



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

SUBJECT: CLEAN AIR ACT INSPECTION REPORT
Clarios LLC, Geneva, Illinois

FROM: Dakota Prentice, Environmental Engineer
AECAB (IL/IN)

THRU: Nathan Frank, Section Supervisor
AECAB (IL/IN)

TO: File

BASIC INFORMATION

Facility Name: Clarios LLC

Facility Location: 300 South Glengarry Drive, Geneva, Illinois

Date of Inspection: July 25, 2023

EPA Inspector(s):

1. Dakota Prentice, Environmental Engineer
2. Carlo Demma, Physical Scientist (Env.)

Other Attendees:

1. Melissa Bitter, Environmental Engineering Manager – Clarios LLC
2. Ernie Gowen, Manufacturing, Engineering, and Maintenance Manager – Clarios LLC
3. Alexandria Kelly, EHS Technician – Clarios LLC
4. Jay Noecker, Supply Chain Manager – Clarios LLC

Contact Email Address: melissa.bitter@clarios.com

Purpose of Inspection: to determine compliance with operating permits issued by Illinois EPA

Facility Type: Lead-Acid Battery Manufacturer

Regulations Central to Inspection: National Emission Standards for Hazardous Air Pollutants for Lead Acid Battery Manufacturing Area Sources at 40 C.F.R. Part 63, Subpart P P P P P P (NESHAP P P P P P P)

Facility Name: Clarios LLC
Facility Location: 300 South Glengarry Drive, Geneva, Illinois
Date of Inspection: July 25, 2023

Arrival Time: 10:30 AM

Departure Time: 12:30 PM

Inspection Type:

- ☒ Unannounced Inspection
- ☐ Announced Inspection

OPENING CONFERENCE

- ☒ Presented Credentials
- ☒ Stated authority and purpose of inspection
- ☒ Small Business Resource Information Sheet not provided. Reason: Not a Small Business
- ☒ Provided CBI warning to facility

The following information was obtained verbally from Clarios personnel unless otherwise noted.

Company Ownership: Approximately three years ago there was a “statutory tax conversion” resulting in the facility operating as Clarios LLC. It was previously operated as Johnson Controls Battery Group.

Process Description:

The Clarios facility manufactures starting, light, and ignition (SLI) lead-acid batteries frequently used in automobiles, boats, and trucks. Manufacturing begins with the production of lead oxide in either a Barton (thermal) process or a tumble milling process. The lead oxide is then conveyed to storage units until needed. Two plates are needed for the batteries, a positive plate and a negative plate. Negative plates are produced onsite from melted lead. Positive plates are provided by another Clarios facility. Paste is then manufactured by mixing the previously produced lead oxide with various additives. The paste is applied to the plates and then moved to a Chemset chamber. At the Chemset chamber, the chemistry of the lead that will be in the final battery is set through a curing process at controlled temperature of 170°F and humidity for 36 hours. Assembly of the battery then commences. The positive and negative plates are combined in the plastic battery shell. Lead bearing straps and posts are added and the plastic top of the battery is melted to the existing shell. Acid is then added to the battery, the battery is charged for 5 to 36 hours, depending on the size, and then goes through various testing and decorating processes prior to shipment to customers.

Staff Interview: Clarios obtains lead oxide from a third party as needed. Multiple baghouses are used to control emissions from the facility with most having secondary HEPA filtration. Bag leak detection systems are not in use. Baghouse pressure drop is monitored once per day. All baghouses are inspected quarterly. All lead oxide is stored in lead silos inside the plant.

TOUR INFORMATION

EPA Tour of the Facility: Yes

Data Collected and Observations:

EPA walked the exterior of the facility and observed two doors propped open. The doors were promptly closed by the Clarios personnel providing the facility tour to EPA. The doors were identified as being in the shipping and acid storage portions of the plant, respectively. EPA also toured portions of the interior of the facility. At the interior of the facility, EPA observed open windows in an area adjacent to truck loading and battery decoration.

Photos and/or Videos: were taken during the inspection.
See Appendix A: Digital Image Log

Field Measurements: were not taken during this inspection.

CLOSING CONFERENCE

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

Requested documents:

- Baghouse operation and maintenance plan
- Baghouse inspection records for the last month
- NESHAP PPMPP semi-annual reports for the last two years
- Documentation on any facility policies regarding open doors or windows
- Information regarding an incident where dirty baghouse filters were left on the facility roof
- Performance Test report for testing conducted in 2019
- All reporting submitted to Illinois EPA in association with air regulations for the last two years

DIGITAL SIGNATURES

Report Author: DAKOTA PRENTICE Digitally signed by DAKOTA PRENTICE
Date: 2023.07.28 08:34:13 -05'00'

Section Supervisor: Frank, Nathan Digitally signed by Frank, Nathan
Date: 2023.07.28 16:34:29 -05'00'

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APPENDICES AND ATTACHMENTS

Appendix A: Digital Image Log

Facility Name: Clarios LLC
Facility Location: 300 South Glengarry Drive, Geneva, Illinois
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APPENDIX A: DIGITAL IMAGE LOG

1. Inspector Name: C. Demma	2. Archival Record Location: EPA Region 5 Electronic Records Center
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Image Number	File Name	Date and Time (incl. Time zone and DST)	Description of Image
1	IMG_5055.JPG	2023:07:25 12:02:06	Open windows adjacent to truck loading and battery decoration
2	IMG_5056.JPG	2023:07:25 12:02:20	Open windows adjacent to truck loading and battery decoration

Note: All photos claimed as Confidential Business Information