



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
Four Penn Center – 1600 John F Kennedy Blvd
Philadelphia, Pennsylvania 19103-2852

Report Title: Clean Air Act Inspection of Petroleum Recycling Corporation
Inspection Date(s): 09/14/2022
Regulatory Program(s): N/A

Company Name: Petroleum Recycling Corporation
Facility Name: Petroleum Recycling Corporation
Facility Location: 3000 E. Ontario Street
Philadelphia, PA 19134

Latitude: 39.982010 **Longitude:** -75.094650
County/Parish: Philadelphia

AFS Number: N/A
Permit Number: N/A
NAICS Code: 324191 **SIC:** N/A
Unique Project #: 3E22CA022A

Facility Representatives: **Point of Contact**
Carl Forcillo, President ☒
Phone: 215-291-9400 Contact: info@3000east.com

EPA Inspectors:
Bruce Augustine, Environmental Scientist, 3ED21
Phone: 215-814-2131 Contact: augustine.bruce@epa.gov

State/Local Inspectors:
N/A

EPA Lead Inspector

Signature

Bruce Augustine

Date

Four Penn Center – 1600 John F Kennedy Blvd
(3ED21)
Philadelphia, PA 19103-2852

Supervisor

Signature

Kristen Hall

Date

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I. Introduction

The United States Environmental Protection Agency (EPA) conducted a Clean Air Act (CAA) inspection at Petroleum Recycling Corporation (PRC or Facility) to verify compliance with applicable State and Federal regulations. The Philadelphia Department of Health Air Management Services (AMS) was notified of the inspection on August 31, 2022 via email. On September 13, 2022, EPA notified the Facility of the planned inspection via phone. A list of records requested was not sent to the Facility prior to the inspection.

A. Summary of the Facility

The Facility is located at 3000 East Ontario St., Philadelphia, PA. PRC is a privately owned company that receives, and processes used oil. PRC commenced operation at this site approximately 24 years ago and was purchased by the current owner in 2016. This is the only location for PRC. The Facility operates five days a week and has three full-time employees. The site is leased from a private owner other than PRC.

The Facility received a solid waste permit and a water discharge permit from the City of Philadelphia and does not have an air permit of any kind.

PRC is classified as minor source for all criteria pollutants and HAP's. The Facility is subject to, or *potentially* subject to the following federal regulations:

- 40 C.F.R. Part 63, Subpart DD: National Emissions Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations
- 40 C.F.R. Part 63, Subpart JJJJJ: National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

B. Inspection Opening Conference

At 9:03AM on September 14, 2022, EPA inspectors arrived at the Facility for a CAA Inspection and conducted a brief opening conference. PRC was represented by Carl Forcillo. No inspectors from AMS were present for the inspection. EPA inspector, Bruce Augustine, presented his credentials and explained the purpose of the visit was to conduct a CAA inspection to determine if the Facility is subject to any regulations and/or needs a permit. Additionally, EPA informed the facility representatives of their right to claim any confidential business information (CBI). At that time, Carl Forcillo did not claim any photos or documentation as CBI.

II. Site Activity/Process Description

PRC receives used oil and industrial wastewater from various sources. The Facility receives approximately 500,000 gallon/yr of used oil from small garages and small townships in Pennsylvania and New Jersey. PRC receives approximately one truck each day of used oil from the immediate area and one truck twice each week from New Jersey. The used oil is brought to PRC via truck by JRP. JRP is a used oil collection company that is also owned by Carl Forcillo. PRC and JRP are two separate companies. Mr. Forcillo stated that PRC only receives non-hazardous waste and does not accept any materials that contain gasoline. PRC typically receives

used oil from a known customer base and does not sample each load of oil. However, if a new customer sends oil to PRC, a grab sample can be taken and analyzed at PRC's onsite lab. Used oil that arrives via truck undergoes a gravity separation in the truck before the water is pumped off the bottom of the tank and into the wastewater tanks. Oil is then pumped into one of six 15,000-18,000 gallon vertical tanks located outside. Any additional water that separates out of the oil in these tanks is also removed from the bottom. The oil is sent through a filter to remove any larger particles and is shipped via truck off-site to asphalt companies for use in asphalt production. The six vertical tanks can be heated to maintain oil above a certain temperature using a non-contact process boiler that combusts heating oil that is circulated in pipes in the bottom of the tanks. Both the six vertical oil storage tanks and the process boiler are uncontrolled and do not limit the emissions of any pollutant to the atmosphere. The tanks are maintained at atmospheric pressure and are not equipped with any control measures.

Industrial wastewater is also brought into PRC via truck from an outside wastewater plant. This plant is not owned by PEC or JRP. Wastewater is pumped into a settling tank inside the building and through filters to remove any larger material. The building contains four 20,000 gallon vertical tanks to contain the wastewater. The wastewater is sent through one of two oil/water separators. The water from the separators is discharged to the city owned water treatment plant while the oil is sent to the oil tanks.

