

RCRA Compliance Evaluation Inspection Report

1) **Inspector and Author of Report**

Raj Aiyar, Environmental Engineer
U.S. Environmental Protection Agency, Region 4
RCRA Enforcement Section
Chemical Safety and Land Enforcement Branch
Enforcement and Compliance Assurance Division
61 Forsyth Street S.W.
Atlanta, Georgia 30303-8960
(404) 562-8993
aiyar.raj@epa.gov

2) **Facility Information**

Indorama Ventures Xylenes & PTA LLC
1401 Finley Island Road
Decatur, Alabama 35601
EPA ID Number: ALD002985554
Website: www.indoramaventures.com

3) **Responsible Officials**

Ms. Karla Shinkunas, Health, Safety, Security & Environmental Manager

4) **Inspection Participants**

Teresa McGee, Environmental Superintendent
Mark Stone, Environmental Specialist
Marlon McMillian, Alabama Department of Environmental Management
Raj Aiyar, U.S. EPA, Region 4

5) **Date and Time of Inspection**

June 30, 2021, 9:30 a.m.

6) **Applicable Regulations**

Resource Conservation and Recovery Act (RCRA) Sections 3002, 3004, 3005, 3007 and 3008, (42 U.S.C. §§ 6922, 6924, 6925, 6927 and 6928)

40 Code of Federal Regulations (C.F.R.) Parts 260-266, 270, 273, 279

Alabama Hazardous Waste Management and Minimization Act of 1978, Ala. Code § 22-30-1 et seq., and rules 335-14-1 to 335-14-17 (2016 and 2018) of the Alabama Department of Environmental Management (ADEM) Administrative Code (ADEM Admin. Code).

As the State's authorized hazardous waste program operates in lieu of the federal RCRA program, the citations of those authorized provisions alleged herein will be to the authorized State program; however, for ease of reference, the federal citations will follow in brackets.

7) **Purpose of Inspection**

On June 30, 2021, inspectors from the U.S. Environmental Protection Agency, Region 4, and the Alabama Department of Environmental Management (ADEM) conducted an unannounced compliance evaluation inspection (CEI) at Indorama Ventures Xylenes & PTA LLC (hereinafter IVXP) to determine its compliance status with the RCRA and the State of Alabama regulations.

8) **Facility Description**

The IVXP manufactures purified terephthalic acid (PTA) and its raw materials to Alpha PET Inc. a co-located business operation that produces PTA to external customers worldwide. The facility also serves as an only commercial manufacturer of 2,6-naphthalene dicarboxylate (NDA) and 2,6-naphthalene dicarboxylic acid (PDNA). In 2018, the facility started manufacturing Purified Isophthalic Acid (PIA). The facility offers a wide range of petrochemical products that are used by the food and the beverage industry, automotive plastic, textile, and electronic industries including manufacturers of flat screen TV and iPhones.

The IVXP facility is located on approximately 1,000 acres with 500 acres being active. IVXP can produce one million tons per year of PTA, as well as paraxylene (PX), a raw material for PTA production. In April 2016, Indorama Ventures, PCL acquired BP Amoco Chemical Company's petrochemical complex- known now as IVXP. IVXP is the sole commercial manufacturer of naphthalene dicarboxylate (NDC), a specialty chemical used in the new-generation of polyesters and resins that are used to make LCD flat-panel displays, ultra-thin data storage tape, and other products. IVXP operates two overlapping 12-hour shifts, year-round. The facility has approximately 400 employees and 350 contractors onsite. Four employees are assigned activities related to hazardous waste management and emergency response.

In its most recent notification of regulated waste activity (ADEM Form 8700-12, dated February 22, 2021) IVXP, identified itself as a large quantity generator of hazardous waste, and as a used oil generator. The waste codes of the hazardous waste generated by IVXP includes D001, D002, D005, D006, D007, D008, D009, D016, D018, D022, D035, F002, F003, F005, U080, U154 and U239.

