

# CITY OF PHILADELPHIA DEPARTMENT OF PUBLIC HEALTH AIR MANAGEMENT SERVICES (AMS)

# **Natural Minor Operation Permit OP17-000056**

# Philadelphia Refinery Operations - Evergreen Resources Group, LLC

2700 W Passyunk Avenue, Philadelphia, PA 19145 (Sunoco Partners Marketing and Terminals L.P. (SPMT) Belmont Terminal Site)

3144 W Passyunk Avenue, Philadelphia, PA 19145 (Formerly Philadelphia Energy Solutions Refining & Marketing LLC (PES) Philadelphia Refining Complex Site)

AMS Response Document to Written Comments Received & Virtual Public Hearing on April 7, 2022

Prepared By:

AMS 321 University Avenue Philadelphia, PA 19104

3/22/2023

#### PART I: PROJECT BACKGROUND

In September 2017, the Evergreen Resources Group, LLC submitted an initial Natural Minor Operating Permit (NMOP) Application (OP17-000056) to operate remediation systems at the following two locations:

- The Former Philadelphia Refining Complex (3144 W. Passyunk Avenue, Philadelphia, PA 19145).
- Sunoco Partners Marketing and Terminals L.P. (SPMT) Belmont Terminal (2700 W. Passyunk Avenue, Philadelphia, PA 19145).

The initial public notice on the intent to issue the NMOP was published in the PA Bulletin on November 2, 2019. AMS received numerous requests for a public hearing, but the public hearing was delayed due to the COVID-19 pandemic. In the interim, the facility submitted installation permits for new remediation systems. Since the hearing had not yet taken place for the initial draft NMOP, AMS modified the draft NMOP to include the current remediation systems and restarted the public notice and comment period. The permit currently includes the following systems and locations:

- The Former Philadelphia Refining Complex (3144 W. Passyunk Avenue, Philadelphia, PA 19145). There are two remediation systems at the location. One is a biofilter (Point Breeze Biofilter) and the second remediation system is a closed vent system (Maiden Lane Remediation System).
- Sunoco Partners Marketing and Terminals L.P. (SPMT) [n/k/a Energy Transfer (ET)] Belmont Terminal (2700 W. Passyunk Avenue, Philadelphia, PA 19145). There is one remediation system, a biofilter, at this location (Belmont Terminal Biofilter).

On March 5, 2022, notice of the proposed issuance of the draft NMOP permit and public hearing was published in the Pennsylvania Bulletin. See 52 Pa. B 1365. The 30-day public comment period on the draft NMOP began to run from the publication date. The public hearing on the proposed draft NMOP was held virtually via WebEx Seminar on April 7, 2022, at 6:00 PM.

PART II: SUMMARIES OF COMMENTS AND AMS RESPONSE TO COMMENTS MADE DURING APRIL 7, 2022, PUBLIC HEARING, AND WRITTEN COMMENTS RECEIVED DURING THE 30-DAY COMMENT PERIOD.

<u>Note:</u> AMS received written comment(s) and testimony at the public hearing. The written comments, and the testimony of commenters at the public hearing, raised identical or similar concerns. Accordingly, these comments have been summarized and condensed

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by AMS where possible. The summarized comments, and attendant responses, are presented below in no particular order.

A transcript of the April 7, 2022, Public Hearing, with noted corrections, can be found at https://www.phila.gov/departments/air-pollution-control-board/air-management-notices/.

A copy of all written comments that were received and considered by AMS can also be found at https://www.phila.gov/departments/air-pollution-control-board/air-management-notices/..

**Comment 1:** Commenters were concerned that monitoring requirements were being lifted in the NMOP and the two (2) biofilters (Point Breeze and Belmont Terminal Biofilters) will be exempt from air monitoring.

#### **AMS Response Comment 1:**

The two (2) biofilters never had emission limits or air emission limit monitoring requirements, because biofilters do not have actual stacks. When there is no stack, it is difficult to estimate actual stack exhaust flow rates to determine whether an emission limit has been violated. Without knowing the exhaust flow rate, it is not possible to convert the concentration of a pollutant in ppm into a lbs/hr. In biofilters, pollutants are emitted throughout the biofilter which makes quantifying emissions difficult. The biofilters are also not subject to any emission standards under local, state, or federal air emission limits.

Instead of actual air emission monitoring, there have been various parameter monitoring requirements in place instead, which will still be required in the NMOP. In Section D.4 of the NMOP, monitoring requirements for each biofilter per the most recent construction or installation permits have been incorporated in the operating permit. Monitoring parameters such as the moisture, pH bed, and influent/effluent monitoring will ensure that each biofilter is working properly, will control emissions, and will prevent odor complaints. Attachments A and B were previously issued permits for the Point Breeze and Belmont Terminal Biofilters, respectively. The tables below compare the past and current monitoring requirements for each biofilter. As shown in the tables, each biofilter requires monitoring.

