN **ZIP Code:** 46135 –

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.*

Tim Menke	Plant Manager
Name *(typed)*	Title
	6/25/2024
Signature	Date

OAQ AIR PERMIT APPLICATION – FORMS CHECKLIST

State Form 51607 (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

NOTES:

- The purpose of this checklist is to help the applicant and IDEM, OAQ ensure that the air permit application packet is administratively complete. This checklist is a required form.
- Check the appropriate box indicating whether each application form is applicable for the current permit application. The source must submit only those forms pertinent to the current permit application.
- Place this checklist between the cover sheet and all subsequent forms and attachments that encompass your air permit application packet.

Part A: General Source Data				
Applicable?	**Form ID**	**Title of Form**	**State Form Number**	**When should this form be included in my application packet?**
☒ Y ☐ N	COVER	Application Cover Sheet	50639	Include for every application, modification, and renewal, including source specific operating agreements (SSOA).
☒ Y ☐ N	CHECKLIST	Forms Checklist	51607	Include for every application, modification, and renewal, including SSOA.
☒ Y ☐ N	GSD-01	Basic Source Level Information	50640	Include for every application, modification, and renewal, including SSOA.
☒ Y ☐ N	GSD-02	Plant Layout Diagram	51605	Include for every new source application, and modification.
☒ Y ☐ N	GSD-03	Process Flow Diagram	51599	Include one for every process covered by the application.
☒ Y ☐ N	GSD-04	Stack / Vent Information	51606	Include for every new source application, and modification.
☒ Y ☐ N	GSD-05	Emissions Unit Information	51610	Include for every process covered by the application.
☒ Y ☐ N	GSD-06	Particulate Emissions Summary	51612	Include if the process has particulate emissions (PM).
☐ Y ☒ N	GSD-07	Criteria Pollutant Emissions Summary	51602	Include if the process has criteria pollutant emissions.
☐ Y ☒ N	GSD-08	HAP Emissions Summary	51604	Include if the process has hazardous air pollutant emissions (HAP).
☐ Y ☒ N	GSD-09	Summary of Additional Information	51611	Include if the additional information is included.
☐ Y ☒ N	GSD-10	Insignificant Activities	51596	Include if there are unpermitted insignificant activities.
☐ Y ☒ N	GSD-11	Alternative Operating Scenario	51601	Include if an AOS is requested.
☐ Y ☒ N	GSD-12	Affidavit of Nonapplicability	51600	Include if the standard notification requirements do not apply.
☐ Y ☒ N	GSD-13	Affidavit of Applicability	51603	Include if the standard notification requirements apply.
☐ Y ☒ N	GSD-14	Owners and Occupants Notified	51609	Include if the standard notification requirements apply.
☐ Y ☒ N	GSD-15	Government Officials Notified	51608	Include if the standard notification requirements apply.
☐ Y ☒ N	RENEWAL	Renewal Checklist	51755	Include with every operating permit renewal packet.

Continued on Next Page

Part B: Process Information				
Applicable?	**Form ID**	**Title of Form**	**State Form Number**	**When should this form be included in my application packet?**
☐ Y ☒ N	AEF-01	Alternate Emission Factor Request	51860	Submit if you are requesting to use an emission factor other than AP-42.
☐ Y ☒ N	PI-01	Miscellaneous Processes	52534	Include one form for each process for which there is not a specific PI form.
☐ Y ☒ N	PI-02A	Combustion Unit Summary	52535	Include one form to summarize all combustion units *(unless SSOA).*
☐ Y ☒ N	PI-02B	*Combustion:* Boilers, Process Heaters, & Furnaces	52536	Include one form for each boiler, process heater, or furnace *(unless SSOA).*
☐ Y ☒ N	PI-02C	*Combustion:* Turbines & Internal Combustion Engines	52537	Include one form for each turbine or internal combustion engine *(unless SSOA).*
☐ Y ☒ N	PI-02D	*Combustion:* Incinerators & Combustors	52538	Include one form for each incinerator or combustor *(unless SSOA).*
☐ Y ☒ N	PI-02E	*Combustion:* Kilns	52539	Include one form for each kiln *(unless SSOA).*
☐ Y ☒ N	PI-02F	*Combustion:* Fuel Use	52540	Include one form for each combustion unit *(unless SSOA).*
☐ Y ☒ N	PI-02G	*Combustion:* Emission Factors	52541	Include one form for each combustion unit *(unless SSOA).*
☐ Y ☒ N	PI-02H	*Combustion:* Federal Rule Applicability	52542	Include one form for each combustion unit *(unless SSOA).*
☒ Y ☐ N	PI-03	Storage and Handling of Bulk Material	52543	Include if the process involves the storage and handling of bulk materials.
☐ Y ☒ N	PI-04	Asphalt Plants	52544	Include for each asphalt plant process (*unless general permit*).
☐ Y ☒ N	PI-05	Brick / Clay Products	52545	Include for each brick and/or clay products process.
☐ Y ☒ N	PI-06	Electroplating Operations	52546	Include for each electroplating process.
☐ Y ☒ N	PI-07	Welding Operations	52547	Include for each welding process.
☐ Y ☒ N	PI-08	Concrete Batchers	52548	Include for each concrete batcher *(unless SSOA).*
☐ Y ☒ N	PI-09	Degreasing	52549	Include for each degreasing process *(unless SSOA).*
☐ Y ☒ N	PI-10	Dry Cleaners	52550	Include for each dry cleaning process
☐ Y ☒ N	PI-11	Foundry Operations	52551	Include for each foundry process
☐ Y ☒ N	PI-12	Grain Elevators	52552	Include for each grain elevator *(unless SSOA).*
☐ Y ☒ N	PI-13	Lime Manufacturing	52553	Include for each lime manufacturing process.
☐ Y ☒ N	PI-14	Liquid Organic Compound Storage	52554 (doc)	Include if the process involves the storage of liquid organic compounds.
☐ Y ☒ N	PI-14ALT	Alternate version of Liquid Organic Compound Storage	52555 (xls)	Include if the process involves the storage of liquid organic compounds and there are several storage vessels.
☐ Y ☒ N	PI-15	Portland Cement Manufacturing	52556	Include for each Portland cement manufacturing process.
☐ Y ☒ N	PI-16	Reinforced Plastics & Composites	52557	Include for each reinforced plastics and composites process.

Continued on Next Page

Part B: Process Information				
Applicable?	**Form ID**	**Title of Form**	**State Form Number**	**When should this form be included in my application packet?**
☐ Y ☒ N	PI-17	Blasting Operations	52558	Include for each blasting process *(unless SSOA).*
☐ Y ☒ N	PI-18	Mineral Processing	52559	Include if the process involves mineral processing *(unless SSOA).*
☐ Y ☒ N	PI-19	Surface Coating & Printing Operations	52560	Include for each surface coating or printing process *(unless SSOA).*
☐ Y ☒ N	PI-20	Woodworking / Plastic Machining	52561	Include for each woodworking or plastic machining process *(unless SSOA).*
☐ Y ☒ N	PI-21	Site Remediation	52570	Include for each soil remediation process.
☐ Y ☒ N	PI-22	Ethanol Plants *(Under Development)*	None	Include for each ethanol plant.

Part C: Control Equipment				
Applicable?	**Form ID**	**Title of Form**	**State Form Number**	**When should this form be included in my application packet?**
☒ Y ☐ N	CE-01	Control Equipment Summary	51904	Include if add-on control equipment will be used for the process.
☒ Y ☐ N	CE-02	Particulates – Baghouse / Fabric Filter	51953	Include for each baghouse or fabric filter.
☐ Y ☒ N	CE-03	Particulates – Cyclone	52620	Include for each cyclone.
☐ Y ☒ N	CE-04	Particulates – Electrostatic Precipitator	52621	Include for each electrostatic precipitator.
☐ Y ☒ N	CE-05	Particulates – Wet Collector / Scrubber / Absorber	52622	Include for each wet collector, scrubber, or absorber.
☐ Y ☒ N	CE-06	Organics – Flare / Oxidizer / Incinerator	52623	Include for each flare, oxidizer, or incinerator.
☐ Y ☒ N	CE-07	Organics – Adsorbers	52624	Include for each adsorber.
☐ Y ☒ N	CE-08	Organics – Condenser	52625	Include for each condenser.
☐ Y ☒ N	CE-09	Reduction Technology	52626	Include for each control device using reduction technology (e.g., SCR, SNCR).
☐ Y ☒ N	CE-10	Miscellaneous Control Equipment	52436	Include one form for equipment for which there is not a specific CE form.

Continued on Next Page

Part D: Compliance Determination for Part 70 Sources				
Applicable?	**Form ID**	**Title of Form**	**State Form Number**	**When should this form be included in my application packet?**
☒ Y ☐ N	CD-01	Emissions Unit Compliance Status	51861	Include for every Title V application, including modifications.
☐ Y ☒ N	CD-02	Compliance Plan by Applicable Requirement	51862	Include for every Title V application, including modifications.
☐ Y ☒ N	CD-03	Compliance Plan by Emissions Unit	51863	Include for every Title V application, including modifications.
☒ Y ☐ N	CD-04	Compliance Schedule and Certification	51864	Include for every Title V application, including modifications and renewal.
☐ Y ☒ N	FED-03	Compliance Assurance Monitoring	53377	Include for every Title V application, including modifications.

Part E: Best Available Control Technology				
Applicable?	**Form ID**	**Title of Form**	**State Form Number**	**When should this form be included in my application packet?**
☐ Y ☒ N	BACT-01	Analysis of Best Available Control Technology	None	Include for every BACT application.
☐ Y ☒ N	BACT-01a	Background Search: Existing BACT Determinations	None	Include for every BACT application.
☐ Y ☒ N	BACT-01b	Cost/Economic Impact Analysis	None	Include for every BACT application.
☐ Y ☒ N	BACT-02	Summary of Best Available Control Technology	None	Include for every BACT application.
☐ Y ☒ N	PSD / EO-01	PSD / Emission Offset Checklist	None	Include for every PSD application and every NSR application that requires emission offsets.

Part F: Emission Credit Registry				
Applicable?	**Form ID**	**Title of Form**	**State Form Number**	**When should this form be included in my application packet?**
☐ Y ☒ N	EC-01	Generation of Emission Credits	51783	Include if the modification results in emission reductions.
☐ Y ☒ N	EC-02	Transfer of Emission Credits	51784	Submit whenever registered emission credits are transferred.
☐ Y ☒ N	EC-03	Use of Emission Credits	51785	Include if the modification requires the use of emission credits for offsets.
☐ Y ☒ N	EC-04	Emission Credit Request	51906	Submit if you are looking for emission credits for offsets.

Continued on Next Page

Part G: Plantwide Applicability Limits				
Applicable?	**Form ID**	**Title of Form**	**State Form Number**	**When should this form be included in my application packet?**
☐ Y ☒ N	PAL-01	Actuals Plantwide Applicability Limit	52451	Include if the modification results in emission reductions.
☐ Y ☒ N	PAL-02	Revised Plantwide Applicability Limit	52452	Submit whenever registered emission credits are transferred.
☐ Y ☒ N	PAL-03	Plantwide Applicability Limit Renewal	52453	Include if the modification requires the use of emission credits for offsets.
☐ Y ☒ N	PAL-04	Request for Termination of Plantwide Applicability Limit	52454	Submit if you are looking for emission credits for offsets.

Part H: Air Toxics				
Applicable?	**Form ID**	**Title of Form**	**State Form Number**	**When should this form be included in my application packet?**
☒ Y ☐ N	FED-01	Summary of Federal Requirements – NSPS & NESHAP	53512	Include for each 40 CFR Part 60 NSPS, 40 CFR Part 61 NESHAP, and 40 CFR Part 63 NESHAP applicable to the process.
☒ Y ☐ N	FED-02	MACT Pre-Construction Review	51905	Include if constructing or modifying a process subject to a Part 63 NESHAP.
☐ Y ☒ N	No Form ID	MACT Initial Notification	None	This form is available on the U.S. EPA website. Completed notifications should be submitted to the IDEM Compliance Branch.

Part I: Special Permits				
Applicable?	**Form ID**	**Title of Form**	**State Form Number**	**When should this form be included in my application packet?**
☐ Y ☒ N	INTERIM	Interim Approval	None	Submit if you are applying for interim operating approval.
☐ Y ☒ N	ASPHALT	Asphalt General Permit	None	Submit if you are applying for or modifying an asphalt plant general permit.
☐ Y ☒ N	NOXBTP	NO_x Budget Permit	None	Submit if you are a power plant or if you have opted in to the NO_x budget trading program.
☐ Y ☒ N	ACIDRAIN	Phase 2 Acid Rain Permit	None	Submit if you are applying for, modifying, or renewing a Phase 2 Acid Rain permit.