IVXP uses Clean Harbors Deer Park LLC (EPA ID TXD055141378) and Clean Harbors El Dorado LLC (EPA ID ARD 069748192) to pick up their wastes.

9) **Previous Inspection History**

IVXP was last inspected by ADEM in October 2016. The deficiencies observed during the inspection included failure to conduct weekly inspections in the hazardous waste storage area and failure to label containers. The facility returned to compliance on February 27, 2017. There was no prior EPA inspection at this facility.

10) Findings

Inspectors arrived at the facility at 9:30 a.m. and were greeted by Ms. Shinkunas, Ms. McGee, and Mr. Stone. The inspectors conducted a formal introduction, showed their credentials, and explained the purpose of the visit. Ms. Shinkunas provided the inspectors a general description of the on-site activities at the facility. The inspectors were later accompanied by Mr. Stone during the walk-through inspection of the facility.

Laboratory

Quality assurance tests are conducted in this lab 24-hours a day on the final product and on the various chemical for scaling it to production. The inspectors observed two 5-gallon satellite accumulation area (SAA) buckets in the lab. One SAA container was located near equipment used for measuring the density of the sample. The waste codes on the container were observed to be D001, D018, U238 and U080. The container also had a hazard indicating label. The inspectors observed a second SAA gallon container under a hood. Both the SAA containers were observed to be labeled and closed. There were no deficiencies observed in this area.

Blasting Yard and Painting Area.

In this area, the facility conducts spot painting and blasting activities outdoors using a non-hazardous blasting media (Black Beauty). The Safety Data Sheet (SDS) identifies the material as nonhazardous material. The inspectors observed spent nonhazardous blast media stockpiled in the ground. Although SDS identifies the spent blast media as nonhazardous, it recommends the spent blast media to be stored such that there is no runoff to the storm sewers and ditches that leads to waterways. The spent blast media is also comprised of fine dust that can be airborne and become a potential health hazard for inhalation. The inspectors recommend the spent blast media to be stored in a closed container to avoid the risk of release to the waterways and avoid posing a health risk by being airborne.

Ms. McGee in her email response to the EPA on August 3, 2021, mentioned that the spent sand blast material was disposed of in a nonhazardous waste landfill. She also mentioned that in future the IVXP would use a suitable closed container for storage prior to disposal.

The inspectors observed one 55-gallon SAA drum in this area. The drum was observed to be empty at the time of inspection. The container was labeled with the words “waste paint and thinner” along with a pictogram identifying the hazard. The waste codes on the drum were noted to be D001, F003 and F005. There was no deficiency observed in this area.

PTA Unit #5 (Used Oil)

PX is brought to this unit to produce PTA. The material is then transported to the company’s sister facility next door (Alpha PET). The inspectors observed one 55-gallon SAA drum located near a place called “the Waterfall”. Filter socks and Personal Protective Equipment (PPE) are generated during the changing of the filters for the production process. The drum was observed to be closed and labeled with the words “hazardous waste” along with a pictogram indicating the hazard.

The inspectors observed one 2,000 gallon used oil tank in this area. The tank was observed to be closed, intact, nonleaking and marked with the words “Used Oil”. According to Mr. Stone, the

used oil generated in this area is from lubricating the conveyor pumps in the production area. Mr. Stone also mentioned that Safety-Kleen Systems Inc. (EPA ID#KYD053348108) picked up their used oil.

During the inspection, the inspectors observed white powdery material covering the floor of the production area. Mr. Stone stated that the material is production material (PTA) and is nonhazardous. He also mentioned that the material on the floor is scheduled for removal and putting back in process (Picture-1).

In response to an additional follow-up regarding the cleanup of the white powdery material observed on the floor of the production area, Ms. McGee, Environmental Superintendent in an email response dated August 3, 2021 mentioned that the white powdery material observed during the inspection was located in the Mother Liquid Solids Separation (MLSS) Area. Maintenance was being performed on the MLSS system the day of the inspection which resulted in some of the PTA material being on the floor of the production area during the inspection. The material was later washed down to the onsite waste treatment system after the inspectors had left the area. IVXP continually works to reduce the production losses to the waste treatment system.

