



REGION 5

CHICAGO, IL 60604

MEMORANDUM

SUBJECT: CLEAN AIR ACT INSPECTION REPORT
Skyway Cement Company, LLC, Chicago, Illinois

FROM: Valeria Apolinario, Environmental Engineer
AECAB (MN/OH)

THRU: Brian Dickens, Section Supervisor
AECAB (MN/OH)

TO: File

BASIC INFORMATION

Facility Name: Skyway Cement Company, LLC

Facility Location: 3020 East 103rd Street, Chicago, Illinois 60617

Date of Inspection: March 5, 2024

EPA Inspector(s):

1. Valeria Apolinario, Environmental Engineer
2. Carlo Demma, Physical Scientist (Env.)

Other Attendees:

1. Joshua Farr, Plant Manager, Skyway Cement Co.
2. Robert Carrillo, Quality and Shipping Manager, Skyway Cement Co.

Contact Email Address: jfarr@skywaycement.com

Purpose of Inspection: to determine compliance with the Facility's Federally Enforceable State Operating Permit (FESOP)

Facility Type: Stationary Grinding Plant for Blast Furnace Slag Cement

Regulations Central to Inspection: The Facility's FESOP contains the following provisions:

Facility Name: Skyway Cement Company, LLC
Facility Location: 3020 East 103rd Street, Chicago, Illinois 60617
Date of Inspection: March 5, 2024

Condition 7.j. states that pursuant to 35 Ill Adm. Code 212.324(f), for any process emission unit subject to 35 Ill. Adm. Code 212.324(a), the owner or operator shall maintain and repair all air pollution control equipment in a manner that assures that the emission limits and standards in 35 Ill. Adm. Code 212.324 shall be met at all times.

Condition 8.e. states that the permittee shall maintain total enclosure on conveyors that are outside the slag processing building.

Condition 8.g. states that the permittee shall operate and maintain the conveyor discharge to the surge pile with a choke loading device or a telescopic chute.

Condition 8.h. states that water spray control shall be used on the surge pile and dump hopper as necessary.

Condition 13 provides that the permittee shall conduct quarterly visible emissions observations of each particulate matter emission unit in accordance with Method 22.

Condition 15.a. states that the permittee shall maintain and operate a continuous baghouse leak detection monitor, with recorder, on each exhaust of baghouses T71-BF1, T71-BF2, T71-BF3, and T61-BF1.

Arrival Time: 10:00 AM

Departure Time: 1:00 PM

Inspection Type:

- ☒ Unannounced Inspection
- ☐ Announced Inspection

OPENING CONFERENCE

- ☒ Presented Credentials
- ☒ Stated authority and purpose of inspection
- ☒ Provided Small Business Resource Information Sheet – via email
- ☒ Provided CBI warning to facility

The following information was obtained verbally from Joshua Farr and Robert Carrillo unless otherwise noted.

Process Description:

Granulated blast furnace slag is brought by truck and discharged into a hopper and onto a surge pile in the Facility yard. Based on production needs, the slag is then stock piled and eventually moved into a day bin. From the day bin, material is conveyed to a natural gas-fired air-lift dryer to be dried, blown through a cyclone separator, and discharged into one of two roller presses to be crushed into a flat

Facility Name: Skyway Cement Company, LLC
Facility Location: 3020 East 103rd Street, Chicago, Illinois 60617
Date of Inspection: March 5, 2024

cake shape. The caked slag goes through the roller press multiple times until the roller press is full and the slag slides into an overflow chute. The material is then sent to the ball mill where finishing crushing takes place. A ball rotates on the material as it enters and exits the ball mill. The finished product is slag cement.

Particulate emissions throughout the process are controlled by a baghouse system.

Staff Interview:

- The Facility operates 24/7 with four rotating crews on either 8-hour or 12-hour shifts. There are 18 full-time employees on-site.
- One dust collector, T71-CF4 had been down until February 1, 2024. Stack testing occurred shortly after the baghouse became operational. Five additional baghouses at the Facility had been tested for emissions in December 2023.
- Product throughput is approximately 500,000 tons per year.
- Received blast furnace slag is at a moisture content of 10-12%. At the roller press, moisture content is reduced to approximately 4%. Moisture content sampling for raw material at the conveyer belt and production is conducted every 2 hours. Moisture content analysis is conducted frequently to determine if the dryer temperature should be adjusted. Moisture content sampling for raw material received from trucks is conducted daily.
- The Facility has a preventative maintenance schedule for its baghouses and has a weekly down day to inspect equipment. The pressure drop range for each baghouse is approximately between 1-6 inches of water column.
- The Facility has bag leak detection systems and continuous pressure drop monitoring on larger baghouses at the Facility. For smaller baghouses, staff conduct a baghouse walkthrough at startup to ensure that the baghouses are in working order.
- The Facility has a sweeper truck and water truck to conduct dust suppression on the piles. A water sprinkler is also used for pile wet suppression. At the time of the inspection, a pipe for the water sprinkler was broken. The pipe burst in January 2024. Due to the raw material being wet, the dust suppression system is not used often.
- Quarterly Method 22 visible emissions observations are conducted at emissions units at the Facility.