Continued on Next Page

Part J: Source Specific Operating Agreements (SSOA)				
Applicable?	**Form ID**	**Title of Form**	**State Form Number**	**When should this form be included in my application packet?**
☐ Y ☒ N	OA-01	Summary of Application and Existing Agreements	53438	Submit if you are applying for or modifying a Source Specific Operating Agreement.
☐ Y ☒ N	OA-02	Industrial / Commercial Surface Coating Operations -OR- Graphic Arts Operations (326 IAC 2-9-2.5)	53439	Submit if you are applying for or modifying a SSOA for industrial or commercial surface coating operations not subject to 326 IAC 8-2; or graphic arts operations not subject to 326 IAC 8-5-5.
☐ Y ☒ N	OA-03	Surface Coating or Graphic Arts Operations (326 IAC 2-9-3)	53440	Submit if you are applying for or modifying a SSOA for surface coating or graphic arts operations.
☐ Y ☒ N	OA-04	Woodworking Operations (326 IAC 2-9-4)	53441	Submit if you are applying for or modifying a SSOA for woodworking operations.
☐ Y ☒ N	OA-05	Abrasive Cleaning Operations (326 IAC 2-9-5)	53442	Submit if you are applying for or modifying a SSOA for abrasive cleaning operations.
☐ Y ☒ N	OA-06	Grain Elevators (326 IAC 2-9-6)	53443	Submit if you are applying for or modifying a SSOA for grain elevators.
☐ Y ☒ N	OA-07	Sand And Gravel Plants (326 IAC 2-9-7)	53444	Submit if you are applying for or modifying a SSOA for sand and gravel plants.
☐ Y ☒ N	OA-08	Crushed Stone Processing Plants (326 IAC 2-9-8)	53445	Submit if you are applying for or modifying a SSOA for crushed stone processing plants.
☐ Y ☒ N	OA-09	Ready-Mix Concrete Batch Plants (326 IAC 2-9-9)	53446	Submit if you are applying for or modifying a SSOA for ready-mix concrete batch plants.
☐ Y ☒ N	OA-10	Coal Mines And Coal Preparation Plants (326 IAC 2-9-10)	53447	Submit if you are applying for or modifying a SSOA for coal mines and coal preparation plants.
☐ Y ☒ N	OA-11	Automobile Refinishing Operations (326 IAC 2-9-11)	53448	Submit if you are applying for or modifying a SSOA for automobile refinishing operations.
☐ Y ☒ N	OA-12	Degreasing Operations (326 IAC 2-9-12)	53449	Submit if you are applying for or modifying a SSOA for degreasing operations.
☐ Y ☒ N	OA-13	External Combustion Sources (326 IAC 2-9-13)	53450	Submit if you are applying for or modifying a SSOA for external combustion sources.
☐ Y ☒ N	OA-14	Internal Combustion Sources (326 IAC 2-9-14)	53451	Submit if you are applying for or modifying a SSOA for internal combustion sources.

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

State Form 50647 (R5 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Received
State of Indiana
JUL 01 2024
Dept of Environmental Mgmt
Office of Air Quality

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 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 in 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.

PART A: Source / Company Location Information

1. **Source / Company Name**: Lone Star Industries, Inc. dba Buzzi Unicem USA
2. **Plant ID**: 133 – 00002
3. **Location Address**: 3301 South County Road 150 West
   - **City**: Greencastle
   - **State**: IN
   - **ZIP Code**: 46135 –
4. **County Name**: Putnam
5. **Township Name**: Greencastle
6. **Geographic Coordinates**:
   - **Latitude**: 39.615907
   - **Longitude**: -86.869086
7. **Universal Transferal Mercadum Coordinates** *(if known)*:
   - **Zone**: 16
   - **Horizontal**: 511 km
   - **Vertical**: 4385 km
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)*:
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: Miriam Press		
19. Title *(optional)*: Environmental Engineer		
20. Mailing Address: 3301 South County Road 150 West		
City: Greencastle	**State**: IN	**ZIP Code**: 46135 –
21. Electronic Mail Address *(optional)*: miriam.press@buzziunicemusa.com		
22. Telephone Number: (765) 655 – 0428	**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: Tim Menke		
25. Title: Plant Manager		
26. Mailing Address: 3301 South County Road 150 West		
City: Greencastle	**State**: IN	**ZIP Code**: 46135 –
27. Telephone Number: (765) 653 – 9766	**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:***

PART E: Owner Information

30. Company Name of Owner: Lone Star Industries, Inc. dba Buzzi Unicem USA		
31. Name of Owner Contact Person: Fabio Rizzi, Sr. VP, Operations		
32. Mailing Address: 100 Brodhead Road		
City: Bethlehem	**State**: PA	**ZIP Code**: 18017 –
33. Telephone Number: (610) 882 – 5000	**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: SAME AS OWNER		
36. Name of Operator Contact Person:		
37. Mailing Address:		
City:	**State**:	**ZIP Code**: –
38. Telephone Number: ( ) –	**39. Facsimile Number** *(optional)*: ( ) –	

Continued on Next Page

PART G: Agent Information

40. Company Name of Agent: Spectrum Environmental Sciences, Inc.

41. Type of Agent: ☒ Environmental Consultant ☐ Attorney ☐ Other (specify):

42. Name of Agent Contact Person: Miranda Brown

43. Mailing Address: 110 Water Street PO Box 46

City: Thurmont	**State**: MD	**ZIP Code**: 21788 –

44. Electronic Mail Address *(optional)*: mbrown@spectrumenv.com

45. Telephone Number: (240) 446 – 3492	**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: Date of Permit Submittal

49. Name of Library: Putnam County Library

50. Name of Librarian *(optional)*:

51. Mailing Address: 103 E. Poplar Street

City: Greencastle	**State**: IN	**ZIP Code**: 46135 –

52. Internet Address *(optional)*:

53. Electronic Mail Address *(optional)*:

54. Telephone Number: (765) 653 – 2755	**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**
	to
	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
–		to
–		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:

City: | **State**: | **ZIP Code**: –

County Name:

63. New Location:

Address:

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
Portland Cement Manufacturing	Portland Cement	3241	32731

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
	Administrative amendment approved 09/08/2022	

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

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
3-40, 3-41, 3-42, 3-43, 3-44, 3-45, 3-46, 3-47, 3-48	X		Clinker Silo System	11/1/2024	3/1/2026	12/1/2025

Continued on Next Page

OAQ GENERAL SOURCE DATA APPLICATION
GSD-02: Plant Layout Diagram

State Form 51605 (R3 / 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 GSD-02 is to provide a diagram of the entire plant site. This form and a Plant Layout diagram are required for all air permit applications. If you do not provide the necessary information, applicable to your source, the application process may be stopped.
- IDEM, OAQ has provided detailed instructions for this form and an example of a basic plant layout diagram 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 in 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.

Part A: Basic Plant Layout

Part A provides IDEM, OAQ with the appropriate information about all buildings and access-limiting features in and around the plant site. **Please use this table as a checklist.** You must provide scaled drawings, with the actual scale shown. All dimensions and units must be clearly indicated with a brief explanation of what is being shown. Include the following (*All measurements should be given in feet.*):

1.	☒ Building Location and Dimensions				
2.	☒ Property Lines and Access-Limiting Features				
3.	☒ Surrounding Building Location and Dimensions				
4.	☒ Distances to Property Lines and Access-Limiting Features				
5.	☒ UTM Location Coordinates	6.	☒ Compass (pointing North)	7.	☒ Scale

Part B: Stack Information

Part B provides IDEM, OAQ with the appropriate information about all stacks, roof monitors, control devices, and process vents at the plant site. **Please use this table as a checklist.** You must show the location of all applicable emission points and include all relevant stack and emissions unit identification numbers for each. In addition, you will need to identify each of these emission points under "Stack Identification" on form GSD-04, Stack/Vent Information. Include the following (*All measurements should be in feet.*):

8.	☒ Exhaust Stacks			
9.	☐ Process Vents			
10.	☐ Roof Monitors	☒ *No Roof Monitors*		
11.	☒ Control Devices	☐ *No Control Devices*		
12.	☒ Interior Vents	☐ *No Interior Vents*	☐ Doors and Windows *(for processes vented inside a building)*	

Part C: Roadway Information

Part C provides IDEM, OAQ with the appropriate information about the roadways in and around the plant site. **Please use this table as a checklist.** Include the following (*All measurements should be in feet.*):

13.	☐ Adjacent Roadways	☐ Interior Roadways
14.	☐ Roadway Surface Description (gravel, dirt, paved, etc.)	
15.	☐ Number of Lanes	

Continued on Next Page

Part D: Source Building Information

This table provides detailed information about each building at the plant site that is part of the source. If additional space is needed, you may make a copy of this table. (*All measurements should be given in feet.*)

16. Building ID	17. Building Description	18. Building Dimensions			19. Distance & direction to the nearest property line or access limiting feature (feet & compass coordinate)	20. Distance & direction to the nearest residence (feet & compass coordinate)
		Length (feet)	Width (feet)	Height (feet)		
NA						

Continued on Next Page

Part E: Surrounding Building / Residence Information

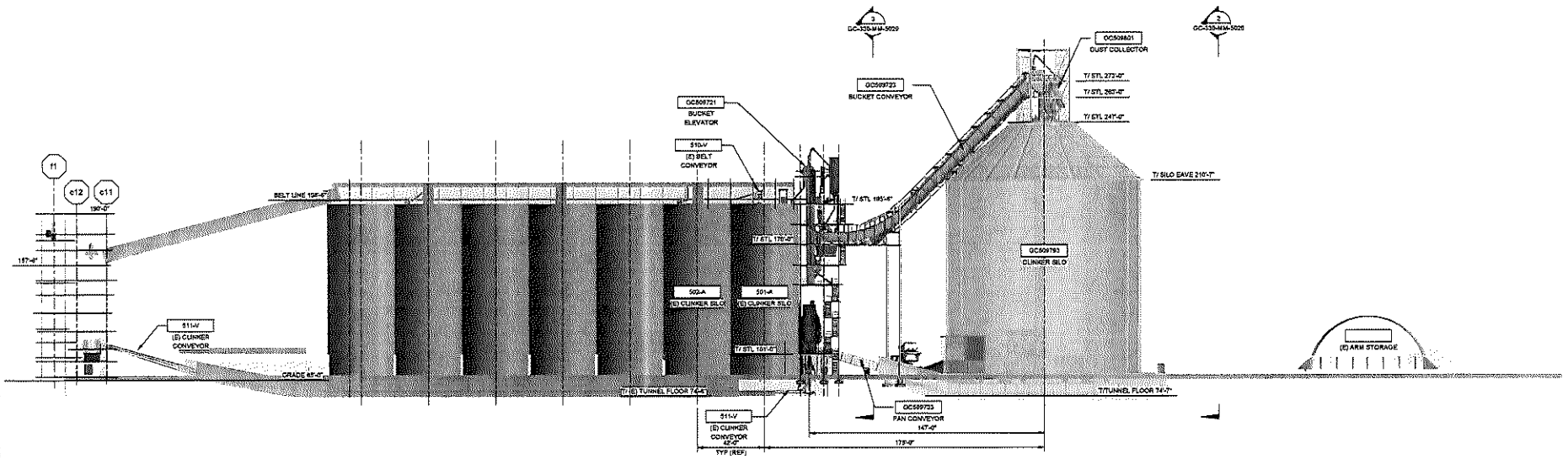
This table provides detailed information about each building or residence surrounding the plant site. If additional space is needed, you may make a copy of this table. (*All measurements should be given in feet.*)

21. Surrounding Building / Residence Description	22. Surrounding Building / Residence Property Dimensions			23. Distance & direction to the nearest property line or access limiting feature (feet & compass coordinate)	24. Building ID of nearest building on the plant site	25. Distance & direction to the nearest building on the plant site (feet & compass coordinate)
	Length (feet)	Width (feet)	Height (feet)			
NA						

Continued on Next Page

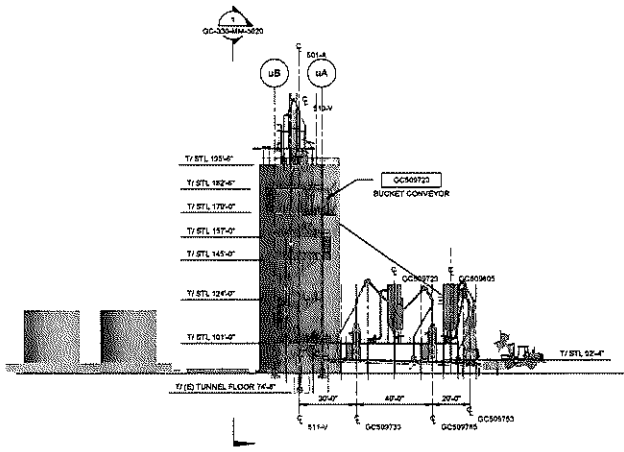
Part F: Plant Layout Diagram

This space provides a place for a hand drawn plant layout diagram. It is **optional** to use this space to create your plant layout, but you must include the diagram with your application. If you choose to submit the plant layout in a different format, state "plant layout attached" in the space provided, and submit the information with your completed application. IDEM, OAQ has provided an example of a basic plant layout diagram on the Air Permit Applications Forms website.



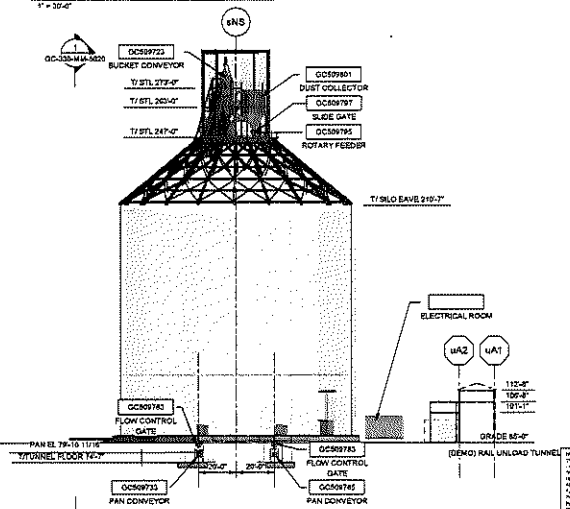
SYSTEM ELEVATION Lk N

1" = 30'-0"



CLINKER TOWER Lk W

1" = 30'-0"



CLINKER SILO Lk W

1" = 30'-0"

ISSUED FOR APPROVAL

NOT FOR CONSTRUCTION

Industrial Ally
1422 Elbridge Payne Rd. Suite 120
Chesterfield, MO 63017

INDUSTRIAL ALLY PROJECT NUMBER: 2379

DESIGNED	MRB	01/10/24
DRAWN:	MRB	01/10/24
CHECKED	TED	01/12/24
SIA/ACC APPR KC		

Buzzi Unicem USA

MECHANICAL ARRANGEMENTS
SYSTEM SECTIONS
CLINKER CONVEYING & STORAGE

DOCUMENT NUMBER
GC-330-MM-5020

OAQ GENERAL SOURCE DATA APPLICATION
GSD-03: Process Flow Diagram

State Form 51599 (R3 / 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 GSD-03 is to provide a checklist for identifying the information to be included on each Process Flow diagram.
- Complete this form and submit a process flow diagram for each process included in your air permit application.
- IDEM, OAQ has provided detailed instructions for this form and an example of a basic process flow diagram 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 in 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.

