

SUBJECT:

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

CLEAN AIR ACT INSPECTION REPORT Pinnacle Polymers LLC, Garyville, Louisiana

FROM: Karina Kuc

AECAB (IL/IN)

THRU: Nathan Frank, Section Supervisor

AECAB (IL/IN)

TO: File

BASIC INFORMATION

Facility Name: Pinnacle Polymers LLC (Pinnacle)

Facility Location: 1 Pinnacle Ave, Garyville, LA 70051

Date of Inspection: April 22, 2022

EPA Inspector(s):

- 1. Karina Kuc, Environmental Engineer
- 2. Victoria Nelson, Environmental Engineer

Other Attendees:

- 1. Trey Warner, Pinnacle, Environmental/Sustainability Engineer
- 2. Charles Anderson, Pinnacle, EHS Manager
- 3. Bryan Englade, Pinnacle, VP of Corporate Services
- 4. Donavan Becnel, Pinnacle, Production Superintendent
- 5. Jonas Grunditz, Pinnacle, EHS Engineer (closing only)

Contact Email Address: charles.anderson@pinnaclepolymers.com

Purpose of Inspection: to assess compliance with the Clean Air Act and the Title V operating permit

Facility Type: polypropylene plastic pellet production

Regulations Central to Inspection: the polypropylene plant is subject to the New Source Performance Standards (NSPS), 40 CFR 60, Subpart DDD for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry

Arrival Time: 9:00 AM **Departure Time:** 11:20 AM

Inspection Type:

☑ Unannounced Inspection☑ Announced Inspection

OPENING CONFERENCE

- Stated authority and purpose of inspection

The following information was obtained verbally from Pinnacle Polymers employees unless otherwise noted.

Process Description: Raw materials consist of propylene piped from the adjacent Marathon refinery, ethylene and hydrogen. The raw products first go through a purification process, then the purified propylene, ethylene, and a catalyst are fed to a reactor and form a resin. Organic peroxide is used to break the polymer chain. It is then steam heated and blended with various additives (depending on product grade) and extruded and pelletized. The final products, various grades of pelletized polypropylene, are shipped by rail.

Staff Interview: Electricity, steam and water are provided by Marathon and wastewater from Pinnacle goes to Marathon for treatment. Propane is formed in the reactors and sold back to Marathon. The reactors, all pressure safety valves, purge bins and sweeps are routed to the flare. The flare utilizes steam modulation for opacity control. The extruders are controlled by dust collectors. The facility was originally built to produce 700 million pounds of polypropylene annually and now produces one billion pounds of polypropylene annually due to debottlenecking projects over the last 20 years. Pinnacle utilizes a third party to conduct Leak Detection and Repair (LDAR) at the facility.

TOUR INFORMATION

EPA Tour of the Facility: Yes

Data Collected and Observations: EPA observed the flares and walked through the plant. Using the FLIR GFx-320, EPA observed a sample line from reactor 3 that was leaking

Photos and/or Videos: were taken during the inspection.

Field Measurements: were not taken during this inspection.

CLOSING CONFERENCE

Requested documents:

• Flare operation manual

Concerns: EPA communicated that the open sample line that was emitting VOCs is a concern.

DIGITAL SIGNATURES

Report Author:

Kuc, Karina
Digitally signed by Kuc,
Karina
Date: 2022.05.17
13:40:11-05'00'

Frank, Digitally signed by Frank, Nathan Date: 2022.05.17
15:03:10 -05'00'

Facility Name: Pinnacle Polymers

Facility Location: 1 Pinnacle Ave, Garyville, LA 70051

Date of Inspection: April 22, 2022

APPENDICES AND ATTACHMENTS

Appendix A – Digital Video Log

Facility Name: Pinnacle Polymers

Facility Location: 1 Pinnacle Ave, Garyville, LA 70051

Date of Inspection: April 22, 2022

APPENDIX A: DIGITAL VIDEO LOG

1. Inspector Name: Victoria	2. Archival Record Location: Region 5 Electronic
Nelson	Records Center

Image	File Name	Date and Time	Description of Image
Number		(Central time)*	
1	MOV_0249.mp4	4/22/2022 11:20	Flare at Pinnacle Polymers
2	MOV_0251.mp4	4/22/2022 11:38	Steam header going into steam trap
3	MOV_0252.mp4	4/22/2022 11:46	Wastewater pit
4	MOV_0253.mp4	4/22/2022 11:58	Leaking sample line on reactor 3
5	MOV_0254.mp4	4/22/2022 12:00	Closing leaking sample line on reactor 3

^{*}The time reflected on the timestamp is an hour later than the video was recorded