



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

DATE: April 16, 2021

SUBJECT: CLEAN AIR ACT INSPECTION REPORT
CE Niehoff & Co., Evanston, IL

FROM: Karyn DeFranco, Inspector
AECAB (MN/OH)

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

TO: File

BASIC INFORMATION

Facility Name: CE Niehoff & Co.

Facility Location: 2021 Lee St., Evanston, IL 60202

Date of Inspection: 03/25/2021

EPA Inspector(s):

1. Karyn DeFranco
2. Patrick Miller

Other Attendees:

1. John Silva, HR Manager
2. Sue Metzner, President
3. Rob Thomson, VP of Supply Chain
4. Ann Mullins, VP of Production
5. Michael Thomas, Purchasing Manager
6. Steve Anderson, Admiral Environmental Services Consultant
7. Julie List, Compliance Manager

Contact Email Address: johns@ceniehoff.com

Purpose of Inspection: To investigate compliance with their FESOP and the Clean Air Act. The FESOP focuses on emission limits of VOM from both emission units (tons/year) and material content (lbs/gal).

Facility Type: Motor Vehicle Electrical and Electronic Equipment Manufacturing

Virtual Opening Conference Start Time: March 23, 2021, 10:00am (CST)

Virtual Opening Conference End Time: March 23, 2021, 11:26am (CST)

Arrival Time: March 25, 2021, 9:05am (CST)

Departure Time: March 25, 2021, 11:19am (CST)

Virtual Closing Conference Start Time: March 26, 2021, 1:00pm (CST)

Virtual Closing Conference End Time: March 26, 2021, 1:38pm (CST)

Inspection Type:

- Unannounced Inspection
- Announced Inspection

OPENING CONFERENCE

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

The following information was obtained verbally from CE Niehoff & Co. unless otherwise noted.

Process Description:

CE Niehoff & Co. (CE Niehoff) operates a facility to design and manufacture heavy-duty brushless alternators for automotive vehicles. Products enter the receiving area and are inspected and distributed to various process areas. The main process areas include electronics for regulators and/or housing, machining, potting, winding, tube assembly/subassembly, stator-rotor varnish, final production line, testing, and final prep.

Staff Interview:

The facility currently has 399 fulltime employees. All assembly and production is onsite.

In addition to other emission units, CE Niehoff has two vapor degreasers (#2 and #3) and a solvent still. Vapor degreaser #3 is used for electronics and uses n-Propyl Bromide solvent, with

a freeboard to minimize solvent loss. The used solvent is then stored in 55-gallon drums and when there are approximately three drums of spent solvent, about every 3 months, the spent solvent is then processed in the solvent still. Roughly two-thirds of the n-Propyl Bromide solvent is recovered. The remaining one-third not recovered is emitted to the air. A booster is added to the recovered n-Propyl Bromide solvent, which is used in Vapor degreaser #2 located in a separate room. Solvent from Vapor degreaser #2 is never recovered.

TOUR INFORMATION

EPA Tour of the Facility: Yes

Data Collected and Observations:

EPA toured the entire facility. EPA inspected process areas and emission vents from units. CE Niehoff vents emissions internally and through roof/wall outlets. The soldering stations in the electronics area are vented through an industrial carbon filter and recirculated through the room. Similarly, pickup vents throughout the subassembly areas are also vented through a filter and recirculated through the room. Vapor degreaser #2, Vapor degreaser #3, and the solvent still do not have any duct work connected and there are fugitive emissions to the room. The resin potting stations are vented through ducts into the receiving area. The five spray booths, two welding stations, rotor laminator, and hand dip varnish dip tank are vented through the roof.

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

Photos were taken by John Silva at the request of EPA. All photos taken are CBI and not included in this report.

Field Measurements: were not taken during this inspection.

RECORDS REVIEW

CLOSING CONFERENCE

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

Requested documents (to be supplied to EPA by secure weblink by April 16th, 2021):

- Photos from inspection (taken by John Silva, HR Manager)
- Emission records and calculations for 2019 and 2020- including VOC, PM, Lead, SO₂ and n-propyl bromide
 - If not included in the yearly emissions data requested above, amount used of:
 - As-used solvent booster
 - n-propyl bromide
 - Solvent flux remover
- List of HAPs used in all paints, coatings, and primers for 2019, or SDS sheets for all paints, coatings, primers used in 2019
- SDS sheets for:

- Most frequently used solvents for vapor degreaser
- Most frequently used solvent-based paints
- As-used solvent booster used
- Vapor degreaser (n-propyl bromide)
- Solvent flux remover
- Most frequently used paints
- Most frequently used primers
- Most frequently used coatings (varnish)
- Records of all solder purchased in 2019
- Records of all solder used in 2019
- Composition of all solder used in 2019 (wt. %)

Concerns: Concerns about drafting emissions calculations on a monthly basis and backlog between getting and calculating emissions.

SIGNATURES

Report Author:

**KARYN
DEFRANCO** Digitally signed by
KARYN DEFRANCO
Date: 2021.04.16
10:16:36 -05'00'

Section Chief:

**BRIAN
DICKENS** Digitally signed by
BRIAN DICKENS
Date: 2021.04.16
14:27:46 -05'00'

Facility Name: CE Niehoff

Facility Location: 2021 Lee Street, Evanston, IL 60202

Date of Inspection: March 25, 2021

APPENDICES AND ATTACHMENTS

1. Appendix A: Digital Image Log – CBI not included in this document.

Contains Items Claimed as CBI – Non-Releasable

Facility Name: CE Niehoff

Facility Location: 2021 Lee Street, Evanston, IL 60202

Date of Inspection: March 25, 2021

CONFIDENTIAL BUSINESS INFORMATION ATTACHMENT

Facility Name: CE Niehoff

Facility Location: 2021 Lee Street, Evanston, IL 60202

Date of Inspection: March 25, 2021

All photos listed in Appendix A are confidential business information and not included in this document.