Part A: Process Flow Diagram

Part A provides basic information to understanding the nature of the process. Please use this table as a checklist to indicate that you have included the following items on your process flow diagram (*All throughputs should be given in pounds per hour.*):

1. ☒ **Process Description:** Clinker Silo System

2. ☒ Process Equipment	3. ☐ Raw Material Input	4. ☒ Process Throughput

5. ☒ Additions ☐ Deletions ☐ Modifications

Use the space below to briefly explain the impacts of the additional equipment, the reason for removing any equipment, and/or the reason for the proposed modification. (*If additional space is needed, please attach a separate sheet with the information and indicate in the space below that additional information is attached.*)

See Section 2.0 of the Application for a detailed description of all new equipment being added. The attached process flow diagram identifes all the new equipment for the new clinker silo system.

Part B: Process Operation Schedule

Part B indicates the actual (or estimated actual) hours of operation for the process.

6. ☒ Process Operation Schedule 24 Hours per Day 7 Days per Week 52 Weeks Per Year

7. **Scheduled Downtime:** Use the space below to include as much information as is known about scheduled periods of downtime for this process. (*If additional space is needed, please attach a separate sheet with the information and indicate in the space below that additional information is attached.*)

NA

Part C: Emissions Point Information

Part C provides information about each potential outlet of air pollutant emissions to the atmosphere. Please use this table as a checklist to indicate that you have included the following items on your process flow diagram (*All throughputs should be given in pounds per hour.*):

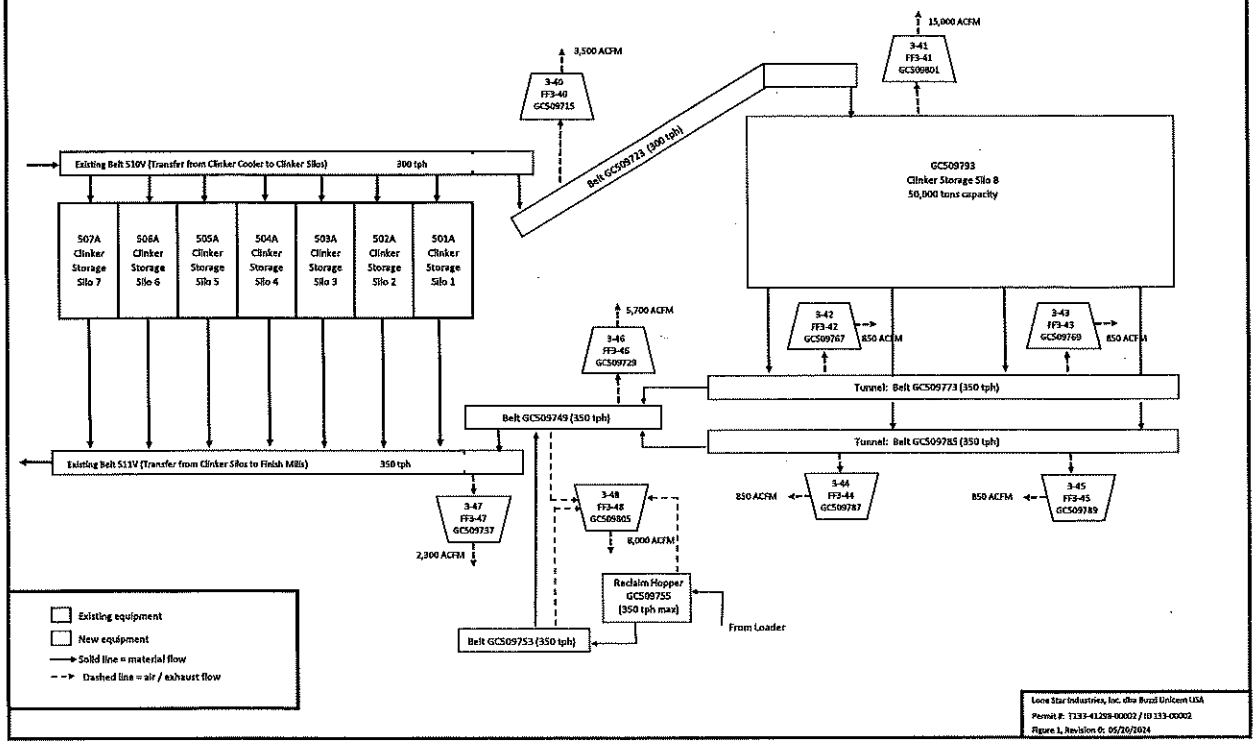
8. ☒ Stack / Vent Information
9. ☐ Pollutants Emitted
10. ☒ Air Pollution Control

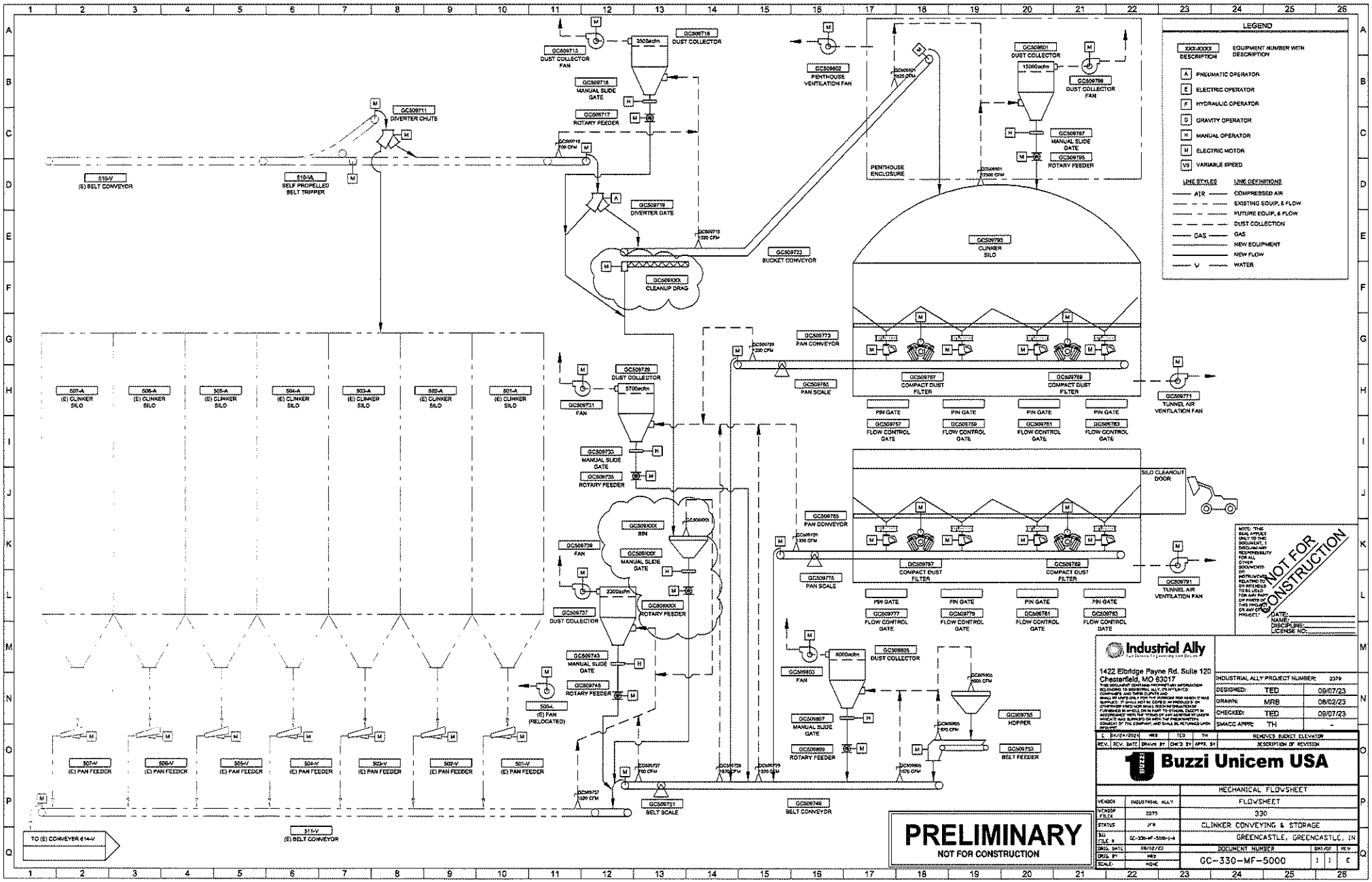
Continued on Next Page

Part D: Process Flow Diagram

This space provides a place for a hand drawn process flow diagram. It is **optional** to use this space to create your process flow diagram, but you must include the diagram with your application. If you choose to submit the process flow diagram in a different format, state "process flow diagram attached" in the space provided, and submit the information with your completed application. IDEM, OAQ has provided an example of a basic process flow diagram on the Air Permit Applications Forms website.

Figure 1 - New Clinker Storage Silo
Process Flow Diagram




LEGEND
XXX-XXXXX DESCRIPTION
EQUIPMENT NUMBER WITH DESCRIPTION
A PNEUMATIC OPERATOR
E ELECTRIC OPERATOR
F HYDRAULIC OPERATOR
G GRAVITY OPERATOR
H MANUAL OPERATOR
M ELECTRIC MOTOR
VS VARIABLE SPEED
LINE STYLES
LINE DEFINITIONS
AIR COMPRESSED AIR
EXISTING EQUIP. & FLOW
FUTURE EQUIP. & FLOW
DUST COLLECTION
GAS GAS
NEW EQUIPMENT
NEW FLOW
WATER
GC509713 DUST COLLECTOR FAN
3500acfm
GC509718 DUST COLLECTOR
GC509716 MANUAL SLIDE GATE
GC509717 ROTARY FEEDER
GC509711 DIVERTER CHUTE
510-V (E) BELT CONVEYOR
510-VA SELF PROPELLED BELT TRIPPER
GC509719 DIVERTER GATE
GC509723 BUCKET CONVEYOR
GC509XXX CLEANUP DRAG
GC509802 PENTHOUSE VENTILATION FAN
PENTHOUSE ENCLOSURE
GC509801 DUST COLLECTOR
15000acfm
GC509799 DUST COLLECTOR FAN
GC509797 MANUAL SLIDE GATE
GC509795 ROTARY FEEDER
GC509793 CLINKER SILO
GC509773 PAN CONVEYOR
GC509795 PAN SCALE
GC509729 DUST COLLECTOR
5700acfm
GC509731 FAN
GC509733 MANUAL SLIDE GATE
GC509735 ROTARY FEEDER
GC509767 COMPACT DUST FILTER
GC509769 COMPACT DUST FILTER
PIN GATE
GC509757 FLOW CONTROL GATE
GC509759 FLOW CONTROL GATE
GC509761 FLOW CONTROL GATE
GC509763 FLOW CONTROL GATE
GC509771 TUNNEL AIR VENTILATION FAN
507-A (E) CLINKER SILO
506-A (E) CLINKER SILO
505-A (E) CLINKER SILO
504-A (E) CLINKER SILO
503-A (E) CLINKER SILO
502-A (E) CLINKER SILO
501-A (E) CLINKER SILO
GC509XXX BIN
GC509XXX MANUAL SLIDE GATE
GC509739 FAN
2300acfm
GC509737 DUST COLLECTOR
GC509XXX ROTARY FEEDER
GC509743 MANUAL SLIDE GATE
GC509745 ROTARY FEEDER
504-A (E) FAN (RELOCATED)
GC509785 PAN CONVEYOR
GC509775 PAN SCALE
GC509787 COMPACT DUST FILTER
GC509789 COMPACT DUST FILTER
GC509777 FLOW CONTROL GATE
GC509779 FLOW CONTROL GATE
GC509781 FLOW CONTROL GATE
GC509783 FLOW CONTROL GATE
GC509791 TUNNEL AIR VENTILATION FAN
SILO CLEANOUT DOOR
GC509805 DUST COLLECTOR
8000acfm
GC509803 FAN
GC509807 MANUAL SLIDE GATE
GC509809 ROTARY FEEDER
GC509735 HOPPER
GC509753 BELT FEEDER
507-V (E) PAN FEEDER
506-V (E) PAN FEEDER
505-V (E) PAN FEEDER
504-V (E) PAN FEEDER
503-V (E) PAN FEEDER
502-V (E) PAN FEEDER
501-V (E) PAN FEEDER
GC509731 BELT SCALE
GC509748 BELT CONVEYOR
511-V (E) BELT CONVEYOR
TO (S) CONVEYER 614-V
NOT FOR CONSTRUCTION
PRELIMINARY
NOT FOR CONSTRUCTION
Industrial Ally
1422 Elbridge Payne Rd. Suite 120
Chesterfield, MO 63017
Buzzi Unicem USA
MECHANICAL FLOWSHEET
FLOWSHEET
330
CLINKER CONVEYING & STORAGE
GREENCASTLE, GREENCASTLE, IN
GC-330-MF-5000

OAQ GENERAL SOURCE DATA APPLICATION
GSD-04: Stack / Vent Information

State Form 51606 (R3 / 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 form is to provide basic information about each stack or vent that has the potential to emit air pollutants. If you do not provide enough information to adequately describe each process vent and/or stack, the application process may be stopped. This form is required for all air permit applications.
- Detailed instructions for this form are available online 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 in 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.

