

**U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 5**

Purpose: Pretreatment and Industrial Storm Water Compliance Evaluation Inspection

Facility: Poly-Wood, LLC
1001 West Brooklyn Street
Syracuse, IN 46567

NPDES Permit: INP000610

Date of Inspection: May 31, 2023

EPA Representatives:

Sangsook Choi, Environmental Engineer, 312-353-1869
Raymond Cullen, Environmental Engineer, 312-886-0538

Facility Representatives:

Landon Deel, Human Resources Manager, 574-325-5825
Holly Stevenson, Environmental, Health & Safety, 574-528-4016
Mike Fuhrman, CF Environmental, Consultant

Report Prepared by: Sangsook Choi
Choi,

Inspector's Signature: Sangsook

Digitally signed by Choi,
Sangsook
Date: 2023.07.28
11:56:25 -05'00'

Approver Name and Title: Ryan Bahr, Section 2 Supervisor, Water Enforcement and
Compliance Assurance Branch

Approver Signature and Date: RYAN BAHR

Digitally signed by RYAN
BAHR
Date: 2023.07.28
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INTRODUCTION & FACILITY DESCRIPTION

The purpose of this inspection report is to describe, evaluate, and document compliance with parts of the Clean Water Act (CWA) with respect to Poly-Wood, LLC (“Poly-Wood” or “you”) located at 1001 West Brooklyn Street in Syracuse, Indiana. Poly-Wood is a manufacturer of various styles of outdoor plastic furniture mainly using recycling plastics. The main processes are: plastic extrusion, plastic cutting, metal cutting, welding, powder coating and assembly. The majority of wastewater is from the water used from the Powder Coating processes.

The Powder Coating has 3 stages: stage 1 – etching, stage 2 – rinse etching off, and stage 3 – neutralize. Stage 2 is the only rinse water that discharges to the POTW. Stages 1 & 3 wastewater are hauled off. The Powder coating operates only 1st shift in mornings. Plastic Extrusion water are recycled and evaporates and there is no discharges from this operation. Recycling Center uses washing water for recycled plastics about 6,000 gallons per week and goes to trench and pumps out. The average daily discharge to POTW is about 1,000 gallons per day. The rinse/wash wastewater is not treated prior to discharge to the Town of Syracuse POTW.

Poly-Wood has been in operation for past 32 years and has 800 employees working at this facility. According to Mr. Deel, Human Resources Manager, there are a total of 1,300 employees working for Poly-Wood which includes another plant located in North Carolina. This facility operates 24 hours for 7 days a week.

Poly-Wood performs a powder coating and etching operation on metal material (aluminum and steel) and is subject to 40 CFR 433.17 Metal Finishing Point Source Category. 40 CFR 433.17 Pretreatment Standards for New Sources (PSNS) requires compliance with categorical effluent limitations for the following parameters: Cadmium, Chromium, Copper, Lead, Nickel, Silver, Zinc, Cyanide, and TTO.

The Poly-Wood facility has an Indiana Department of Environmental Management (IDEM) Industrial Wastewater Pretreatment (IWP) Permit No. INP000610, issued on February 10, 2022, that became effective on May 1, 2022. The IWP Permit required all regulated categorical parameters to comply with categorical effluent limitations per 40 CFR 433.17 and daily monitoring for pH and flow and monitoring and reporting for Zirconium and Mercury at Outfall 001. Outfall 001 is located after the sump pit at the end of the process.

SITE INSPECTION

Opening Conference

At 12:40 p.m. on May 31, 2023, Raymond Cullen and I arrived and entered the Poly-Wood facility to conduct an unannounced compliance evaluation inspection to evaluate compliance with federal pretreatment requirements and any industrial storm water requirements under the Clean Water Act. We showed our credentials to Ms. Holly Stevenson, Environmental, Health, and Safety, and Mr. Landon Deel, Human Resources Manager, and explained the purpose of our inspection at the opening conference.

At first, Mr. Deel wanted to know why Poly-Wood was selected for this inspection because it had been more than 10 years since the U.S. Environmental Protection Agency had inspected.

We explained to Mr. Deel that EPA implements federal pretreatment requirements in Indiana and at Industrial Users where the POTW does not have a federally approved pretreatment program and that we are required to conduct inspections at selected industrial facilities every year and the Poly-Wood facility is one of the selected facilities for this year's inspection.