Hazardous Waste Storage Area

The hazardous waste storage area consisted of a roofed, stand-alone, open-sided structure for storing hazardous waste, non-hazardous waste, used oil, and universal waste. The area was enclosed with a locked fence. The area was separated into three sections; Used Oil, Hazardous Waste, and Ignitable Hazardous Waste. The inspectors observed a sign at the entrance indicating that it is a hazardous waste storage area and a warning sign as “danger” and “no smoking” (Picture-2). A logbook is maintained in the storage area to track the waste in storage. Mr. Stone retrieved the logbook while we were conducting the inspection so that it could be reviewed as part of the weekly storage logs. The logs were observed to be complete. No deficiencies were noted in the storage area.

Ignitable Waste

There were two 275-gallon totes and one 5-gallon bucket containing lab waste in the ignitable hazardous waste section of the storage. All the containers in the ignitable waste section were observed to be closed, labeled, and dated within the 90-day period. The oldest accumulation date was observed to be 06/07/2021. There were no leaks or spills observed in this section. The secondary containment system was observed to be free of any cracks or gaps. No deficiencies were noted in this area.

Hazardous Waste/Universal Waste

The hazardous waste section did not have any hazardous waste stored at the time of inspection. The inspectors observed six containers containing universal waste. There were two containers of 4-foot used lamps, one container of 8-foot used lamps and three 55-gallon drums containing High Intensity Discharge (HID) used lamps. The oldest accumulation date was observed to be 02/10/2021. In addition, the inspectors observed two 1-cubic yard containers of electronic waste (computer equipment and accessories). All the containers were observed to be closed, labeled, and dated within the one-year storage period. According to Mr. Stone, Safety-Kleen Systems Inc. picked up their universal waste. No deficiencies were noted in this area.

Used Oil

There were twenty-eight 55-gallon used oil drums and one 250-gallon tote containing used oil stored in this area. All the containers were observed to be closed and labeled with the words “used oil”. There was no leaks or spills observed in this area. No deficiencies were noted in this area.

2PX Area

In this area, mixed xylene (Meta, Ortho) is sent through an isomerization process to produce the paraxylene configuration exclusively. The inspectors observed one 55-gallon SAA drum containing spent filters in the production area. The SAA drum was closed, labeled and with a hazard indication label on the drum. No deficiencies were noted in this area.

11) Record Review

Once the walkthrough of the facility was completed, inspectors were escorted to a conference room to conduct a review of the required documentation. The records review included the following:

- Personnel Training
- Contingency Plan and Quick Reference Guide
- Hazardous Waste Inspection Records
- Hazardous Waste Manifests
- Documents showing emergency arrangements with local authorities

Based on the review of the records, the records appeared to be complete.

12) Out-Briefing

An exit briefing was conducted at the conclusion of the inspection. Ms. Shinkunas, Ms. McGee, and Mr. Stone participated in the exit briefing. The observations made during the inspection were discussed and the inspection was concluded.

13) Signed

RAJAGOPAL AIYAR

Digitally signed by RAJAGOPAL AIYAR
Date: 2021.08.19 09:23:31 -04'00'

Raj Aiyar
Environmental Engineer

Date

14) Concurrence

**ARACELI
CHAVEZ**

Digitally signed by ARACELI
CHAVEZ
Date: 2021.08.19 08:41:34
-04'00'

Araceli B. Chavez
Chief
RCRA Enforcement Section

Date

Attachment A

INDORAMA VENTURES XYLENES & PTA LLC

DECATUR, ALABAMA

EPA ID # ALD002985554

JUNE 30, 2021



Picture 1: PTA Unit #5



Picture 2: Hazardous Waste Storage Area