Stack / Vent Information

This table provides detailed information about each stack or vent through which air pollutants could be released into the atmosphere. If an air stream is vented inside a building, the vent does not need to be listed on this form. If additional space is needed, you may make a copy of this form.

1. Stack / Vent ID	2. Type (V H W O)	3. Shape (C R O)	4. Outlet Dimensions (feet)	5. Height (feet)	6. Maximum Outlet Flow Rate (acfm)	7. Outlet Gas Temperature (Degrees F)	8. Related Stacks / Vents (B P O)
FF3-40	V	R	1.3x1.3	137.30	3531.00	68.0	
FF3-41	V	R	1.3x3.6	191.20	15009.00	68.0	
FF3-42	H	C	0.66	-2.00	850.00	68.0	
FF3-43	H	C	0.66	-2.00	850.00	68.0	
FF3-44	H	C	0.66	-2.00	850.00	68.0	
FF3-45	H	C	0.66	-2.00	850.00	68.0	
FF3-46	V	R	1.3x1.6	25.00	5709.00	68.0	
FF3-47	V	R	1.3x1	22.60	2295.00	68.0	
FF3-48	V	R	1.3x2.6	26.60	8005.00	68.0	

OAQ GENERAL SOURCE DATA APPLICATION
GSD-05: Emissions Unit Information

State Form 51610 (R3 / 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 form is to provide basic information about each emissions unit that has the potential to emit air pollutants. This form is required for all air permit applications.
- Detailed instructions for this form are available online 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 in 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.

Emissions Unit Information

This table provides detailed information about each emissions unit that has the potential to emit air pollutants to the atmosphere. Accurate information is needed to determine the total potential to emit. If you do not provide enough information to adequately describe each emissions unit, the application process may be stopped. If additional space is needed, you may make a copy of this form.

1. Unit ID	2. Model Number	3. Serial Number	4. Description	5. Manufacturer	6. Installation Date	7. Maximum Capacity	8. Stack / Vent ID
3-40	PNF 8x8-3-H-WI (Fabric Filter)	NA	BELT 510V TRANSFER TO BELT GC509723	Redecam	11/1/24	300.00 TPH	FF3-40
3-41	PNF 11x14-4.5-SW-H (Fabric Filter)	NA	BELT GC509273 TRANSFER INTO SILO 8	Redecam	11/1/24	300.00 TPH	FF3-41
3-42	NA (Fabric Filter)	NA	WESTERN SILO 8 TRANSFER TO BELT GC509773	DCL	11/1/24	350.00 TPH	FF3-42
3-43	NA (Fabric Filter)	NA	EASTERN SILO 8 TRANSFER TO BELT GC509773	DCL	11/1/24	350.00 TPH	FF3-43
3-44	NA (Fabric Filter)	NA	WESTERN SILO 8 TRANSFER TO BELT GC509785	DCL	11/1/24	350.00 TPH	FF3-44
3-45	NA (Fabric Filter)	NA	EASTERN SILO 8 TRANSFER TO BELT GC509785	DCL	11/1/24	350.00 TPH	FF3-45
3-46	PNF 9x9-3-H-WI (Fabric Filter)	NA	BELTS GC509773 AND GC509785 TRANSFER TO BELT GC509749	Redecam	11/1/24	350.00 TPH	FF3-46
3-47	PNF 6x6-3-H-WI (Fabric Filter)	NA	BELT GC509749 TO BELT 511V	Redecam	11/1/24	350.00 TPH	FF3-47
3-48	PNF 10x12-3-H-WI (Fabric Filter)	NA	RECLAIM HOPPER GC509755 TO BELT GC509743 TO BELT GC509749	Redecam	11/1/24	350.00 TPH	FF3-48

OAQ GENERAL SOURCE DATA APPLICATION
GSD-06: Particulate Emissions Summary

State Form 51612 (R3 / 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 form is to provide basic information about each source of particulate emissions. This form is required for all air permit applications.
- 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 in 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.

Part A: Particulate Matter Emissions

Part A provides a summary of the type and amount of particulate emissions at the source. The state rules on particulate emissions are found in Title 326 of the Indiana Administrative Code, Article 6, Particulate Rules. If you do not provide enough information to adequately describe each source of particulate emissions, the application process may be stopped. If additional space is needed, you may make a copy of this table.

Emissions Point		Potential To Emit (tons per year)						
1. ID	2. Description	3. PM	4. PM-10	5. PM-2.5	6. TSP	7. Fugitive Dust	8. Fugitive PM	9. HAP PM
3-40	BELT 510V TRANSFER TO BELT GC509723	1.31	1.12	0.39				
3-41	BELT GC509273 TRANSFER INTO SILO 8	5.63	4.79	1.69				
3-42	WESTERN SILO 8 TRANSFER TO BELT GC509773	0.03	0.03	0.01				
3-43	EASTERN SILO 8 TRANSFER TO BELT GC509773	0.03	0.03	0.00				
3-44	WESTERN SILO 8 TRANSFER TO BELT GC509785	0.03	0.03	0.01				
3-45	EASTERN SILO 8 TRANSFER TO BELT GC509785	0.03	0.03	0.01				
3-46	BELTS GC509773 AND GC509785 TRANSFER TO BELT GC509749	2.14	1.82	0.64				
3-47	BELT GC509749 TO BELT 511V	0.86	0.73	0.26				
3-48	RECLAIM HOPPER GC509755 TO BELT GC509743 TO BELT GC509749	3.00	2.55	0.90				

Continued on Next Page

Part B: Control of Particulate Emissions

Part C gathers information about how each source of particulate emissions is controlled. If you do not provide enough information to adequately describe how each source of particulate emissions is controlled, the application process may be stopped. If additional space is needed, you may make a copy of this table.

10. Emissions Point ID	11. Control Measure	12. Control Measure Description	13. Control Plan
3-40	☐ No Control ☐ Dust Suppression ☒ Other: Baghouse	Fabric Filter GC509715, subject to 40 CFR 63 Subpart LLL and operated per the Operations & Maintenance Plan last submitted to IDEM in May 2024.	☒ Yes ☐ No Date Submitted: June 2024
3-41	☐ No Control ☐ Dust Suppression ☒ Other: Baghouse	Fabric Filter GC509801, subject to 40 CFR 63 Subpart LLL and operated per the Operations & Maintenance Plan last submitted to IDEM in May 2024	☒ Yes ☐ No Date Submitted: June 2024
3-42	☐ No Control ☐ Dust Suppression ☒ Other: Baghouse	Fabric Filter GC509767, subject to 40 CFR 63 Subpart LLL and operated per the Operations & Maintenance Plan last submitted to IDEM in May 2024	☒ Yes ☐ No Date Submitted: June 2024
3-43	☐ No Control ☐ Dust Suppression ☒ Other: Baghouse	Fabric Filter GC509769, subject to 40 CFR 63 Subpart LLL and operated per the Operations & Maintenance Plan last submitted to IDEM in May 2024	☒ Yes ☐ No Date Submitted: June 2024
3-44	☐ No Control ☐ Dust Suppression ☒ Other: Baghouse	Fabric Filter GC509787, subject to 40 CFR 63 Subpart LLL and operated per the Operations & Maintenance Plan last submitted to IDEM in May 2024	☒ Yes ☐ No Date Submitted: June 2024
3-45	☐ No Control ☐ Dust Suppression ☒ Other: Baghouse	Fabric Filter GC509789, subject to 40 CFR 63 Subpart LLL and operated per the Operations & Maintenance Plan last submitted to IDEM in May 2024	☒ Yes ☐ No Date Submitted: June 2024
3-46	☐ No Control ☐ Dust Suppression ☒ Other: Baghouse	Fabric Filter GC509729, subject to 40 CFR 63 Subpart LLL and operated per the Operations & Maintenance Plan last submitted to IDEM in May 2024	☒ Yes ☐ No Date Submitted: June 2024
3-47, 3-48	☐ No Control ☐ Dust Suppression ☒ Other: Baghouse	Fabric Filter GC509737, subject to 40 CFR 63 Subpart LLL and operated per the Operations & Maintenance Plan last submitted to IDEM in May 2024 Fabric Filter GC509805, subject to 40 CFR 63 Subpart LLL and operated per the Operations & Maintenance Plan last submitted to IDEM in May 2024	☒ Yes ☐ No Date Submitted: June 2024

Air Permitting Rules 326 IAC 6-4 and 326 IAC 6-5 require fugitive dust to be controlled as needed to prevent dust from visibly crossing property lines. Parts C and D summarize sources of fugitive particulate emissions from process operations and unpaved roads.

PART C: Fugitive Dust *(if applicable)*

Part C identifies measures implemented for controlling fugitive particulate emissions from process operations and unpaved roads.

14. Dust Control Plans: *Check all that apply.*			**15. Control Measures:**
☒ Conveying:	☐ Wet	☒ Dry	Fabric filters
☐ Stock Piles:	☐ Open	☐ Covered	
☐ Unpaved Roads: *Watered?*	☐ Yes	☐ No	
☐ Other *(specify)*:			
☐ Other *(specify)*:			
☐ Other *(specify)*:			

PART D: Vehicular Traffic on Unpaved Roads *(if applicable)*

Part D gathers information on vehicular traffic patterns when the site contains unpaved roads. All data should be provided assuming peak hours of vehicular traffic. Two one-way trips equal one round trip. For external traffic (vehicles entering and leaving the property lines), the distance from the plant to the property line is the one-way trip distance.

16. Average Silt Content of Unpaved Roads:

17. Vehicle Description	**18. Max. No. round trips at peak hours** (trips/hr)	**19. Distance of one-way trip** (miles/trip)	**20. Max. vehicle speed** (mph)	**21. Max. gross vehicle weight** *(fully loaded)* (tons)	**22. Tare weight** (tons)	**23. No. of wheels on vehicle** (wheels)
NA						

OAQ PROCESS INFORMATION APPLICATION
PI-03: Storage & Handling of Bulk Material

State Form 52543 (R2 / 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 form is to obtain detailed information about the storage and handling of bulk materials. Complete one form for each process (or group of identical processes). Use additional forms if necessary. This 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 in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for anyone to inspect and photocopy.

PART A: Storage & Handing Information

Part A identifies all process units associated with storage and handling process for bulk materials. If there are multiple process units that are identical in nature, capacity, and use, you may use one form to summarize the data.

1. Equipment / Component Type	2. Unit ID	3. Number of Identical Units	4. Installation Date *(see instructions)*	5. Material Handled/ Stored	6. Maximum Materials Throughput Rate *(tons/year)*
Silo	3-40 through 3-48		11/1/2024	Clinker	1500000.00

7. Add-On Control Technology: *Identify all control technologies used for this unit, and attach completed CE-01 (unless "none").*

- ☐ None
- ☒ Baghouse / Fabric Filter – *Attach CE-02.*
- ☐ Cyclone – *Attach CE-03.*
- ☐ Electrostatic Precipitator – *Attach CE-04.*
- ☐ Absorption / Wet Collector / Scrubber – *Attach CE-05.*
- ☐ Adsorber – *Attach CE-07.*
- ☐ Other *(specify)*: – *Attach CE-10.*

8. Control Techniques: *Identify any other air emission control options used for the process.*

The silo and associated conveyors and hoppers will be enclosed to minimize dust emissions. All equipment will be controlled by fabric filters.

9. Process Limitations / Additional Information: *Identify any acceptable process limitations. Attach additional information if necessary.*

Continued on next page

PART B: Process Material Information

Part B summarizes the process material information. Provide the information in the items below for each material stored and/or handled in this process.

10. Material Handled/Stored *(from table above)*	11. Method of Handling	12. Type of Storage	13. Storage Capacity *(tons)*	14. Pile Acreage	15. Silt Content *(% by weight)*	16. Moisture Content *(% by weight)*
Clinker	Silo	Silo	50000.00			

PART C: Emission Factors

Part C identifies all emission factors used to calculate air emissions from the process units listed on this form.

17. Process Equipment & ID *(complete for all units listed in Part A of this form)*	18. Air Pollutant	19. Emission Factor		20. Source of Emission Factor *(if not using AP-42, include calculations)*	
		value	*units*		
3-40 through 3-48	PM	0.01	gr/acf	☒ AP-42	☐ Other
3-40 through 3-48	PM-10	0.0085	gr/acf	☒ AP-42	☐ Other
3-40 through 3-48	PM-2.5	0.003	gr/acf	☒ AP-42	☐ Other
				☐ AP-42	☐ Other

PART D: Federal Rule Applicability

Part D identifies any federal rules that apply to the process.

21. Is a **New Source Performance Standard (NSPS)** applicable to this source? ☐ Yes ☒ No
If yes, attach a completed FED-01 for each rule that applies.

- ☐ 40 CFR Part 60, Subpart CC — Glass Manufacturing Plants
- ☐ 40 CFR Part 60, Subpart DD — Grain Elevators
- ☐ 40 CFR Part 60, Subpart HH — Lime Manufacturing Plants
- ☐ 40 CFR Part 60, Subpart LL — Metallic Mineral Processing Plants
- ☐ 40 CFR Part 60, Subpart UU — Asphalt Processing and Asphalt Roofing Manufacture
- ☐ 40 CFR Part 60, Subpart OOO — Non-Metallic Mineral Processing Plants
- ☐ 40 CFR Part 60, Subpart UUU — Calciners and Dryers in Mineral Industries

22. Is a **National Emission Standard for Hazardous Air Pollutants (NESHAP)** applicable to this source? ☒ Yes ☐ No
If yes, attach a completed FED-01 for each rule that applies.