We asked Poly-Wood to explain the facility's manufacturing operations and wastewater processes, any treatment systems installed, chemicals and raw materials used, and waste handling and disposal practices, and any specific sampling and monitoring requirements. We also asked for a copy of the facility operations and process diagrams. Mr. Deel and Ms. Stevenson did not locate these documents for their pretreatment system processes, wastewater process diagram, nor specific sampling and monitoring reports for this facility. Then, Mr. Deel said that facility has a consultant who takes care of all those matters, and he decided to call his consultant, Mr. Fuhrman. By joining on a phone call, Mr. Fuhrman was able to participate in our discussion and explained its manufacturing operations and its wastewater discharges to the Syracuse POTW.

Mr. Fuhrman explained how their operations generate wastewater discharges, haul off cooling paint line powder coating, conduct sampling for its wastewater and send reports to the Town of Syracuse POTW and to IDEM per the Industrial Wastewater Pretreatment (IWP) Permit requirements. The automatic sampler is set up twice a month for sampling to meet regulatory requirements and Poly-Wood monitors pH and flow daily. The flow meter is calibrated once a year and the pH meter is calibrated daily.

EPA asked Poly-Wood before walking through the site that if any of the information discussed or that we were going to see would be considered Confidential Business Information (CBI) and if we can take photos during our walkthrough. Mr. Deel stated that there is no CBI that he knows of and will let us know if there is any problem with taking photos. Mr. Deel did not identify any issue with taking photos during the walkthrough.

Facility Walkthrough

We looked at the Powder coating line and the sampling location (photo #1), its automated washing process (photo #2), an overflow sump and where it pumps back into a sample trench (photos #3 and 4), and observed discharging flow data shown on a computer monitor (5/29/23, 4 p.m. – 5/31/23, 1 p.m.) in photo #5. Then we saw the pH buffering area and observed that none of the buffers were past the expiration date (photo #6) and we observed the pH calibration log (photo #7). We also observed the powder coating lines as shown in photo #8 for Stage 1 (Etch), Stage 2 (etch is rinsed off), and Stage 3 (neutralization). Stage 2 water goes to the POTW; Stage 1 and Stage 3 water is hauled off-site. A small drum of LineAdjust 2380 for pH adjustment was

observed between Stages 2 and 3, and a large barrel of LineKote 3381 NP for conversion coating was also observed.

Then we walked to the Extrusion building where recycled plastics are processed through 20 extrusion lines and observed a trench that collects water spilled from 20 extrusion lines (photo #9). Water used in the Extrusion lines is recirculated through the process continuously for cooling as shown in photos # 10 and # 11, and a sampling location in photo #12.

Documents Reviewed

Documents provided by Mr. Deel via follow-up emails after our inspection are as follows:

1. IDEM Industrial Wastewater Pretreatment (IWP) Permit No. INP000610
2. Toxic Organic Management Plan (TOMP) Approved by IDEM on May 6, 2019
3. Invoice for hauling recycled wash water tanks loads
4. IDEM Monthly Monitoring Report for Industrial Discharge Permit February 2023

The TOMP approved by IDEM on May 6, 2019, has a certification statement signed on April 30, 2019; emergency telephone contact numbers; a chain-of-custody document dated December 5, 2018, for samples collected on December 3 and 5, 2018 for metals, cyanide, mercury and TTO. Element Materials Technology analyzed those parameters and analytical reports were provided. The chemicals that are used at the facility were identified in the TOMP and detailed the average amount, maximum amount and total annual usage of the materials.

IDEM's Industrial Wastewater Permit No. INP000610 requires submittal of a Monthly Monitoring Report for daily flow, daily pH, and twice a month for all metals: cadmium, chromium, copper, lead, nickel, silver, zinc, total cyanide and zirconium. Mercury monitoring is required every quarterly and TTO monitoring is required semi-annually.

The facility had reported zinc violations for daily and monthly limits for the monitoring period of February 2021. Mr. Deel sent an email on July 19, 2023, about the cause of zinc effluent violations and informed EPA that his consultant stated that the facility was cleaning out buildup in the tanks, scrapping the tank and it was believed that it had caused the zinc violations. The facility has new tanks and this is no longer an issue. There were no more effluent violations reported.

The Poly-Wood facility is subject to federal regulation 40 CFR 122.26(b)(14) and is under Standard Industrial Classification (SIC) codes of 2514 and 3821 and may be subject to IDEM General Storm Water coverage and may be required to submit a Notice of Intent (NOI) to IDEM.