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# POINT BREEZE BIOFILTER

MONITORING HISTORY and PERMIT REQUIREMENTS						
Inspection or Monitoring Parameter	Plan Approval No. 98005 Dated 3/23/199	Plan Approval No. 06170 dated 4/7/2007	Installation Permit No. 15302 dated 11/29/2016	NMOP No. OP17-000059		
CDM-Check List/Weekly	O					
Maintenance Log						
Sewer Influent Vacuum & Vapor Concentration	*N/A	Weekly	Weekly	Weekly		
Treatment Bed, Moisture, Temperature, and Effluent Vapor Concentration. (Cell 1, Cell 2, Cell 3, and Cell 4)	*N/A	Weekly	Weekly	Weekly		
ST-1 Influent Vapor Concentration	*N/A	Weekly	Weekly	Weekly		
TI-4 and T-5 temperature	*N/A	Weekly	Weekly	Weekly		
Other Monitoring						
Parameters						
Steam Injection System Inspection	*N/A	Weekly		Weekly (During Winter Months)		
Steam Valve Position Check			Annual	Annual		
Blower Fan Differential Pressure	*N/A	Weekly	Monthly	Monthly		
Treatment Bed Pressure Inspection	*N/A	Monthly	Monthly	Monthly		
Inspection and Calibration of the Humidification Control System	Monthly	Monthly	Annual	Annual		
Inspection and Calibration of the Temperature Control System	Monthly	Monthly	Annual	Annual		
Media pH Testing	Monthly	Quarterly	Quarterly	Quarterly		
Blower Fan Performance Inspection	*N/A	Quarterly	Quarterly	Quarterly		
Heating Coil/Winterization	Annual	Annual	Annual	Annual		
Smoke Testing of Air Distribution Piping/Treatment Beds	Annual	Annual	Annual	Annual		
Emissions Monitoring	N/A	N/A	N/A	Monthly		

<sup>\*</sup>N/A = original permit did not list requirements

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# BELMONT BIOFILTER MONITOPING HISTOPY and PERMIT REQUIREMENTS

MONITORING HISTORY 8	ind PERMIT	I KEQUIKEN	TENTS
Inspection or Monitoring	Plan	Plan	NMOP No.
Parameter	Approval	Approval	OP17-000059
	No. 1092	No. 13280	
	Dated	dated	
	10/5/2001	12/23/2013	
CDM-Check List/Weekly			
Maintenance Log			
Temperature and	Daily	Weekly	Weekly
Humidity of Influent			
Stream			
Blower Flow Rate,	N/A	Weekly	Weekly
Influent Vacuum, and			
Effluent Pressures			
Treatment Bed	N/A	Weekly	Weekly
Temperatures and			
Influent Pressure			
• Influent Concentration at	N/A	Weekly	Weekly
the Shunk St. Sewer			
Blower and the Effluent			
Concentration at the top			
of the bed.			
Other Monitoring			
Parameters			
Media pH Testing	Monthly	Quarterly	Quarterly
Smoke Testing of Air	After	Annual	Annual
Distribution	filling and		
Piping/Treatment Beds	every 6		
	months		
Emissions Monitoring	N/A	N/A	Monthly

**Comment 2:** One commentor claimed that remediation systems at the site were collectively permitted to release 2.7 tons per year of VOCs and 1 ton per year of Hazardous Air Pollutants and requested that each biofilter should not be exempt from monitoring. Another commenter indicated that emission limits were being removed.

#### **AMS Response to Comment 2:**

As mentioned in the response to Comment 1, the two (2) biofilters never had emission limits or air emission monitoring requirements, because biofilters do not have actual stacks. In biofilters, pollutants are emitted throughout the biofilter which makes quantifying emissions difficult. The biofilters are also not subject to any emission standards under local, state, or federal air emission limits. As outlined in more detail in response to Comment 1, each biofilter is subject to monitoring, and the monitoring requirements have been incorporated into Section D.4 of the draft NMOP.

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Not all remediation systems are given a VOC emission limit of 2.7 tons per rolling 12-month VOCs and a HAP emission limit of 1 ton per 12 month rolling period. Air emission limits are based on the type of source and whether certain local, state, and federal air regulations are applicable to the source. Most remediation systems with exhaust stacks, such activated carbon drums or catalytic oxidizers, will have some type of VOC emission limits; however, biofilters to do not have exhaust stacks, which makes sampling, determining actual flow rates, and quantifying actual emissions difficult. As seen in the previously approved construction permits issued since 1998, there are no emission limits for biofilters. Thus, AMS is not removing or relaxing any emission limits for the biofilters. AMS is also not exempting or relaxing any monitoring requirements for the biofilters. Existing monitoring requirements remain in the draft NMOP.

To address the public concerns, AMS has added a PID monitoring requirement to clarify the monitoring requirement of each biofilter in the attached final issued NMOP. The facility is required to monitor VOC emission at a minimum of three (3) separate locations throughout the filter. If the air effluent from a location is greater than 20 ppm, then the facility will need to investigate, determine the cause, and take any appropriate action(s). This added monitoring requirement will help maintain proper operation of each biofilter, so that each biofilter is able to control emission and odors properly.

**Comment 3:** Some commenters mentioned PA DEP's ACT 2 Program and are concerned about sewer leaks.

• **AMS Response** – The NMOP permit deals with air emission requirements. The ACT 2 requirements do not fall within the scope of the NMOP and are not under AMS's jurisdiction.

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# **ATTACHMENT A**

# **Point Breeze Biofilter Permits**

- 1. Plan Approval No. 98005 Dated 3/23/1998
- 2. Plan Approval No. 06170 dated 4/7/2007
- 3. Installation Permit No. 15302 dated 11/29/2016

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# ATTACHMENT B

# **Belmont Terminal Permits**

- 1. Plan Approval No. 1092 dated 10/5/2001
- 2. Plan Approval No. 13280 dated 12/23/2013

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#### **ATTACHMENT C**

### List of Commenters

- I. Written Comments Received from:
  - 1. Peter Winslow, 7034 Marion Lane, Philadelphia PA 19119
- II. 3/7/2022 Public Hearing Commenters
  - 1. Peter Winslow, SMART Collaboration, LLC
  - Russell Zerbo, Clean Air Council.
     1330 South Melville, Philadelphia PA 19143
  - 3. Craig Melidosian, Ward 40 Republicans. PO Box 3355, Philadelphia PA 19142
  - 4. Lisa Hastings, EJ Committee for PA League of Women Voters Environment Committee.

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