- ☐ 40 CFR Part 61, Subpart _____ *(Specify)*:
- ☒ 40 CFR Part 63, Subpart LLL *(Specify)*:

23. Non-Applicability Determination: Provide an explanation if the process unit appears subject to a rule (based on the rule title or the source category), but the rule will not apply.

OAQ CONTROL EQUIPMENT APPLICATION
CE-01: Control Equipment Summary

State Form 51904 (R3 / 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 CE-01 is to summarize all of the equipment used to control emissions. This 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 in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

Summary of Control Equipment

This table summarizes all of the equipment used to control air pollutant emissions. The identification numbers listed on this form should correspond to the emissions unit identified on the Plant Layout diagram and Process Flow diagram.

1. Control Equipment ID	2. Control Equipment Description	3. Pollutant Controlled	4. Emission Unit ID	5. Stack / Vent ID	6. Applicable Rule
GC509715	Fabric Filter	PM, PM10, PM2.5	3-40	FF3-40	40 CFR 63 LLL
GC509801	Fabric Filter	PM, PM10, PM2.5	3-41	FF3-41	40 CFR 63 LLL
GC509767	Fabric Filter	PM, PM10, PM2.5	3-42	FF3-42	40 CFR 63 LLL
GC509769	Fabric Filter	PM, PM10, PM2.5	3-43	FF3-43	40 CFR 63 LLL
GC509787	Fabric Filter	PM, PM10, PM2.5	3-44	FF3-44	40 CFR 63 LLL
GC509789	Fabric Filter	PM, PM10, PM2.5	3-45	FF3-45	40 CFR 63 LLL
GC509729	Fabric Filter	PM, PM10, PM2.5	3-46	FF3-46	40 CFR 63 LLL
GC509737	Fabric Filter	PM, PM10, PM2.5	3-47	FF3-47	40 CFR 63 LLL
GC509805	Fabric Filter	PM, PM10, PM2.5	3-48	FF3-48	40 CFR 63 LLL

OAQ CONTROL EQUIPMENT APPLICATION
CE-02: Particulate Control – Baghouse / Fabric Filter

State Form 51953 (R2 / 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 CE-02 is to identify all the parameters that describe the baghouse or fabric filter. This is a required form.
- Complete this form once for each baghouse or fabric filter (or once for each set of identical baghouses or fabric filters).
- 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 in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

PART A: Identification and Description of Control Equipment

Part A identifies the particulate control device and describes its physical properties.

1. Control Equipment ID:	GC509767
2. Installation Date:	11/1/2024
3. Bags or Cartridges?	☐ Bags ☒ Cartridges
4. Filter Material:	Polyester/PTFE
5. Number of Bags/Cartridges per Compartment:	4
6. Number of Compartments:	1
7. Mode of Operation:	☐ Intermittent ☐ Periodic ☒ Continuous
8. Cleaning Method:	☐ Shaking ☐ Reverse Pulse ☐ Reverse Air ☒ Jet Pulse
9. Cleaning Cycle / Frequency *(specify units)*:	TBD
10. Is a bag leak detector installed on this device?	☐ Yes ☒ No
11. Type / Description of Bag Leak Detector:	☐ Positive Pressure ☐ Negative Pressure
12. Air to Cloth Ratio *(Ex: 1.3 : 1.0)*:	3.7 : 1.0
13. Is Lime Injection used on this device?	☐ Yes ☒ No
14. Is Carbon Injection used on this device?	☐ Yes ☒ No

PART B: Operational Parameters

Part B provides the operational parameters of the control device and the pollutant laden gas stream. Appropriate units must be included if the standard units are not used. For each applicable parameter, provide the inlet and outlet values or provide the differential value.

	A. Units	B. Inlet	C. Outlet	D. Differential
15. Gas Stream Flow Rate	ACFM		850	
16. Gas Stream Temperature	°F		68	
17. Gas Stream Pressure	inches of water			0.00 to 10.00
18. Moisture Content	%		0.10%	
19. Particle Size Range	gr/acf		0.01	to
20. Lime Injection Rate *(if applicable)*	lb/hr			
21. Carbon Injection Rate *(if applicable)*	lb/hr			
22. Other *(specify)*:				

Continued on Next Page

PART C: Pollutant Concentrations

Part C provides the pollutant concentrations of the pollutant laden gas stream.

	23. Units	24. Inlet	25. Outlet	26. Efficiency (%): Capture	26. Efficiency (%): Control
☐ a. Lead (Pb)					
☐ b. Hazardous Air Pollutant (HAP) *(specify)*:					
☒ c. Particulate Matter (PM)	gr/acf	1.00	0.01	100.0%	99.0%
☒ d. Particulate Matter less than 10μm (PM_{10})	gr/acf	1.00	0.0085	100.0%	99.0%
☒ e. Particulate Matter less than 2.5μm ($PM_{2.5}$)	gr/acf	1.00	0.003	100.0%	99.0%
☐ f. Other Pollutant *(specify)*:					

PART D: Monitoring, Record Keeping, & Testing Procedures

Part D identifies any existing or proposed monitoring, record keeping, & testing procedures that may need to be included in the permit.

27. Item(s) Monitored:	Opacity			
28. Monitoring Frequency:	Monthly			
29. Item(s) Recorded:	Visible Emissions			
30. Record Keeping Frequency:	Monthly			
31. Pollutant(s) Tested:	Opacity			
32. Test Method(s):	22			
33. Testing Frequency:	Monthly			

PART E: Preventive Maintenance Plan

Part E verifies that a complete Preventive Maintenance Plan (PMP) has been prepared for the control device, if applicable. Use this table as a checklist to ensure that the PMP is complete.

34. Do you have a Preventive Maintenance Plan (PMP)?

☒ No PMP is needed. ☐ Yes – the following items are identified on the PMP:

- ☐ **A.** Identification of the individual(s) responsible for inspecting, maintaining and repairing emission control devices.
- ☐ **B.** Description of the items or conditions that will be inspected.
- ☐ **C.** Schedule for inspection of items or conditions described above.
- ☐ **D.** Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

PART F: Determination of Integral Control

Part F provides explanation to determine whether the control device should be considered integral to the process.

35. Has IDEM already made an integral control determination for this device? ☒ No ☐ Yes
If "Yes", provide the following:

Permit Number:	**Issuance Date:**	**Determination:** ☐ Integral ☐ Not Integral

36. Is this device integral to the process? ☐ No ☒ Yes
If "Yes", provide the reason(s) why the device is integral.

A properly functioning baghouse is required to operate the clinker silo.

OAQ CONTROL EQUIPMENT APPLICATION
CE-02: Particulate Control – Baghouse / Fabric Filter

State Form 51953 (R2 / 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 CE-02 is to identify all the parameters that describe the baghouse or fabric filter. This is a required form.
- Complete this form once for each baghouse or fabric filter (or once for each set of identical baghouses or fabric filters).
- 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 in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

PART A: Identification and Description of Control Equipment

Part A identifies the particulate control device and describes its physical properties.

1. Control Equipment ID:	GC509769
2. Installation Date:	11/1/2024
3. Bags or Cartridges?	☐ Bags ☒ Cartridges
4. Filter Material:	Polyester/PTFE
5. Number of Bags/Cartridges per Compartment:	4
6. Number of Compartments:	1
7. Mode of Operation:	☐ Intermittent ☐ Periodic ☒ Continuous
8. Cleaning Method:	☐ Shaking ☐ Reverse Pulse ☐ Reverse Air ☒ Jet Pulse
9. Cleaning Cycle / Frequency *(specify units)*:	TBD
10. Is a bag leak detector installed on this device?	☐ Yes ☒ No
11. Type / Description of Bag Leak Detector:	☐ Positive Pressure ☐ Negative Pressure
12. Air to Cloth Ratio *(Ex: 1.3 : 1.0)*:	3.7 : 1.0
13. Is Lime Injection used on this device?	☐ Yes ☒ No
14. Is Carbon Injection used on this device?	☐ Yes ☒ No

PART B: Operational Parameters

Part B provides the operational parameters of the control device and the pollutant laden gas stream. Appropriate units must be included if the standard units are not used. For each applicable parameter, provide the inlet and outlet values or provide the differential value.

	A. Units	B. Inlet	C. Outlet	D. Differential
15. Gas Stream Flow Rate	ACFM		850	
16. Gas Stream Temperature	°F		68	
17. Gas Stream Pressure	inches of water			0.00 to 10.00
18. Moisture Content	%		0.10%	
19. Particle Size Range	gr/acf		0.01	to
20. Lime Injection Rate *(if applicable)*	lb/hr			
21. Carbon Injection Rate *(if applicable)*	lb/hr			
22. Other *(specify)*:				

Continued on Next Page

PART C: Pollutant Concentrations

Part C provides the pollutant concentrations of the pollutant laden gas stream.

	23. Units	24. Inlet	25. Outlet	26. Efficiency (%): Capture	26. Efficiency (%): Control
☐ a. Lead (Pb)					
☐ b. Hazardous Air Pollutant (HAP) *(specify)*:					
☒ c. Particulate Matter (PM)	gr/acf	1.00	0.01	100.0%	99.0%
☒ d. Particulate Matter less than 10μm (PM_{10})	gr/acf	1.00	0.0085	100.0%	99.0%
☒ e. Particulate Matter less than 2.5μm ($PM_{2.5}$)	gr/acf	1.00	0.003	100.0%	99.0%
☐ f. Other Pollutant *(specify)*:					

PART D: Monitoring, Record Keeping, & Testing Procedures

Part D identifies any existing or proposed monitoring, record keeping, & testing procedures that may need to be included in the permit.

27. Item(s) Monitored:	Opacity			
28. Monitoring Frequency:	Monthly			
29. Item(s) Recorded:	Visible Emissions			
30. Record Keeping Frequency:	Monthly			
31. Pollutant(s) Tested:	Opacity			
32. Test Method(s):	22			
33. Testing Frequency:	Monthly			

PART E: Preventive Maintenance Plan

Part E verifies that a complete Preventive Maintenance Plan (PMP) has been prepared for the control device, if applicable. Use this table as a checklist to ensure that the PMP is complete.

34. Do you have a Preventive Maintenance Plan (PMP)?

☒ No PMP is needed. ☐ Yes – the following items are identified on the PMP:

- ☐ **A.** Identification of the individual(s) responsible for inspecting, maintaining and repairing emission control devices.
- ☐ **B.** Description of the items or conditions that will be inspected.
- ☐ **C.** Schedule for inspection of items or conditions described above.
- ☐ **D.** Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

PART F: Determination of Integral Control

Part F provides explanation to determine whether the control device should be considered integral to the process.

35. Has IDEM already made an integral control determination for this device? ☒ No ☐ Yes
If "Yes", provide the following:

Permit Number:	**Issuance Date:**	**Determination:** ☐ Integral ☐ Not Integral

36. Is this device integral to the process? ☐ No ☒ Yes
If "Yes", provide the reason(s) why the device is integral.

A properly functioning baghouse is required to operate the clinker silo.

OAQ CONTROL EQUIPMENT APPLICATION
CE-02: Particulate Control – Baghouse / Fabric Filter

State Form 51953 (R2 / 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 CE-02 is to identify all the parameters that describe the baghouse or fabric filter. This is a required form.
- Complete this form once for each baghouse or fabric filter (or once for each set of identical baghouses or fabric filters).
- 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 in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

PART A: Identification and Description of Control Equipment

Part A identifies the particulate control device and describes its physical properties.

1. Control Equipment ID:	GC509787
2. Installation Date:	11/1/24
3. Bags or Cartridges?	☐ Bags ☒ Cartridges
4. Filter Material:	Polyester/PTFE
5. Number of Bags/Cartridges per Compartment:	4
6. Number of Compartments:	1
7. Mode of Operation:	☐ Intermittent ☐ Periodic ☒ Continuous
8. Cleaning Method:	☐ Shaking ☐ Reverse Pulse ☐ Reverse Air ☒ Jet Pulse
9. Cleaning Cycle / Frequency *(specify units)*:	TBD
10. Is a bag leak detector installed on this device?	☐ Yes ☒ No
11. Type / Description of Bag Leak Detector:	☐ Positive Pressure ☐ Negative Pressure
12. Air to Cloth Ratio *(Ex: 1.3 : 1.0)*:	3.7 : 1.0
13. Is Lime Injection used on this device?	☐ Yes ☒ No
14. Is Carbon Injection used on this device?	☐ Yes ☒ No

PART B: Operational Parameters

Part B provides the operational parameters of the control device and the pollutant laden gas stream. Appropriate units must be included if the standard units are not used. For each applicable parameter, provide the inlet and outlet values or provide the differential value.

	A. Units	B. Inlet	C. Outlet	D. Differential
15. Gas Stream Flow Rate	ACFM		850.00	
16. Gas Stream Temperature	°F		68	
17. Gas Stream Pressure	inches of water			0.00 to 10.00
18. Moisture Content	%		0.10%	
19. Particle Size Range	gr/acf		0.01	to
20. Lime Injection Rate *(if applicable)*	lb/hr			
21. Carbon Injection Rate *(if applicable)*	lb/hr			
22. Other *(specify)*:				

Continued on Next Page

PART C: Pollutant Concentrations

Part C provides the pollutant concentrations of the pollutant laden gas stream.

	23. Units	24. Inlet	25. Outlet	26. Efficiency (%): Capture	26. Efficiency (%): Control
☐ a. Lead (Pb)					
☐ b. Hazardous Air Pollutant (HAP) *(specify)*:					
☒ c. Particulate Matter (PM)	gr/acf	1.00	0.01	100.0%	99.0%
☒ d. Particulate Matter less than 10μm (PM_{10})	gr/acf	1.00	0.0085	100.0%	99.0%
☒ e. Particulate Matter less than 2.5μm ($PM_{2.5}$)	gr/acf	1.00	0.003	100.0%	99.0%
☐ f. Other Pollutant *(specify)*:					

PART D: Monitoring, Record Keeping, & Testing Procedures

Part D identifies any existing or proposed monitoring, record keeping, & testing procedures that may need to be included in the permit.