Federal regulation 40 CFR 403.8(f)(1)(iii)(B)(6) requires control of Slug Discharges. The facility is required to submit a Spill Prevention/Slug Control Plan which describes the procedures for identifying potential spill sources/slug discharges, implementing preventative measures, conducting spill response, and notification to authorities.

Closing Conference

The site inspection was completed at approximately 3:15 PM on May 31, 2023. A brief closing conference was held, and we requested Poly-Wood submit the documents requested earlier and we advised Poly-Wood that an inspection report will follow which will identify any areas of concerns identified during this inspection.

AREAS OF CONCERN

1. Spill Prevention/Slug Control Plan

Federal regulation 40 CFR 403.8(f)(1)(iii)(B)(6) requires control of Slug Discharges. A Slug Discharge is any Discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch Discharge.

Federal regulation 40 CFR 403.8(f)(2)(vi) requires industrial users to notify the POTW immediately of any changes at its facility affecting potential for a Slug Discharge and to develop a plan which contains, at a minimum, the following elements:

- (A) Description of discharge practices, including non-routine batch Discharges;
- (B) Description of stored chemicals;
- (C) Procedures for immediately notifying the POTW of Slug Discharges, including any Discharge that would violate a prohibition under [§ 403.5\(b\)](#) with procedures for follow-up written notification within five days;
- (D) If necessary, procedures to prevent adverse impact from accidental spills, including inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site run-off, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants (including solvents), and/or measures and equipment for emergency response.

2. Industrial Stormwater Notice of Intent (NOI)

IDEM's Rule 327 IAC 15-6 (Rule 6) for Storm Water Discharges Exposed to Industrial Activity applies to facilities described by one or more of the Standard Industrial Classification (SIC) Codes including 25xx Furniture and fixtures and 38xx Instruments and related products subject to additional considerations in the Rule and may require you to submit a Notice to IDem regarding Industrial Storm Water coverage.

LIST OF ATTACHMENTS:

1. Photo Log

**Poly-Wood, LLC
Photo Log
EPA Inspection May 31, 2023
All photos taken by Ray Cullen, Environmental Engineer, EPA**



1: IMG_0308

Description: Sampling location

Location: Powder coating line

Camera Direction: Down, south

Date/Time: 5/31/23, 1:57 p.m.



2: IMG_0309

Description: Automated washing process

Location: Powder coating line

Camera Direction: South

Date/Time: 5/31/23, 1:58 p.m.



3: IMG_0310

Description: Overflow sump.

Location: Powder coating line

Camera Direction: West

Date/Time: 5/31/23, 2:03 p.m.



4: IMG_0311

Description: Water inside of sump in Photo 3, which is pumped back into sampling trench.

Location: Powder coating line

Camera Direction: Down

Date/Time: 5/31/23, 2:06 p.m.

Logging No.	Time	Date	Channel/Level
26327	4:00:00 PM	5/29/2023	0
26328	5:00:00 PM	5/29/2023	0
26329	6:00:00 PM	5/29/2023	0
26330	7:00:00 PM	5/29/2023	0
26331	8:00:00 PM	5/29/2023	0
26332	9:00:00 PM	5/29/2023	0
26333	10:00:00 PM	5/29/2023	0
26334	11:00:00 PM	5/29/2023	0
26335	12:00:00 AM	5/30/2023	0
26336	12:00:00 AM	5/30/2023	0
26337	1:00:00 AM	5/30/2023	0
26338	2:00:00 AM	5/30/2023	0
26339	3:00:00 AM	5/30/2023	0
26340	4:00:00 AM	5/30/2023	0
26341	5:00:00 AM	5/30/2023	0
26342	6:00:00 AM	5/30/2023	0
26343	7:00:00 AM	5/30/2023	0
26344	8:00:00 AM	5/30/2023	0
26345	9:00:00 AM	5/30/2023	0
26346	10:00:00 AM	5/30/2023	0
26347	11:00:00 AM	5/30/2023	0
26348	12:00:00 PM	5/30/2023	0
26349	1:00:00 PM	5/30/2023	0
26350	2:00:00 PM	5/30/2023	0
26351	3:00:00 PM	5/30/2023	0
26352	4:00:00 PM	5/30/2023	0
26353	5:00:00 PM	5/30/2023	0
26354	6:00:00 PM	5/30/2023	0
26355	7:00:00 PM	5/30/2023	0
26356	8:00:00 PM	5/30/2023	0
26357	9:00:00 PM	5/30/2023	0
26358	10:00:00 PM	5/30/2023	0
26359	11:00:00 PM	5/30/2023	0
26360	12:00:00 AM	5/31/2023	0
26361	1:00:00 AM	5/31/2023	0
26362	2:00:00 AM	5/31/2023	0
26363	3:00:00 AM	5/31/2023	0
26364	4:00:00 AM	5/31/2023	0
26365	5:00:00 AM	5/31/2023	0
26366	6:00:00 AM	5/31/2023	0
26367	7:00:00 AM	5/31/2023	0
26368	8:00:00 AM	5/31/2023	0
26369	9:00:00 AM	5/31/2023	0
26370	10:00:00 AM	5/31/2023	0
26371	11:00:00 AM	5/31/2023	0
26372	12:00:00 PM	5/31/2023	0

