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

SUBJECT:	CLEAN AIR ACT INSPECTION REPORT Material Sciences Corporation, Elk Grove Village, Illinois
FROM:	Natalie Schulz, Environmental Engineer AECAB (MN/OH)
THRU:	Brian Dickens, Section Supervisor AECAB (MN/OH)
TO:	File

BASIC INFORMATION

Facility Name: Material Sciences Corporation

Facility Location: 2250 East Pratt Boulevard, Elk Grove Village, Illinois 60007

Date of Inspection: April 13, 2023

EPA Inspector(s):
1. Natalie Schulz, Environmental Engineer
2. Karyn DeFranco, Environmental Scientist

Other Attendees:
1. Ed Kolozsy, Material Sciences Corporation, EH&S Supervisor

Contact Email Address: ed.kolozsy@materialsciencescorp.com and bob.grilli@materialsciencescorp.com

Purpose of Inspection: VOC and HAP emission limits relating to coil coating lines

Facility Type: Coil coating facility

Regulations Central to Inspection: NESHAP SSSS, VOC and HAP emission requirements of Title V Permit

Arrival Time: 10:45 a.m.
Departure Time: 12:40 a.m.

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
☒ Provided CBI warning to facility

The following information was obtained verbally from Ed Kolozsy unless otherwise noted.

Process Description:
The facility is a coil coating facility that cleans coils and applies coating, adhesive, and/or laminate to the coils, as required by the order. The facility receives metal coils made from aluminum or galvanized steel. The coils are first routed through a cleaning process, including an oil-water separator, a caustic cleaning process, some acidic cleansing tanks, and hot and cold water rinses to remove oils from the coil and prep the material.

After cleaning, the coils are routed through the coating areas. The facility has two coating lines, called Line 2 and Line 4. Line 4 is a larger line, able to coat wider coils. Each coating line is divided into the prime coat room and the topcoat room; Line 4 has an additional mezzanine coating room to coat both sides of the coil. After each coat the coil is routed through an oven for heat treatment. Each coat room is connected to an incinerator, for a total of two incinerators on Line 2 and three incinerators on Line 4. The coating lines are interlocked with their respective incinerators so that the line cannot run without the incinerators running at or above the required temperature. Methyl ethyl ketone and acetone are used to clean out pans between different coatings. Sludge from Line 2 and Line 4 are collected at sent to the wastewater treatment area prior to discharging. Process wastewater generated from operations and cleaning is treated onsite for pH, zinc, and chromium.

The rollers for the lines are ground and smoothed at the facility; there is a dust collector in the grinding area. Some coils may be slit to the desired size after coating; there is not dust collector in the slitting area. These operations are not included in the permit.

Staff Interview:
The coil coating Line 4 is used more frequently than Line 2. Line 4 and Line 2 are able to be run concurrently. The coating lines can operate up to 600 feet of coil per minute. Each oven on the coating lines operates between 900-1200°F, product-dependent.

None of the coatings used contain chromium, but some cleaning products used contains chromium, which the facility treats in the onsite wastewater treatment room to meet MWRD standards.

The facility staff completes monthly internal inspections of the plant; the previous two inspection reports were requested for later review.

TOUR INFORMATION

EPA Tour of the Facility: Yes

Data Collected and Observations:
Line 4 was running during the facility tour; however, the coil was only being cleaned and not being coated. Line 2 was not running during the facility tour. Inspectors used an optical gas imaging camera during the inspection; no videos were recorded.

Coating lines are subject to capture and destruction efficiencies required by the permit and NESHAP SSSS; the associated stack tests and temperature records were requested for later review. NESHAP SSSS requires that the temperatures of the incinerators are continuously monitored; the temperature records were requested for later review.

The permit requires the facility to track the usage of VOC containing material and calculate VOC emissions; the logs and calculations were requested for later review.

The facility is required by the permit to cover open containers containing cleaning solvents and otherwise utilize equipment practices that minimize emissions from the cleanup operation; inspectors did not observe open containers of cleaning solvents.

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

Requested documents:
- Most recent stack test of the incinerators and enclosures
- Previous two years of emission calculations
- Previous two years of VOC logs
- Two years of incinerator temperature/deviation records
- Past two monthly inspection reports

DIGITAL SIGNATURES

Report Author: NATALIE SCHULZ Digitally signed by NATALIE SCHULZ Date: 2023.06.09 10:31:55 -05'00'

Section Supervisor: CHARLES HALL Digitally signed by CHARLES HALL Date: 2023.06.09 10:47:18 -05'00' for Brian Dickens