27. Item(s) Monitored:	Opacity			
28. Monitoring Frequency:	Monthly			
29. Item(s) Recorded:	Visible Emissions			
30. Record Keeping Frequency:	Monthly			
31. Pollutant(s) Tested:	Opacity			
32. Test Method(s):	22			
33. Testing Frequency:	Monthly			

PART E: Preventive Maintenance Plan

Part E verifies that a complete Preventive Maintenance Plan (PMP) has been prepared for the control device, if applicable. Use this table as a checklist to ensure that the PMP is complete.

34. Do you have a Preventive Maintenance Plan (PMP)?

☒ No PMP is needed. ☐ Yes – the following items are identified on the PMP:

- ☐ **A.** Identification of the individual(s) responsible for inspecting, maintaining and repairing emission control devices.
- ☐ **B.** Description of the items or conditions that will be inspected.
- ☐ **C.** Schedule for inspection of items or conditions described above.
- ☐ **D.** Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

PART F: Determination of Integral Control

Part F provides explanation to determine whether the control device should be considered integral to the process.

35. Has IDEM already made an integral control determination for this device? ☒ No ☐ Yes
If "Yes", provide the following:

Permit Number:	**Issuance Date:**	**Determination:** ☐ Integral ☐ Not Integral

36. Is this device integral to the process? ☐ No ☒ Yes
If "Yes", provide the reason(s) why the device is integral.

A properly functioning baghouse is required to operate the clinker silo.

OAQ CONTROL EQUIPMENT APPLICATION
CE-02: Particulate Control – Baghouse / Fabric Filter

State Form 51953 (R2 / 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 CE-02 is to identify all the parameters that describe the baghouse or fabric filter. This is a required form.
- Complete this form once for each baghouse or fabric filter (or once for each set of identical baghouses or fabric filters).
- 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 in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

PART A: Identification and Description of Control Equipment

Part A identifies the particulate control device and describes its physical properties.

1. Control Equipment ID:	GC509789
2. Installation Date:	11/1/24
3. Bags or Cartridges?	☐ Bags ☒ Cartridges
4. Filter Material:	Polyester/PTFE
5. Number of Bags/Cartridges per Compartment:	4
6. Number of Compartments:	1
7. Mode of Operation:	☐ Intermittent ☐ Periodic ☒ Continuous
8. Cleaning Method:	☐ Shaking ☐ Reverse Pulse ☐ Reverse Air ☒ Jet Pulse
9. Cleaning Cycle / Frequency *(specify units)*:	TBD
10. Is a bag leak detector installed on this device?	☐ Yes ☒ No
11. Type / Description of Bag Leak Detector:	☐ Positive Pressure ☐ Negative Pressure
12. Air to Cloth Ratio *(Ex: 1.3 : 1.0)*:	3.7 : 1.0
13. Is Lime Injection used on this device?	☐ Yes ☒ No
14. Is Carbon Injection used on this device?	☐ Yes ☒ No

PART B: Operational Parameters

Part B provides the operational parameters of the control device and the pollutant laden gas stream. Appropriate units must be included if the standard units are not used. For each applicable parameter, provide the inlet and outlet values or provide the differential value.

	A. Units	B. Inlet	C. Outlet	D. Differential
15. Gas Stream Flow Rate	ACFM		850	
16. Gas Stream Temperature	°F		68	
17. Gas Stream Pressure	inches of water			0.00 to 10.00
18. Moisture Content	%		0.10%	
19. Particle Size Range	gr/acf		0.01	to
20. Lime Injection Rate *(if applicable)*	lb/hr			
21. Carbon Injection Rate *(if applicable)*	lb/hr			
22. Other *(specify)*:				

Continued on Next Page

PART C: Pollutant Concentrations

Part C provides the pollutant concentrations of the pollutant laden gas stream.

	23. Units	24. Inlet	25. Outlet	26. Efficiency (%): Capture	26. Efficiency (%): Control
☐ a. Lead (Pb)					
☐ b. Hazardous Air Pollutant (HAP) *(specify)*:					
☒ c. Particulate Matter (PM)	gr/acf	1.00	0.01	100.0%	99.0%
☒ d. Particulate Matter less than 10μm (PM_{10})	gr/acf	1.00	0.0085	100.0%	99.0%
☒ e. Particulate Matter less than 2.5μm ($PM_{2.5}$)	gr/acf	1.00	0.003	100.0%	99.0%
☐ f. Other Pollutant *(specify)*:					

PART D: Monitoring, Record Keeping, & Testing Procedures

Part D identifies any existing or proposed monitoring, record keeping, & testing procedures that may need to be included in the permit.

27. Item(s) Monitored:	Opacity			
28. Monitoring Frequency:	Monthly			
29. Item(s) Recorded:	Visible Emissions			
30. Record Keeping Frequency:	Monthly			
31. Pollutant(s) Tested:	Opacity			
32. Test Method(s):	22			
33. Testing Frequency:	Monthly			

PART E: Preventive Maintenance Plan

Part E verifies that a complete Preventive Maintenance Plan (PMP) has been prepared for the control device, if applicable. Use this table as a checklist to ensure that the PMP is complete.

34. Do you have a Preventive Maintenance Plan (PMP)?

☒ No PMP is needed. ☐ Yes – the following items are identified on the PMP:

- ☐ **A.** Identification of the individual(s) responsible for inspecting, maintaining and repairing emission control devices.
- ☐ **B.** Description of the items or conditions that will be inspected.
- ☐ **C.** Schedule for inspection of items or conditions described above.
- ☐ **D.** Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

PART F: Determination of Integral Control

Part F provides explanation to determine whether the control device should be considered integral to the process.

35. Has IDEM already made an integral control determination for this device? ☒ No ☐ Yes
If "Yes", provide the following:

Permit Number:	**Issuance Date:**	**Determination:** ☐ Integral	☐ Not Integral

36. Is this device integral to the process? ☐ No ☒ Yes
If "Yes", provide the reason(s) why the device is integral.

A properly functioning baghouse is required to operate the clinker silo.

OAQ CONTROL EQUIPMENT APPLICATION
CE-02: Particulate Control – Baghouse / Fabric Filter

State Form 51953 (R2 / 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 CE-02 is to identify all the parameters that describe the baghouse or fabric filter. This is a required form.
- Complete this form once for each baghouse or fabric filter (or once for each set of identical baghouses or fabric filters).
- 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 in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

PART A: Identification and Description of Control Equipment

Part A identifies the particulate control device and describes its physical properties.

1. Control Equipment ID:	GC509715
2. Installation Date:	11/1/2024
3. Bags or Cartridges?	☒ Bags ☐ Cartridges
4. Filter Material:	Polyester
5. Number of Bags/Cartridges per Compartment:	64
6. Number of Compartments:	1
7. Mode of Operation:	☐ Intermittent ☐ Periodic ☒ Continuous
8. Cleaning Method:	☐ Shaking ☐ Reverse Pulse ☐ Reverse Air ☒ Jet Pulse
9. Cleaning Cycle / Frequency *(specify units)*:	TBD
10. Is a bag leak detector installed on this device?	☐ Yes ☒ No
11. Type / Description of Bag Leak Detector:	☐ Positive Pressure ☐ Negative Pressure
12. Air to Cloth Ratio *(Ex: 1.3 : 1.0)*:	3.6 : 1.0
13. Is Lime Injection used on this device?	☐ Yes ☒ No
14. Is Carbon Injection used on this device?	☐ Yes ☒ No

PART B: Operational Parameters

Part B provides the operational parameters of the control device and the pollutant laden gas stream. Appropriate units must be included if the standard units are not used. For each applicable parameter, provide the inlet and outlet values or provide the differential value.

	A. Units	B. Inlet	C. Outlet	D. Differential
15. Gas Stream Flow Rate	ACFM		3500.00	
16. Gas Stream Temperature	°F		68.00	
17. Gas Stream Pressure	inches of water	-11.20		to
18. Moisture Content	%		0.10%	
19. Particle Size Range	gr/acf		0.01	to
20. Lime Injection Rate *(if applicable)*	lb/hr			
21. Carbon Injection Rate *(if applicable)*	lb/hr			
22. Other *(specify)*:				

Continued on Next Page

PART C: Pollutant Concentrations

Part C provides the pollutant concentrations of the pollutant laden gas stream.

	23. Units	24. Inlet	25. Outlet	26. Efficiency (%): Capture	26. Efficiency (%): Control
☐ a. Lead (Pb)					
☐ b. Hazardous Air Pollutant (HAP) *(specify)*:					
☒ c. Particulate Matter (PM)	gr/acf	1.00	0.01	100.0%	99.0%
☒ d. Particulate Matter less than 10μm (PM_{10})	gr/acf	1.00	0.0085	100.0%	99.0%
☒ e. Particulate Matter less than 2.5μm ($PM_{2.5}$)	gr/acf	1.00	0.003	100.0%	99.0%
☐ f. Other Pollutant *(specify)*:					

PART D: Monitoring, Record Keeping, & Testing Procedures

Part D identifies any existing or proposed monitoring, record keeping, & testing procedures that may need to be included in the permit.

27. Item(s) Monitored:	Opacity			
28. Monitoring Frequency:	Monthly			
29. Item(s) Recorded:	Visible Emissions			
30. Record Keeping Frequency:	Monthly			
31. Pollutant(s) Tested:	Opacity			
32. Test Method(s):	22			
33. Testing Frequency:	Monthly			

PART E: Preventive Maintenance Plan

Part E verifies that a complete Preventive Maintenance Plan (PMP) has been prepared for the control device, if applicable. Use this table as a checklist to ensure that the PMP is complete.

34. Do you have a Preventive Maintenance Plan (PMP)?

☒ No PMP is needed. ☐ Yes – the following items are identified on the PMP:

- ☐ **A.** Identification of the individual(s) responsible for inspecting, maintaining and repairing emission control devices.
- ☐ **B.** Description of the items or conditions that will be inspected.
- ☐ **C.** Schedule for inspection of items or conditions described above.
- ☐ **D.** Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

PART F: Determination of Integral Control

Part F provides explanation to determine whether the control device should be considered integral to the process.

35. Has IDEM already made an integral control determination for this device? ☒ No ☐ Yes
If "Yes", provide the following:

Permit Number:	**Issuance Date:**	**Determination:** ☐ Integral ☐ Not Integral

36. Is this device integral to the process? ☐ No ☒ Yes
If "Yes", provide the reason(s) why the device is integral.

A properly functioning baghouse is required to operate the clinker silo.

OAQ CONTROL EQUIPMENT APPLICATION
CE-02: Particulate Control – Baghouse / Fabric Filter

State Form 51953 (R2 / 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 CE-02 is to identify all the parameters that describe the baghouse or fabric filter. This is a required form.
- Complete this form once for each baghouse or fabric filter (or once for each set of identical baghouses or fabric filters).
- 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 in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

PART A: Identification and Description of Control Equipment

Part A identifies the particulate control device and describes its physical properties.

1. Control Equipment ID:	GC509729
2. Installation Date:	11/1/2024
3. Bags or Cartridges?	☒ Bags ☐ Cartridges
4. Filter Material:	Polyester
5. Number of Bags/Cartridges per Compartment:	81
6. Number of Compartments:	1
7. Mode of Operation:	☐ Intermittent ☐ Periodic ☒ Continuous
8. Cleaning Method:	☐ Shaking ☐ Reverse Pulse ☐ Reverse Air ☒ Jet Pulse
9. Cleaning Cycle / Frequency *(specify units)*:	TBD
10. Is a bag leak detector installed on this device?	☐ Yes ☒ No
11. Type / Description of Bag Leak Detector:	☐ Positive Pressure ☐ Negative Pressure
12. Air to Cloth Ratio *(Ex: 1.3 : 1.0)*:	4.6 : 1.0
13. Is Lime Injection used on this device?	☐ Yes ☒ No
14. Is Carbon Injection used on this device?	☐ Yes ☒ No

PART B: Operational Parameters

Part B provides the operational parameters of the control device and the pollutant laden gas stream. Appropriate units must be included if the standard units are not used. For each applicable parameter, provide the inlet and outlet values or provide the differential value.

	A. Units	B. Inlet	C. Outlet	D. Differential
15. Gas Stream Flow Rate	ACFM		5700.00	
16. Gas Stream Temperature	°F		68.00	
17. Gas Stream Pressure	inches of water	-12.00		to
18. Moisture Content	%		0.10%	
19. Particle Size Range	gr/acf		0.01	to
20. Lime Injection Rate *(if applicable)*	lb/hr			
21. Carbon Injection Rate *(if applicable)*	lb/hr			
22. Other *(specify)*:				

Continued on Next Page

PART C: Pollutant Concentrations

Part C provides the pollutant concentrations of the pollutant laden gas stream.

	23. Units	24. Inlet	25. Outlet	26. Efficiency (%): Capture	26. Efficiency (%): Control
☐ a. Lead (Pb)					
☐ b. Hazardous Air Pollutant (HAP) *(specify)*:					
☒ c. Particulate Matter (PM)	gr/acf	1.00	0.01	100.0%	99.0%
☒ d. Particulate Matter less than 10μm (PM_{10})	gr/acf	1.00	0.0085	100.0%	99.0%
☒ e. Particulate Matter less than 2.5μm ($PM_{2.5}$)	gr/acf	1.00	0.003	100.0%	99.0%
☐ f. Other Pollutant *(specify)*:					

PART D: Monitoring, Record Keeping, & Testing Procedures

Part D identifies any existing or proposed monitoring, record keeping, & testing procedures that may need to be included in the permit.

