



REGION 5

CHICAGO, IL 60604

MEMORANDUM

SUBJECT: CLEAN AIR ACT INSPECTION REPORT
TJM Innovations, LLC, Milwaukee, Wisconsin

FROM: DeMarkus Hodge, Environmental Engineer
AECAB (MI/WI)

THRU: Sarah Marshall, Section Supervisor
AECAB (MI/WI)

TO: File

BASIC INFORMATION

Facility Name: TJM Innovations, LLC

Facility Location: 5519 W Woolworth Ave, Milwaukee, WI 53218

Date of Inspection: December 3, 2024

EPA Inspector(s):

1. DeMarkus Hodge, Environmental Engineer
2. Matthew Walters, Environmental Engineer

Other Attendees:

1. Ted McNamara, CEO
2. Julie McNamara, President
3. Sam Rawson, Chemist
4. Marla Maebane, HR/ Safety Director
5. Jesus Zamora, Operations Director

Contact Email Address: julie@tjminnovations.com

Purpose of Inspection: To ensure compliance with the Chemical Accident Prevention Provisions (CAPP) at 40 C.F.R. Part 68.

Facility Type: Foam Manufacturer

Facility Name: TJM Innovations, LLC
Facility Location: 5519 W Woolworth Ave, Milwaukee, WI 53218
Date of Inspection: December 3, 2024

Regulations Central to Inspection: Part 68 – Chemical Accident Prevention Provisions

Arrival Time: 12:45 PM CT

Departure Time: 3:00 PM CT

Inspection Type:

- ☒ Unannounced Inspection
☐ Announced Inspection

OPENING CONFERENCE

- ☒ Presented Credentials
☒ Stated authority and purpose of inspection
☒ Provided Small Business Resource Information Sheet
☒ Provided CBI warning to facility

Was any information collected during the inspection claimed as CBI?

☐ Yes ☒ No.

The following information was obtained verbally from TJM Innovations Personnel unless otherwise noted.

Process Description:

TJM Innovations, LLC (TJM) manufactures polyether and polyurethane foam gutter filters and other foam products. TJM uses various raw materials such as toluene 2,4-diisocyanate (2,4-TDI), toluene 2,6-diisocyanate (2,6-TDI), polyols, additives, certain catalysts, and colorants (pigments) in the foam manufacturing process. TJM uses two TDI formulations: TD-80 (80% 2,4-TDI, 20% 2,6-TDI) and TD-65 (65% 2,4-TDI, 35% 2,6-TDI). TJM also uses three types on polyols that all have different molecular weights. TDI and polyols are delivered from tankers and unloaded at the facility. The tanker pumps TDI and polyols into the storage tanks. TJM stores TD-80, TD-65, graft polyol, and base polyol in four 6,000-gallon bulk storage tanks. Each of the tanks have a carbon filter and pressure relief valve (PRV). The tanks are located within a concrete diked system, inside the building. TD-80 and TD-65 are mixed at different ratios in the foam manufacturing process. TJM operates one manufacturing line, utilizing a production machine that was purchased new approximately 7 years ago. The foam slab is sent to the next stage for fabrication. The foam is infused with pigments to add color.

Staff Interview:

TJM began manufacturing foam in 2017. TJM typically operates from 7 a.m. to 3:30 p.m. Monday through Friday. TJM employs about 29 employees currently. Occasionally, TJM receives totes and barrels of polyols but mainly handles tankers. TJM has carbon filters for emission control on the tanks. TJM decommissioned the spray booth to paint the foam and currently uses a pigment injection method to color the foam.

TOUR INFORMATION

EPA Toured the Facility: Yes

Data Collected and Observations:

During the inspection, EPA visited the offloading area, storage tanks, foam manufacturing area, and foam packaging area. EPA used an optical gas imaging (OGI) camera to screen for potential VOC emissions from tanks and other equipment at the facility. No fugitive emissions were observed, and no videos were recorded. The storage tanks are labeled and are located next to each other. In the storage area, TJM has 4 pumps to move TDI and polyols into the storage tanks from the offloading area. TJM has an emergency stop (E-Stop) in the storage area and in the offloading area. EPA reviewed the offloading procedures for TD-80 and TD-65 at the time of the inspection. TJM posted the written offloading procedures in the offloading area near the controls for the employees to reference. To ensure the correct chemical is offloaded in the appropriate storage tank (TDI vs polyol), the hose connections are different at each offloading station. In addition, EPA visited the foam manufacturing area. In the manufacturing area, EPA reviewed the foam manufacturing procedures.

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

Field Measurements: were not taken during this inspection.

RECORDS REVIEW

Risk Management Program (RMP) documents in the following categories were reviewed onsite during the inspection:

- Operating Procedures
- Offsite consequence analysis (OCA)

CLOSING CONFERENCE

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

Requested documents:

- Description of the Risk Management Program Management structure.
- Most recent Hazard Review for the foam production covered process.
- Operating Procedures for TDI unloading to storage tanks.
- Startup checklist in the foam production room.
- Training documentation for the four employees who are involved in the TDI unloading operation, including the initial training and any refresher training.
- Most recent Risk Management Program compliance audit, including the audit report, findings of the audit, and how these findings have been resolved or corrected.
- Supporting documentation for the most recent coordination activities with the local response organizations (LEPC and Fire Department).
- Underlying calculations for the reported facility wide actual emissions in an Excel spreadsheet, including any supporting documentation on assumed emission factors.

Compliance Assistance: Inspectors recommended that TJM have a more involved coordination exercise with fire department to ensure that TJM's emergency action plan is understood by the emergency responders.

Concerns:

- Compliance Audits records were not readily available at the site for review.
- TJM only completed a facility walkthrough with the fire department instead of a complete coordination exercise.

DIGITAL SIGNATURES

Report Author: **DEMARKUS HODGE**  Digitally signed by DEMARKUS HODGE
Date: 2025.01.27 08:52:26 -06'00'

Section Supervisor: **SARAH MARSHALL**  Digitally signed by SARAH MARSHALL
Date: 2025.01.27 08:59:42 -06'00'

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APPENDICES

1. Appendix A: Digital Image Log and Digital Video Log

Facility Name: TJM Innovations, LLC
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APPENDIX A: DIGITAL IMAGE LOG

1. Inspector Name: DeMarkus Hodge		2. Archival Record Location: R5 Electronic Record Center	
Image Number	File Name	Date and Time (CST)	Description of Image
1	PC030090.JPG	12/3/2024 2:12 PM	Graft Poly Label
2	PC030091.JPG	12/3/2024 2:12 PM	Base Poly Label
3	PC030092.JPG	12/3/2024 2:13 PM	TD-80 Label
4	PC030093.JPG	12/3/2024 2:14 PM	TD-65 Label
5	PC030094.JPG	12/3/2024 2:16 PM	TDI 80 Unloading Procedures
6	PC030095.JPG	12/3/2024 2:16 PM	TDI 80 Unloading Receiving Station
7	PC030096.JPG	12/3/2024 2:18 PM	Receiving Deliveries and Spill Leak Procedures
8	PC030097.JPG	12/3/2024 2:19 PM	Pumps form Unloading Station
9	PC030098.JPG	12/3/2024 2:20 PM	Pump Label
10	PC030099.JPG	12/3/2024 2:25 PM	Tank Containing Base Poly
11	PC030100.JPG	12/3/2024 2:25 PM	Pressure Relief Valve and Carbon Absorber
12	PC030101.JPG	12/3/2024 2:30 PM	Control Box
13	PC030102.JPG	12/3/2024 2:30 PM	Control Box