The opening conference concluded at 9:47AM.

III. Observations

EPA was led on a walkthrough of the Facility at 9:50AM by Carl Forcillo of PRC. EPA inspectors noted photos (Attachment 1) would be taken during the Facility walkthrough. EPA also used a FLIR GF320 camera to observe emission points for emissions. A log of FLIR videos is included with this report (Attachment 2).

A truck was observed pumping used oil at the time of the inspection. A hose was connected to a portable pump which was moving material into tanks. A second hose was observed going from the pump into a drum and smoke was visible from the drum. Mr. Forcillo stated that the pump was being used to temporarily bypass the filter system since the new filter system that was being installed to remove impurities is not yet operational. From this location, emissions were observed from a hatch on top of Tank 6 using the FLIR camera (MOV_0460.mp4). Each of the six vertical oil tanks was observed adjacent to the truck loading area. The hot oil heater was observed near the tank area. The nameplate indicated it was manufactured by HyWay and is Model 77CFCC. There was no date of manufacture visible on the nameplate and the boiler was not operating during the inspection. However, Mr. Forcillo stated that the boiler had been used the day prior to heat Tank 6 to 181°F. No emissions were observed from the other oil tanks with the FLIR camera.

The inspection moved into the building to observe the wastewater process. The main building contains four 20,000 gallon tanks. Mr. Forcillo stated that the fourth tank was installed this year. Two oil/water separators were observed next to the tanks. Both separators were covered during

the inspection. The second oil/water separator was installed 2-3 years ago. The separators and tanks are not equipped with any emission controls. No emissions were observed with the FLIR camera in this area. Several portable water/frac liquid tanks were observed outside on the Facility property. Mr. Forcillo stated that these tanks are used for additional gravity separation of liquids when PRC has excess inventory.

The walkthrough concluded at 10:41AM.

IV. Records Review

No records were requested prior to or during the inspection. Therefore, no records review took place during the inspection.

V. Closing Conference

The closing meeting took place immediately following the plant walkthrough. Bruce Augustine and Carl Forcillo had a brief closing conference to ask additional questions and discuss observations. Mr. Augustine noted that the investigation is on-going, and any areas of concern identified in the final reports do not necessarily reflect a violation or deviation, rather, they are areas that will require further investigation. EPA also noted that they would issue an inspection report within in 60 days, with a copy to the State. In addition, EPA may request records after the inspection for further review. The inspection concluded at 10:48AM.

The following have been identified as *potential* issues during the inspection. They are issues that require either further investigation by EPA or additional information or explanation by PRC.

- During the inspection Mr. Forcillo stated that neither he nor his consultant has calculated the potential to emit (PTE) or actual emissions for any criteria pollutant (NOX, SO₂, CO, VOC, PM) or HAP. PRC currently operates without an air permit from AMS. Without calculating the PTE or actual emissions of NO_x, VOC, etc., it is unclear if PRC is required to have an air permit from AMS, or if the facility is truly a minor source of emissions. PRC operates a combustion source (hot oil boiler) that is a source of NO_x, SO₂, and CO and tanks which are sources of VOC and potentially HAP.
- The existing hot oil HyWay boiler is potentially subject to 40 C.F.R. Part 63, Subpart JJJJJ. This regulation applies to industrial, commercial, and institutional boilers located at area sources (non major) of hazardous air pollutants. If subject to this regulation, this boiler would be subject to various work practices and recordkeeping/reporting requirements contained in the regulation.

VI. List of Attachments

Attachment 1: Photo Log

Attachment 2: FLIR Video Log (Due to size of files, FLIR videos will be sent separately)



1. Tanker Unloading Product and Pump – PRC – 09/14/22



2. Portable Pump Venting to Drum w/Visible Smoke – PRC – 09/14/22



3. New Filter System (not operating) – PRC – 09/14/22



4. Vertical Oil Tanks (Tank 6 front left) – PRC – 09/14/22



5. HyWay Hot Oil Boiler (not operating) – PRC – 09/14/22



6. Oil/Water Separator for Industrial Wastewater - PRC – 09/14/22



7. Oil/Water Separator for Industrial Wastewater – PRC – 09/14/22



8. 20,000 gallon wastewater tanks inside building – PRC – 09/14/22



9. Portable Frac Liquid Settling Tanks – PRC – 09/14/22



10. Truck Loading/Unloading Area and Oil Tanks – PRC – 09/14/22

Attachment 2 – Petroleum Recycling Corp FLIR Video Log September 14, 2022

FLIR Video Log		
Video Number	Description	File Number
1	Emissions from top (hatch) on Tank 6 observed from ground	MOV_0460.mp4
2	Emissions from drum venting from portable pump during truck offload	MOV_0461.mp4
3	Emissions from top of Tank 6 observed from frac tank across lot	MOV_0462.mp4