27. Item(s) Monitored:	Opacity			
28. Monitoring Frequency:	Monthly			
29. Item(s) Recorded:	Visible Emissions			
30. Record Keeping Frequency:	Monthly			
31. Pollutant(s) Tested:	Opacity			
32. Test Method(s):	22			
33. Testing Frequency:	Monthly			

PART E: Preventive Maintenance Plan

Part E verifies that a complete Preventive Maintenance Plan (PMP) has been prepared for the control device, if applicable. Use this table as a checklist to ensure that the PMP is complete.

34. Do you have a Preventive Maintenance Plan (PMP)?

☒ No PMP is needed. ☐ Yes – the following items are identified on the PMP:

- ☐ **A.** Identification of the individual(s) responsible for inspecting, maintaining and repairing emission control devices.
- ☐ **B.** Description of the items or conditions that will be inspected.
- ☐ **C.** Schedule for inspection of items or conditions described above.
- ☐ **D.** Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

PART F: Determination of Integral Control

Part F provides explanation to determine whether the control device should be considered integral to the process.

35. Has IDEM already made an integral control determination for this device? ☒ No ☐ Yes
If "Yes", provide the following:

Permit Number:	**Issuance Date:**	**Determination:** ☐ Integral ☐ Not Integral

36. Is this device integral to the process? ☐ No ☒ Yes
If "Yes", provide the reason(s) why the device is integral.

A properly functioning baghouse is required to operate the clinker silo.

OAQ CONTROL EQUIPMENT APPLICATION
CE-02: Particulate Control – Baghouse / Fabric Filter

State Form 51953 (R2 / 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
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NOTES:

- The purpose of CE-02 is to identify all the parameters that describe the baghouse or fabric filter. This is a required form.
- Complete this form once for each baghouse or fabric filter (or once for each set of identical baghouses or fabric filters).
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PART A: Identification and Description of Control Equipment

Part A identifies the particulate control device and describes its physical properties.

1. Control Equipment ID:	GC509737
2. Installation Date:	11/1/2024
3. Bags or Cartridges?	☒ Bags ☐ Cartridges
4. Filter Material:	Polyester
5. Number of Bags/Cartridges per Compartment:	36
6. Number of Compartments:	1
7. Mode of Operation:	☐ Intermittent ☐ Periodic ☒ Continuous
8. Cleaning Method:	☐ Shaking ☐ Reverse Pulse ☐ Reverse Air ☒ Jet Pulse
9. Cleaning Cycle / Frequency *(specify units)*:	TBD
10. Is a bag leak detector installed on this device?	☐ Yes ☒ No
11. Type / Description of Bag Leak Detector:	☐ Positive Pressure ☐ Negative Pressure
12. Air to Cloth Ratio *(Ex: 1.3 : 1.0)*:	4.1 : 1.0
13. Is Lime Injection used on this device?	☐ Yes ☒ No
14. Is Carbon Injection used on this device?	☐ Yes ☒ No

PART B: Operational Parameters

Part B provides the operational parameters of the control device and the pollutant laden gas stream. Appropriate units must be included if the standard units are not used. For each applicable parameter, provide the inlet and outlet values or provide the differential value.

	A. Units	B. Inlet	C. Outlet	D. Differential
15. Gas Stream Flow Rate	ACFM		2300.00	
16. Gas Stream Temperature	°F		68.00	
17. Gas Stream Pressure	inches of water	-12.00		to
18. Moisture Content	%		0.10%	
19. Particle Size Range	gr/acf		0.01	to
20. Lime Injection Rate *(if applicable)*	lb/hr			
21. Carbon Injection Rate *(if applicable)*	lb/hr			
22. Other *(specify)*:				

Continued on Next Page

PART C: Pollutant Concentrations

Part C provides the pollutant concentrations of the pollutant laden gas stream.

	23. Units	24. Inlet	25. Outlet	26. Efficiency (%): Capture	26. Efficiency (%): Control
☐ a. Lead (Pb)					
☐ b. Hazardous Air Pollutant (HAP) *(specify)*:					
☒ c. Particulate Matter (PM)	gr/acf	1.00	0.01	100.0%	99.0%
☒ d. Particulate Matter less than 10μm (PM_{10})	gr/acf	1.00	0.0085	100.0%	99.0%
☒ e. Particulate Matter less than 2.5μm ($PM_{2.5}$)	gr/acf	1.00	0.003	100.0%	99.0%
☐ f. Other Pollutant *(specify)*:					

PART D: Monitoring, Record Keeping, & Testing Procedures

Part D identifies any existing or proposed monitoring, record keeping, & testing procedures that may need to be included in the permit.

27. Item(s) Monitored:	Opacity			
28. Monitoring Frequency:	Monthly			
29. Item(s) Recorded:	Visible Emissions			
30. Record Keeping Frequency:	Monthly			
31. Pollutant(s) Tested:	Opacity			
32. Test Method(s):	22			
33. Testing Frequency:	Monthly			

PART E: Preventive Maintenance Plan

Part E verifies that a complete Preventive Maintenance Plan (PMP) has been prepared for the control device, if applicable. Use this table as a checklist to ensure that the PMP is complete.

34. Do you have a Preventive Maintenance Plan (PMP)?

☒ No PMP is needed. ☐ Yes – the following items are identified on the PMP:

- ☐ **A.** Identification of the individual(s) responsible for inspecting, maintaining and repairing emission control devices.
- ☐ **B.** Description of the items or conditions that will be inspected.
- ☐ **C.** Schedule for inspection of items or conditions described above.
- ☐ **D.** Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

PART F: Determination of Integral Control

Part F provides explanation to determine whether the control device should be considered integral to the process.

35. Has IDEM already made an integral control determination for this device? ☒ No ☐ Yes
If "Yes", provide the following:

Permit Number:	**Issuance Date:**	**Determination:** ☐ Integral	☐ Not Integral

36. Is this device integral to the process? ☐ No ☒ Yes
If "Yes", provide the reason(s) why the device is integral.

A properly functioning baghouse is required to operate the clinker silo.

OAQ CONTROL EQUIPMENT APPLICATION
CE-02: Particulate Control – Baghouse / Fabric Filter

State Form 51953 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
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NOTES:

- The purpose of CE-02 is to identify all the parameters that describe the baghouse or fabric filter. This is a required form.
- Complete this form once for each baghouse or fabric filter (or once for each set of identical baghouses or fabric filters).
- 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 in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

PART A: Identification and Description of Control Equipment

Part A identifies the particulate control device and describes its physical properties.

1. Control Equipment ID:	GC509801
2. Installation Date:	11/1/2024
3. Bags or Cartridges?	☒ Bags ☐ Cartridges
4. Filter Material:	Polyester
5. Number of Bags/Cartridges per Compartment:	154
6. Number of Compartments:	1
7. Mode of Operation:	☐ Intermittent ☐ Periodic ☒ Continuous
8. Cleaning Method:	☐ Shaking ☐ Reverse Pulse ☐ Reverse Air ☒ Jet Pulse
9. Cleaning Cycle / Frequency *(specify units)*:	TBD
10. Is a bag leak detector installed on this device?	☐ Yes ☒ No
11. Type / Description of Bag Leak Detector:	☐ Positive Pressure ☐ Negative Pressure
12. Air to Cloth Ratio *(Ex: 1.3 : 1.0)*:	4.2 : 1.0
13. Is Lime Injection used on this device?	☐ Yes ☒ No
14. Is Carbon Injection used on this device?	☐ Yes ☒ No

PART B: Operational Parameters

Part B provides the operational parameters of the control device and the pollutant laden gas stream. Appropriate units must be included if the standard units are not used. For each applicable parameter, provide the inlet and outlet values or provide the differential value.

	A. Units	B. Inlet	C. Outlet	D. Differential
15. Gas Stream Flow Rate	ACFM		15000.00	
16. Gas Stream Temperature	°F		68.00	
17. Gas Stream Pressure	inches of water	-12.00		to
18. Moisture Content	%		0.10%	
19. Particle Size Range	gr/acf		0.01	to
20. Lime Injection Rate *(if applicable)*	lb/hr			
21. Carbon Injection Rate *(if applicable)*	lb/hr			
22. Other *(specify)*:				

Continued on Next Page

PART C: Pollutant Concentrations

Part C provides the pollutant concentrations of the pollutant laden gas stream.

	23. Units	24. Inlet	25. Outlet	26. Efficiency (%): Capture	26. Efficiency (%): Control
☐ a. Lead (Pb)					
☐ b. Hazardous Air Pollutant (HAP) *(specify)*:					
☒ c. Particulate Matter (PM)	gr/acf	1.00	0.01	100.0%	99.0%
☒ d. Particulate Matter less than 10μm (PM_{10})	gr/acf	1.00	0.0085	100.0%	99.0%
☒ e. Particulate Matter less than 2.5μm ($PM_{2.5}$)	gr/acf	1.00	0.00	100.0%	99.0%
☐ f. Other Pollutant *(specify)*:					

PART D: Monitoring, Record Keeping, & Testing Procedures

Part D identifies any existing or proposed monitoring, record keeping, & testing procedures that may need to be included in the permit.

27. Item(s) Monitored:	Opacity			
28. Monitoring Frequency:	Monthly			
29. Item(s) Recorded:	Visible Emissions			
30. Record Keeping Frequency:	Monthly			
31. Pollutant(s) Tested:	Opacity			
32. Test Method(s):	22			
33. Testing Frequency:	Monthly			

PART E: Preventive Maintenance Plan

Part E verifies that a complete Preventive Maintenance Plan (PMP) has been prepared for the control device, if applicable. Use this table as a checklist to ensure that the PMP is complete.

34. Do you have a Preventive Maintenance Plan (PMP)?

☒ No PMP is needed. ☐ Yes – the following items are identified on the PMP:

- ☐ **A.** Identification of the individual(s) responsible for inspecting, maintaining and repairing emission control devices.
- ☐ **B.** Description of the items or conditions that will be inspected.
- ☐ **C.** Schedule for inspection of items or conditions described above.
- ☐ **D.** Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

PART F: Determination of Integral Control

Part F provides explanation to determine whether the control device should be considered integral to the process.

35. Has IDEM already made an integral control determination for this device? ☒ No ☐ Yes
If "Yes", provide the following:

Permit Number:	**Issuance Date:**	**Determination:** ☐ Integral ☐ Not Integral

36. Is this device integral to the process? ☐ No ☒ Yes
If "Yes", provide the reason(s) why the device is integral.

A properly functioning baghouse is required to operate the clinker silo.

OAQ CONTROL EQUIPMENT APPLICATION
CE-02: Particulate Control – Baghouse / Fabric Filter

State Form 51953 (R2 / 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 CE-02 is to identify all the parameters that describe the baghouse or fabric filter. This is a required form.
- Complete this form once for each baghouse or fabric filter (or once for each set of identical baghouses or fabric filters).
- 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 in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

PART A: Identification and Description of Control Equipment

Part A identifies the particulate control device and describes its physical properties.

1. Control Equipment ID:	GC509805
2. Installation Date:	11/1/2024
3. Bags or Cartridges?	☒ Bags ☐ Cartridges
4. Filter Material:	Polyester
5. Number of Bags/Cartridges per Compartment:	120
6. Number of Compartments:	1
7. Mode of Operation:	☐ Intermittent ☐ Periodic ☒ Continuous
8. Cleaning Method:	☐ Shaking ☐ Reverse Pulse ☐ Reverse Air ☒ Jet Pulse
9. Cleaning Cycle / Frequency *(specify units)*:	TBD
10. Is a bag leak detector installed on this device?	☐ Yes ☒ No
11. Type / Description of Bag Leak Detector:	☐ Positive Pressure ☐ Negative Pressure
12. Air to Cloth Ratio *(Ex: 1.3 : 1.0)*:	4.3 : 1.0
13. Is Lime Injection used on this device?	☐ Yes ☒ No
14. Is Carbon Injection used on this device?	☐ Yes ☒ No

PART B: Operational Parameters

Part B provides the operational parameters of the control device and the pollutant laden gas stream. Appropriate units must be included if the standard units are not used. For each applicable parameter, provide the inlet and outlet values or provide the differential value.

	A. Units	B. Inlet	C. Outlet	D. Differential
15. Gas Stream Flow Rate	ACFM		8000.00	
16. Gas Stream Temperature	°F		68.00	
17. Gas Stream Pressure	inches of water	-12.00		to
18. Moisture Content	%		0.10%	
19. Particle Size Range	gr/acf		0.01	to
20. Lime Injection Rate *(if applicable)*	lb/hr			
21. Carbon Injection Rate *(if applicable)*	lb/hr			
22. Other *(specify)*:				

Continued on Next Page

PART C: Pollutant Concentrations

Part C provides the pollutant concentrations of the pollutant laden gas stream.

	23. Units	24. Inlet	25. Outlet	26. Efficiency (%): Capture	26. Efficiency (%): Control
☐ a. Lead (Pb)					
☐ b. Hazardous Air Pollutant (HAP) *(specify)*:					
☒ c. Particulate Matter (PM)	gr/acf	1.00	0.01	100.0%	99.0%
☒ d. Particulate Matter less than 10μm (PM_{10})	gr/acf	1.00	0.0085	100.0%	99.0%
☒ e. Particulate Matter less than 2.5μm ($PM_{2.5}$)	gr/acf	1.00	0.003	100.0%	99.0%
☐ f. Other Pollutant *(specify)*:					

PART D: Monitoring, Record Keeping, & Testing Procedures

Part D identifies any existing or proposed monitoring, record keeping, & testing procedures that may need to be included in the permit.

