



REGION 5

CHICAGO, IL 60604

MEMORANDUM

SUBJECT: CLEAN AIR ACT INSPECTION REPORT
Elgiloy Specialty Metals, Elgin, Illinois

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

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

TO: File

BASIC INFORMATION

Facility Name: Elgiloy Specialty Metals

Facility Location: 1565 Fleetwood Drive, Elgin, Kane County

Date of Inspection: August 6, 2024

EPA Inspector(s):

1. Valeria Apolinario, Environmental Engineer
2. Natalie Schulz, Environmental Engineer

Other Attendees:

1. Ryan Haman, Operations Manager
2. John Foster, Environmental, Health, and Safety Manager
3. Kevin Connolly, Chief Operating Officer
4. James Darrow, Vice President of Operations
5. David Susler, Associate General Counsel
6. Matt Rubas, EHS Manager
7. Grissell Nevarez, HR Generalist (closing only)

Contact Email Address: dsusler@nmlp.com

Facility Name: Elgiloy Specialty Metals
Facility Location: 1565 Fleetwood Drive, Elgin, Kane County
Date of Inspection: August 6, 2024

Purpose of Inspection: to determine compliance with the Facility's construction permit and assess the applicability of the National Emission Standards for Hazardous Air Pollutants (NESHAP) Area Source Standards for Nine Metal Fabrication and Finishing Source Categories (Subpart 6X).

Facility Type: Rolled Steel Shape Manufacturing

Regulations Central to Inspection: The Facility is required under its construction permit to maintain records of volatile organic material emissions with supporting calculations (tons/month and tons/year) as well as its solvent usage (gallons/month and gallons/year).

NESHAP Subpart 6X is applicable to an area source that is primarily engaged in one of nine source categories, including primary metal products manufacturing, and that uses materials that contain or have the potential to emit metal fabrication or finishing metal HAP (MFHAP). MFHAP includes compounds of cadmium, chromium, lead, manganese, and nickel. NESHAP Subpart 6X requires an existing machining source to implement management practices to minimize emissions of MFHAP for each machining operation (e.g., shearing) that uses materials that contain MFHAP. These management practices include to take measures necessary to minimize excess dust in the surrounding area to reduce MFHAP emissions, as practicable.

Arrival Time: 11:11 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 Ryan Haman, John Foster, Kevin Connolly, and James Darrow unless otherwise noted.

Process Description:

The Facility manufactures a variety of alloyed steel strip. There are three primary operations that occur at the Facility: rolling, annealing, and slitting. The Facility operates two rolling mills. Steel coils enter the rolling mills for the steel to be reduced in thickness. The steel is then cleaned in an alkaline solution before entering one of two annealing furnaces that operate between 680°C and 1200°C. The annealing furnaces can operate under hydrogen or argon. Annealing causes the material to become stronger but also more brittle. One of the furnaces is gas-powered while the other is electric. The

material is then air cooled. Most material runs through the rolling and annealing operations a total of three times each. Afterwards, the material is continuously sheared into different widths at one of five slitting lines. A solvent cleaner is used on the material at each of the slitting lines. The used solvent is not reclaimed or recycled.

Staff Interview:

- The Facility operates 24/7, however equipment can be idled for periods of time. Rolling and slitting operations are operated approximately 85% of the year and annealing operations are operated 90-95% of the year.
- The Facility uses alloyed steel consisting of nickel, cobalt, and titanium alloy.
- Coils may be welded together. There are three welding stations at the Facility.
- The Facility uses NEXT HD-Pro solvent as its solvent cleaner.
- Approximately two years ago, the Facility developed an improved solvent application system at the slitting process. It is now automated and results in less solvent usage. The Facility assumes a 100% loss of the solvent it uses for its emissions calculations. Emissions calculations are conducted in-house.
- The Facility receives one to two 55-gallon drums of solvent per month.

TOUR INFORMATION

EPA Toured the Facility: Yes

Data Collected and Observations:

EPA observed the rolling, annealing, and slitting operations at the Facility. EPA noted that at the slitting operations, the solvent is applied continuously as the material is sheared. EPA utilized a Forward-Looking Infrared camera during the inspection. EPA did not note any excess solvent or wet parts. EPA did not note any dust in the slitting area.

Photos and/or Videos: were not taken during the inspection.

Field Measurements: were not taken during this inspection.

CLOSING CONFERENCE

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

Facility Name: Elgiloy Specialty Metals
Facility Location: 1565 Fleetwood Drive, Elgin, Kane County
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Requested documents:

- SDS for the NEXT-HD Pro solvent
- Solvent usage for the last three years
- VOC emissions calculations for the last three years (annual emissions reports as well as supporting calculations)
- Metal SDSs for any materials that contain greater than 0.1 percent of cadmium, chromium, lead, nickel, or manganese.
- Confirmation on if the NEXT-HD Pro solvent is the only solvent used for the slitting operations.

DIGITAL SIGNATURES

Report Author: **VALERIA APOLINARIO**
Digitally signed by VALERIA APOLINARIO
Date: 2024.10.02 13:57:40 -05'00'

Section Supervisor: **BRIAN DICKENS**
Digitally signed by BRIAN DICKENS
Date: 2024.10.03 10:10:03 -05'00'