TOUR INFORMATION

EPA Toured the Facility: Yes

Data Collected and Observations:

EPA first entered the on-site laboratory where moisture content and other analyses of the slag are conducted. EPA then exited the lab to the Facility yard. EPA observed the telescopic spout at the surge and stockpile area. EPA observed that the conveyers outside were enclosed. EPA also observed the water sprinkler system for the surge and stock piles.

Facility Name: Skyway Cement Company, LLC
Facility Location: 3020 East 103rd Street, Chicago, Illinois 60617
Date of Inspection: March 5, 2024

EPA then entered the main processing area to walk the process. EPA noted that fugitive dust was escaping from one of the RP2 Y-chutes at a process unit in the Facility. Staff showed EPA the missing pipe for the water sprinkler system. EPA was informed the pipe cracked from freezing conditions.

As EPA walked the process, inspectors recorded the pressure drop of the Mill Nuisance baghouse to be at 1 inch water column and the Mill Sweep baghouse to be at 1.25 inches of water column. EPA also notated the following continuous parameter data:

Baghouse	Baghouse Leak Detection Monitor Reading (%)	Pressure drop (inches of water column)
T71-BF1	8.8	0.7
T61-BF1	0.4	2.4
T71-BF2	3.6	1.2
T71-BF3	0.5	1.6

Photos and/or Videos: were taken during the inspection and are listed in Appendix A.

Field Measurements: were not taken during this inspection.

CLOSING CONFERENCE

☒ Provided U.S. EPA point of contact to the facility

Requested documents:

- Copies of the most recent stack test reports for the 6 baghouses tested;
- Copy of the current Fugitive Particulate Operating Program;
- The manufacturer recommendations for the baghouses and any associated bag leak detection systems;
- Bag leak detection system monitoring data, in hourly averages, since October 1, 2023 to the date of this email;
- Copies of all Quarterly Method 22 observations conducted;
- Date range that the nuisance dust collector (associated with the most recent stack test) was down;
- Daily moisture contents from October 2022 and process control moisture contents from April 2023 to the date of this email; and
- Electronic version of the Facility process flow diagram

Facility Name: Skyway Cement Company, LLC
Facility Location: 3020 East 103rd Street, Chicago, Illinois 60617
Date of Inspection: March 5, 2024

Concerns: EPA expressed concern with the Facility about the missing pipe for the water sprinkler system and advised the Facility to replace it. EPA also noted to the Facility that there was fugitive dust at one of the RP2 Y-chutes not being sent to the baghouse system.

DIGITAL SIGNATURES

Report Author: VALERIA
APOLINARIO



Digitally signed by VALERIA
APOLINARIO
Date: 2024.04.22 14:45:25 -05'00'

Section Supervisor: BRIAN DICKENS



Digitally signed by BRIAN
DICKENS
Date: 2024.04.22 15:23:03 -05'00'

APPENDICES

1. Appendix A: Digital Image Log and Digital Video Log

Facility Name: Skyway Cement Company, LLC
Facility Location: 3020 East 103rd Street, Chicago, Illinois 60617
Date of Inspection: March 5, 2024

APPENDIX A: DIGITAL IMAGE LOG AND DIGITAL VIDEO LOG

Inspector Name: Carlo Demma **Archival Record Location:** *R5 Electronic Record Center/AECAB Library/Enf_Skyway_IL_24/Enf_Skyway_IL_24_InspRep/Photos and Videos*

Image Number	File Name	Date and Time (incl. Time zone and DST)	Description of Image
1	IMG_4030.JPG	3/6/2024 16:23	Fugitive Dust at RP2 Y-chute
2	IMG_4031.JPG	3/6/2024 16:24	Fugitive Dust at RP2 Y-chute
3	IMG_4032.JPG	3/6/2024 16:24	Missing Pipe at Water Sprinkler System
4	MDG_4029.MOV	3/6/2024 16:35	Fugitive Dust at RP2 Y-chute