27. Item(s) Monitored:	Opacity			
28. Monitoring Frequency:	Monthly			
29. Item(s) Recorded:	Visible Emissions			
30. Record Keeping Frequency:	Monthly			
31. Pollutant(s) Tested:	Opacity			
32. Test Method(s):	22			
33. Testing Frequency:	Monthly			

PART E: Preventive Maintenance Plan

Part E verifies that a complete Preventive Maintenance Plan (PMP) has been prepared for the control device, if applicable. Use this table as a checklist to ensure that the PMP is complete.

34. Do you have a Preventive Maintenance Plan (PMP)?

☒ No PMP is needed. ☐ Yes – the following items are identified on the PMP:

- ☐ **A.** Identification of the individual(s) responsible for inspecting, maintaining and repairing emission control devices.
- ☐ **B.** Description of the items or conditions that will be inspected.
- ☐ **C.** Schedule for inspection of items or conditions described above.
- ☐ **D.** Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

PART F: Determination of Integral Control

Part F provides explanation to determine whether the control device should be considered integral to the process.

35. Has IDEM already made an integral control determination for this device? ☒ No ☐ Yes
If "Yes", provide the following:

Permit Number:	**Issuance Date:**	**Determination:** ☐ Integral ☐ Not Integral

36. Is this device integral to the process? ☐ No ☒ Yes
If "Yes", provide the reason(s) why the device is integral.

A properly functioning baghouse is required to operate the clinker silo.

OAQ COMPLIANCE DETERMINATION APPLICATION
CD-01: Emissions Unit Compliance Status

State Form 51861 (R / 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 CD-01 is to identify the requirements that apply to each emissions unit at the permitted source and to determine the compliance status of these emissions units.
- This is required form for each initial Title V permit application as well as each modification and every renewal.
- 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 in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

PART A: Identification of Source and Emissions Unit

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

1. Source Name: Lone Star Industries, Inc. dba Buzzi Unicem USA	**2. Source ID:** 133 – 00002
3. Emissions Unit Description: Clinker Silo System	**4. Unit ID:** 3-40 through 3-48

PART B: Regulatory Compliance Status

Part B identifies the regulatory requirements that apply to the emissions unit and to determine the compliance status of the emissions unit. These "regulatory requirements" are those required by federal, state, or local law.

5. Rule Cite	6. Description	7. State / Local Only	8. Limitation	9. Test Method	10. In Compliance (y/n)
40 CFR 63 Subpart LLL	Monthly 10-minute Method 22 visible emisison observations	N	10% Opacity	Method 22/9	Y

PART C: Compliance Status – Other Requirements

Part C identifies any other requirements that apply to the emissions unit and to determine the compliance status of the emissions unit. These "other requirements" would not be required by federal, state, or local law.

11. Other Requirements	12. State / Local Only	13. In Compliance (y/n)

OAQ COMPLIANCE DETERMINATION APPLICATION
CD-04: Compliance Schedule and Certification

State Form 51864 (R2 / 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 CD-04 is to provide a schedule of for compliance certification submittals, a certification of the source's compliance status with all applicable requirements, and a compliance schedule that details the measures a source will use to address non-compliance.
- Complete this form once per application (not once for each emissions unit) with respect to all applicable requirements at the source.
- This is required form for each initial Title V permit application as well as each modification and every renewal.
- 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 in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

PART A: Source Identification and Compliance Schedule	
Part A identifies the permitted source and the permit term compliance certification schedule.	
1. Source Name: Lone Star Industries, Inc. dba Buzzi Unicem USA	**2. Source ID:** 133 – 00002
3. Permit Term Compliance Certification Schedule	
Date of first certification submittal:	**Frequency of future submittals:**

PART B: Risk Management Plan		
Part B indicates whether sources subject to section 112(r), Accidental Release Prevention, are complying with the requirement to submit a Risk Management Plan (RMP).		
4. Statement of Applicability / Non-Applicability: Indicate whether the source is subject to Section 112(r) and the requirement to submit and RMP.		
☐ Source is subject to Section 112(r) and a Risk Management Plan (RMP) is required.		
☒ Source is not subject to Section 112(r) and a Risk Management Plan (RMP) is not required.		
RMP Submittal Information: Indicate when the RMP was submitted to each of the following agencies. If the RMP has not yet been submitted to any of the listed agencies, indicate the date when the RMP will be mailed to that agency. If the RMP for IDEM is attached to this application, please write "attached" in the Date Submitted column.		
5. Agency Name	**6. Date Submitted**	**7. Expected Submittal Date**
Chemical Safety and Hazard Investigation Board (CSHIB)		
United States Environmental Protection Agency (U.S. EPA)		
Indiana Department of Environmental Management (IDEM)		
Local Agency responsible for permitting:		
8. EPA Facility Identifier: — —		

Continued on Next Page

PART C: Certification of Source Compliance Status

Part C states whether the source is or is not in full compliance with all applicable requirements and to identify corrective actions to be taken in cases of noncompliance.

9. Check the Most Accurate Statement.

- ☐ The source described in this air pollution control permit application is fully in compliance with all applicable requirements and will continue to comply with those requirements.
- ☒ FORM CD-01 includes new requirements that apply or will apply to the emissions unit during the term of the permit. The source will meet such requirements on a timely basis.
- ☐ The source described in this air pollution control permit application is fully in compliance with all applicable requirements, except for the emissions unit(s) listed below. Compliance will be achieved according to the schedule identified below.

10. Unit ID	11. Applicable Requirement	12. Corrective Action	13. Deadline	14. Progress Reports	
				Start Date	Frequency

15. Signature of Responsible Official

☒ I certify that, based on information and belief formed after reasonable inquiry, the statements and information presented are true, accurate and complete.

Tim Menke
Name *(typed)*

Plant Manager
Title

Signature

Date

OAQ FEDERAL RULE INCORPORATION APPLICATION
FED-01: Summary of Federal Requirements – NSPS & NESHAP

State Form 53512 (R / 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 form is to provide a standardized way for sources to identify the NSPS or NESHAP requirements that are applicable to the regulated source. Complete one (1) form for each federal rule that applies to the source. This 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 in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record.

Part A: Identification of Applicable Standard

Part A identifies the applicable standard and affected source.

1. Type of Standard:	☐ Part 60 NSPS ☐ Part 61 NESHAP	☒ Part 63 NESHAP (MACT)
2. Subpart Letter:	LLL	
3. Source Category Name:	National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry	
4. Affected Source *(Include all applicable emission unit IDs)*:	3-40, 3-41, 3-42, 3-43, 3-44, 3-45, 3-46, 3-47, 3-48	

Part B: Applicable Requirements

Part B specifies the specific requirements of the federal rule that are applicable to the process or emission unit.

5. Applicable Requirements: *Identify the section of the federal standard that is applicable at the lowest subsection level. For example, if all of 40 CFR 63.342(c) is applicable, "40 CFR 63.342(c)" is the appropriate citation. If only paragraph 2 of 40 CFR 63.342(c) is applicable, then the appropriate citation is 40 CFR 63.342(c)(2).*

• 40 CFR 63.1340	•	•
• 40 CFR 63.1341	•	•
• 40 CR 63.1345	•	•
• 40 CFR 63.1347	•	•
• 40 CFR 63.1348	•	•
• 40 CR 63.149(a), (b)(2)	•	•
• 40 CFR 63.1350(f)	•	•
• 40 CFR 63.1351	•	•
• 40 CFR 63.1353	•	•
• 40 CFR 63.1354	•	•
• 40 CFR 63.1355	•	•
•	•	•
•		

Continued on Next Page

Part C: Performance Testing Requirements

Part C identifies the performance testing requirements that are applicable to the process or emission unit.

6. Performance Testing:	Opacity
7. Date of Initial Performance Test:	Within 180 days of startup
8. Test Methods:	Method 9
9. Was the initial performance test approved by IDEM?	☐ Yes: *Date approved:* _____ ☐ No
10. Did the initial performance test show compliance with the rule?	☐ Yes ☐ No: *Date of next performance test:* _____

Part D: Important Dates

Part D identifies specific dates associated with the federal standard that are applicable to the process or emission unit.

11. Date Initial Notification was Submitted:		
12. Initial Compliance Date:	☐ Startup: _____ ☐ Other: _____	
13. Other Dates	Description: _____	Date: _____
	Description: _____	Date: _____
	Description: _____	Date: _____

Part E: Other Information

Part E identifies any additional information pertaining to the applicable federal rule. Attach additional information using form GSD-09 as necessary.

OAQ FEDERAL RULE INCORPORATION APPLICATION
FED-02: MACT Pre-Construction Review

State Form 51905 (R2 / 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 form is to provide a standardized way for sources to request MACT preconstruction approval per 40 CFR 63.5.
- This is a required form for sources subject to the MACT pre-construction review requirements in 40 CFR 63.5.
- 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 in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record.

Part A: General Information

Part A identifies the applicable MACT standard and affected source, and determines whether 40 CFR Section 63.5 of the General Provisions is applicable to the affected source.

1. MACT Subpart Letter:	LLL
MACT Source Category Name:	National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry
2. Affected Source(s):	3-40, 3-41, 3-42, 3-43, 3-44, 3-45, 3-46, 3-47, 3-48

3. Will the proposed construction be a major source of HAP emissions? ☐ Yes ☒ No

Part B: Emissions Unit Information

Part B identifies those emissions units that are part of the affected source and will be constructed or reconstructed:

4. Unit ID:	5. HAP Name or Type of HAP	6. Quantity of HAP Emitted *(specify units)*	
		Actual Emissions	Potential To Emit
	NA		

Continued on Next Page

Part C: Compliance Methods for New Affected Sources

Part C identifies the compliance method chosen for each new affected source.

7. Unit ID:	8. Compliance Method Description	9. Control Efficiency (%)
	Monthly Visual Observations	

Part D: Compliance Methods for Reconstructed Affected Sources

Part D identifies the compliance method chosen for each reconstructed affected source.

10. Unit ID:	11. Description of Current Compliance Method	12. Description of Proposed Compliance Method	13. Control Efficiency (%)

Attachment A - Supporting Emission Calculation Tables

Supporting calculation tables are provided in this attachment for the potential emissions from the new clinker silo system and the addition clinker reclaim system.

Buzzi Unicem USA - Greencastle Plant
Proposed Clinker Silo Emission Sources - Potential Emissions Calculations

Maximum Hourly Production Rate (tons/hour)	350
Maximum Annual Hours of Operation (hours/year)	8,760

Point ID	Source Description	Baghouse Point ID	Baghouse Equipment ID	PM Emission Factor (gr/acf) [1,2]	Flow Rate (acfm)	Control Efficiency	Building Control % [3]	Controlled Emissions [4]				Uncontrolled Emissions [4]			
								PM Emission Rate (lbs/hr)	PM (ton/yr)	PM_{10} (ton/yr)	$PM_{2.5}$ (ton/yr)	PM Emission Rate (lbs/hr)	PM (ton/yr)	PM_{10} (ton/yr)	$PM_{2.5}$ (ton/yr)
3-40	Belt 510V Transfer To Belt GC509723	FF3-40	GC509715	0.01	3,500	99.0%		0.30	1.31	1.12	0.39	30.00	131.40	111.69	39.42
3-41	Belt GC509273 Transfer Into Silo 8	FF3-41	GC509801	0.01	15,000	99.0%		1.29	5.63	4.79	1.69	128.57	563.14	478.67	168.94
3-42	Western Silo 8 Transfer To Belt GC509773	FF3-42	GC509767	0.01	850	99.0%	90%	0.01	0.03	0.03	0.01	7.29	31.91	27.12	9.57
3-43	Eastern Silo 8 Transfer To Belt GC509773	FF3-43	GC509769	0.01	850	99.0%	90%	0.01	0.03	0.03	0.01	7.29	31.91	27.12	9.57
3-44	Western Silo 8 Transfer To Belt GC509785	FF3-44	GC509787	0.01	850	99.0%	90%	0.01	0.03	0.03	0.01	7.29	31.91	27.12	9.57
3-45	Eastern Silo 8 Transfer To Belt GC509785	FF3-45	GC509789	0.01	850	99.0%	90%	0.01	0.03	0.03	0.01	7.29	31.91	27.12	9.57
3-46	Belts GC509773 And GC509785 Transfer To Belt GC509749	FF3-46	GC509729	0.01	5,700	99.0%		0.49	2.14	1.82	0.64	48.86	213.99	181.90	64.20
3-47	Belt GC509749 To Belt 511V	FF3-47	GC509737	0.01	2,300	99.0%		0.20	0.86	0.73	0.26	19.71	86.35	73.40	25.90
3-48	Reclaim Hopper GC509755 To Belt GC509743 To Belt GC509749	FF3-48	GC509805	0.01	8,000	99.0%		0.69	3.00	2.55	0.90	68.57	300.34	255.29	90.10
							TOTALS:		**13.08**	**11.12**	**3.92**		**1,422.87**	**1,209.44**	**426.86**

Note 1: PM_{10} and $PM_{2.5}$ emissions were calculated assuming PM_{10} is 85% of PM and $PM_{2.5}$ is 30% of PM per AP-42 Appendix B.2 Category 4.

Note 2: The 0.01 gr/acfm PM emission factor incorporates a baghouse control efficiency of 99.0%.

Note 3: The transfer points and associated baghouses exhaust within a tunnel, so an additional 90% control efficiency is applied to account for the building enclosure.

Note 4: The baghouses will be used whenever the associated belts are in operation to ensure environmental compliance, but also to protect product quality and the safety of employees in the area.

Buzzi Unicem USA
3301 S. County Road 150 W.
Greencastle, IN 46135

Indiana Department of Environmental
Management
Office of Air Quality, Air Permits Administration
ATTN: Incoming Application
100 North Senate Avenue, IGCN 1003
Indianapolis, IN 46204-2251

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