5: IMG_0312

Description: Discharge flow data (5/29/23, 4 p.m. – 5/31/23, 1 p.m.)

Location: Powder coating line

Camera Direction: N/A

Date/Time: 5/31/23, 2:17 p.m.



6: IMG 0313

Description: pH buffers. None are past expiration.

Location: Powder coating line

Camera Direction: N/A

Date/Time: 5/31/23, 2:23 p.m.

[illegible]

7: IMG 0314

Description: pH calibration log

Location: Powder coating line

Camera Direction: N/A

Date/Time: 5/31/23, 2:24 p.m.



8: IMG_0315

Description: From left to right, Stage 1 (Etch), Stage 2 (etch is rinsed off), and Stage 3 (neutralization). Stage 2 water goes to POTW; Stages 1 and 3 water is hauled off-site. Small drum between Stages 2 and 3 is for pH adjustment, and the large barrel is for conversion coating.

Location: Powder coating line

Camera Direction: Southwest

Date/Time: 5/31/23, 2:25 p.m.



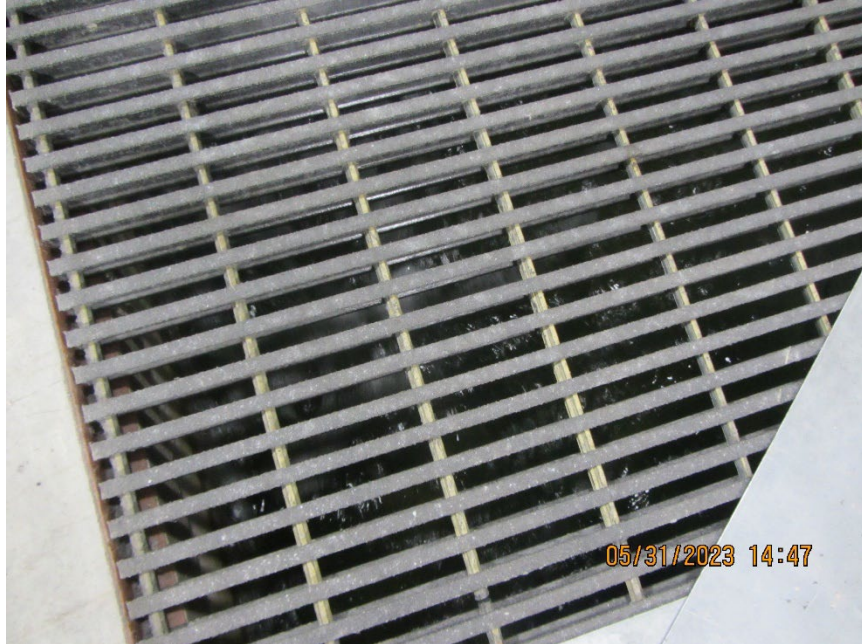
9: IMG_0316

Description: Trench that collects water spilled from 20 extrusion lines in area

Location: Extrusion building

Camera Direction: Down

Date/Time: 5/31/23, 2:37 p.m.



10: IMG_0317

Description: Water below grate is recirculated through the process continuously for cooling

Location: Extrusion building

Camera Direction: Down

Date/Time: 5/31/23, 2:47 p.m.



11: IMG_0318

Description: Zoomed-out photo of the grate in Photo 10

Location: Extrusion building

Camera Direction: Not recorded

Date/Time: 5/31/23, 2:47 p.m.



12: IMG_0319

Description: Sampling location

Location: Extrusion building

Camera Direction: Not recorded, but in the background of Photo 11

Date/Time: 5/31/23, 2:51 p.m.