UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, ILLINOIS 60604

SUBJECT:	CLEAN AIR ACT INSPECTION REPORT Atlantic Alumina Company, Gramercy, Louisiana
FROM:	Karina Kuc, Environmental Engineer AECAB (IL/IN)
THRU:	Nathan Frank, Section Supervisor AECAB (IL/IN)
TO:	File

BASIC INFORMATION

Facility Name: Atlantic Alumina Company (Atalco)

Facility Location: 1111 E Airline Hwy, Gramercy, LA 70052

Date of Inspection: April 18, 2022

EPA Inspector(s):
1. Karina Kuc, Environmental Engineer
2. Victoria Nelson, Environmental Engineer

Other Attendees:
1. Charlotte Hooker, Atalco, Environmental Manager
2. Kevin Matherne, Atalco, Environmental Specialist

Contact Email Address: steven.smith@atalco.com

Purpose of Inspection: to assess compliance with the Clean Air Act and the Title V operating permit

Facility Type: alumina production

Arrival Time: 3:30 PM
Departure Time: 6:45 PM

Inspection Type:

☒ Unannounced Inspection
☐ Announced Inspection

OPENING CONFERENCE

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

The following information was obtained verbally from Atlantic Alumina employees unless otherwise noted.

Company Ownership: In November 2021, Noranda became Atlantic Alumina Company.

Process Description: Atalco extracts alumina from bauxite using the Bayer process. Bauxite ore comes into the facility by barge from a mine in Jamaica. The dock and unloading operations are conducted by a 3rd party. The bauxite is placed into a hopper, fed to a conveyor and transferred to the "Jamaica building" for storage. The conveyor system is controlled by misters and a wet scrubber. The ore is then conveyed to the Bradford Breaker where it is sorted to remove limestone. The Bradford Breaker is controlled by a dust collector. In digestion tanks, bauxite is mixed with spent liquor (50% caustic and water) and heated to extract alumina. Next, the red mud is seperated from the impregnated liquor. The red mud is stored on site in ponds. The recovered liquor goes through evaporation to remove moisture. Next, seed hydrate is added to precipitate out the alumina. At this point the material (wetcake) can be shipped out as final product or it can be further processed in a dryer to produce dry hydrate or in a kiln to produce calcined alumina. The three kilns are controlled by electrostatic precipitators (ESP). Final products (wetcake, dry hydrate, and calcined alumina) are shipped out by truck, barge and rail.

Staff Interview: Mercury samples are collected monthly throughout the process to calculate mercury emissions by mass balance. Stacks are monitored daily for opacity. The ESPs are monitored for current (milliamps) and voltage (kilovolts).

TOUR INFORMATION

EPA Tour of the Facility: Yes

Data Collected and Observations: EPA observed the dock however, no unloading or loading operations were occurring, therefore the hopper and conveyor were not running. All surfaces were covered in a layer of red dust. Bauxite was spilling out from the bottom of the wall of the Jamaica building. Dust was observed emitting from the bottom of the conveyor and from the Bradford Breaker building. We asked Kevin, who is Method 9 certified, to conduct a Method 9 reading, he said it was consistently about 20 to 25% opacity, but he did not perform a full Method 9 reading. Charlotte and Kevin said that this amount of dust was unusual and that there

may be maintenance occurring. There were no visible emissions at two ESP stacks. There were visible emissions from the ESP stack for Kiln 3. Kevin and Charlotte said that operators may be performing maintenance and vacuuming in Kiln 3. Throughout the facility, EPA observed fugitive dust and piles of bauxite dust blown off from the processing steps.

Photos and/or Videos: were taken during the inspection.

Field Measurements: were not taken during this inspection.

CLOSING CONFERENCE

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

Requested documents:

- SDSs for bauxite, final products, and water treatment products used
- 3 months (Feb-April 2022) of Method 9 and Method 22 readings
- Emissions calculations for 2020 and 2021 in an unlocked excel spreadsheet including any assumptions and calculations
- Most recent performance tests
- Mercury sampling results for the last year

Concerns: EPA communicated that the airborne dust observed during the inspection was an issue.

DIGITAL SIGNATURES

Report Author: Kuc, Karina Digitally signed by Kuc, Karina Date: 2022.05.17 13:28:54 -05'00'

Section Supervisor: Frank, Nathan Digitally signed by Frank, Nathan Date: 2022.05.17 15:13:05 -05'00'

APPENDICES AND ATTACHMENTS

Appendix A – Digital Video Log
Appendix B – Digital Image Log

Facility Name: Atalco
Facility Location: 1111 E Airline Hwy, Gramercy, LA 70052
Date of Inspection: April 18, 2022

APPENDIX A: DIGITAL VIDEO LOG

1. **Inspector Name:** Victoria Nelson	2. **Archival Record Location:** Region 5 Electronic Records Center

Image Number	File Name	Date and Time (Central time)	Description of Video
1	MVI_0046.MP4	4/18/2022 16:41	Dust coming from bottom of conveyor
2	MVI_0047.MP4	4/18/2022 16:41	Dust coming from bottom of conveyor
3	MVI_0048.MP4	4/18/2022 16:42	Dust coming from bottom of conveyor
4	MVI_0049.MP4	4/18/2022 16:43	Dust coming from bottom of conveyor
5	MVI_0050.MP4	4/18/2022 16:43	Dust coming from conveyor and Bradford Breaker, facing north
6	MVI_0051.MP4	4/18/2022 16:45	Dust coming from conveyor and Bradford Breaker, facing north

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APPENDIX B: DIGITAL IMAGE LOG

1. **Inspector Name:** Victoria Nelson	2. **Archival Record Location:** Region 5 Electronic Records Center

Image Number	File Name	Date and Time (Central time)	Description of Image
1	IMG_0039.JPG	2022:04:18 16:27:40	Hopper at unloading dock
2	IMG_0040.JPG	2022:04:18 16:28:13	Open access door at conveyor near the unloading dock
3	IMG_0041.JPG	2022:04:18 16:29:19	Open access door at conveyor near the unloading dock
4	IMG_0042.JPG	2022:04:18 16:36:00	Jamaica building
5	IMG_0043.JPG	2022:04:18 16:36:07	Pile of dust outside of Jamaica building
6	IMG_0044.JPG	2022:04:18 16:38:52	Dust spilling out of bottom of Jamaica building
7	IMG_0045.JPG	2022:04:18 16:41:28	Dust from bottom of conveyor
8	IMG_0052.JPG	2022:04:18 17:08:36	Kilns
9	IMG_0053.JPG	2022:04:18 17:25:28	Red mud pond