



REGION 5

CHICAGO, IL 60604

MEMORANDUM

SUBJECT: CLEAN AIR ACT INSPECTION REPORT
Z Technologies Corporation, Redford, MI 48239

FROM: Aileen Drum, Physical Scientist
AECAB (IL/IN)

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

TO: File

BASIC INFORMATION

Facility Name: Z Technologies Corporation

Facility Location: 26500 Capitol Avenue, Redford, MI 48239

Date of Inspection: February 27, 2024

EPA Inspector(s):

1. Aileen Drum, Physical Scientist
2. Emma Leeds, Environmental Engineer
3. Karina Kuc, Environmental Engineer

Other Attendees:

1. Wayne Hall, Plant Manager
2. Jill Zimmerman, EGLE Environmental Engineer

Contact Email Address: waynehall@ztechprotection.com , ellisbreskman@ztechprotection.com

Purpose of Inspection: To ensure compliance with the Clean Air Act

Facility Type: Paint and Coating Manufacturing

Regulations Central to Inspection: Emissions thresholds in the Permit to Install issued June 26, 2008, and 40 CFR Part 63, Subpart CCCCCC.

Facility Name: Z Technologies Corporation
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Date of Inspection: February 27, 2024

Arrival Time: 8:45 AM

Departure Time: 10:30 AM

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. Reason:
- ☒ Provided CBI warning to facility

The following information was obtained verbally from Wayne Hall unless otherwise noted.

Process Description:

Raw materials including calcium carbonate, acetone, methyl ethyl ketone (MEK), mineral spirits, thickeners, and pigments are received at the dock, staged, and tagged. Batch tickets are prepared based on customer specifications. Water based paints are mixed in containers ranging from 300-gallon totes to 1200-gallon tanks, and solvent-based paints are mixed in 3000-gallon reactors, which are pressurized vessels. Pressure is released from the reactors after the product cools. Final products are sent to the lab for quality control. Once cleared, the paints are packaged into 5-gallon pails, 50-gallon tubs, and 330-gallon plastic totes. Shipments are distributed by truck.

Staff Interview: The facility has 18 employees and runs production from 6am to 3pm Monday through Friday. Shipping is done on Saturday and Sunday. Three dust collectors serve as controls for the Barge Liner Tank, X-Tank 1, and X-Tank 2. The dust collectors are turned on when pigment is added. The facility has plans to install one additional dust collector for the American Axil Tank in response to observations of excess dust accrual on the floor overnight. Pressure drop is not monitored. There are no controls for VOCs, however all products produced are low VOC. Overhead exhaust fans run for most of the day. Reactors are heated to a maximum temperature of 265 degrees Fahrenheit.

TOUR INFORMATION

EPA Toured the Facility: Yes

Data Collected and Observations:

EPA walked the production process with a Toxic Vapor Analyzer (TVA) and a camera. A high TVA background reading of 51 ppm was recorded for the resin storage room. The American Axil Tank and

its associated baghouse were observed. On the second floor Reactors 1 and 2 were examined and a leak with a TVA reading of 12,900 ppm was found at Reactor 2. The top of Reactor 1 displayed buildup and corrosion. The baghouses for X-Tank 1 and X-Tank 2 were observed, according to Mr. Hall the filters are usually changed two times per week.

Photos and/or Videos: were taken during the inspection and are listed in Appendix A.

Field Measurements: were taken during this inspection and are listed in Appendix B.

CLOSING CONFERENCE

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

Requested documents:

- Monthly records for the preceding 12-month rolling time-period of the hours of operation for the product manufacturing portion of EUPROCESS
- Monthly records for the preceding 12-month rolling time-period of the amount of product produced in EUPROCESS
- Facility-wide emissions calculations including all emissions factors and assumptions in an unlocked excel spreadsheet for the preceding 12-months
- 2023 and 2024 Compliance Reports
- SDS sheets
 - Top 10 products produced (by quantity)
 - Top 10 VOC/HAP containing raw materials
- Most recent permit
- Process diagram
- Capacities of the baghouses
- Any reasons you may be reporting elevating levels of PM

Concerns: EPA advised that there is a leak on Reactor 2 and that the TVA background reading for the resin storage room was high.

DIGITAL SIGNATURES

Report Author: Drum, Aileen
Digitally signed by Drum, Aileen
Date: 2024.03.19 10:45:43 -05'00'

Section Supervisor: NATHAN FRANK
Digitally signed by NATHAN FRANK
Date: 2024.03.21 14:06:29 -05'00'

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APPENDICES

1. Appendix A: Digital Image Log and Digital Video Log
2. Appendix B: Field Measurement Data

APPENDIX A: DIGITAL IMAGE LOG AND DIGITAL VIDEO LOG

Inspector Name: Emma Leeds **Archival Record Location:** AECAB LIBRARY >
Enf_ZTechnologiesCorp_MI_24 > Enf_ZTechnologiesCorp_MI_24_Inspection

Image Number	File Name	Date and Time (incl. Time zone and DST)	Description of Image
1	P2260179.JPG	2/27/24 10:02 AM EST	Baghouse for Barge Liner Tank
2	P2260180.JPG	2/27/24 10:09 AM EST	Reactor 2 where leak was found
3	P2260181.JPG	2/27/24 10:10 AM EST	X-Tank 1
4	P2260182.JPG	2/27/24 10:13 AM EST	Filter baghouse over X-Tank 1
5	P2260183.JPG	2/27/24 10:13 AM EST	Top of Reactor 1
6	P2260184.JPG	2/27/24 10:15 AM EST	Front of X-Tank 1
7	P2260185.JPG	2/27/24 10:16 AM EST	Filter dust collector for X-Tank 2
8	P2260186.JPG	2/27/24 10:17 AM EST	Reactor #2

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APPENDIX B: FIELD MEASUREMENT DATA

TVA- B37055 Calibration Data	
Span Gas (ppm methane)	TVA Reading (ppm methane)
500	486
1960	1892
9750	9688

Location	Reading (ppm methane)
Final product area	32
Raw material resins	51
Raw material solvents	7.6
Raw material solvents and resins	5.4
Above open drum of solvent based paint	1040
Reactor room	222
Reactor 2	12,900
Reactor 1	128