Philadelphia Energy Solutions Refining and Marketing LLC
c/o Hilco Redevelopment Partners
111 South Wacker Drive, Suite 3000
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December 5, 2023

Via Electronic Mail

Dr. Mohamad Mazid
PA Department of Environmental Protection
South East Regional Office
2 East Main Street
Norristown, PA 19104

RE: Supplement to the Closure Plan for the Point Breeze Hazardous Waste Container Storage Pad, the Girard Point Hazardous Waste Container Storage Pad, and the Two Girard Point Hazardous Waste Aboveground Storage Tanks (EPA ID #PAD049791098)

Dear Dr. Mazid:

Philadelphia Energy Solutions Refining and Marketing LLC ("PESRM") hereby submits to the Pennsylvania Department of Environmental Protection ("Department") this Supplement to the Closure Plan for the Point Breeze Hazardous Waste Container Storage Pad, the Girard Point Hazardous Waste Container Storage Pad, and the Two Girard Point Hazardous Waste Aboveground Storage Tanks located at 3144 Passyunk Avenue, Philadelphia, PA 19145 and identified in the Resource Conservation and Recovery Act ("RCRA") Part B Permit #PAD049791098 (the "Permit").

PESRM is pursuing closure of the hazardous waste storage areas in accordance with the Permit. Following the demolition of the concrete pads in each storage area, PESRM collected samples of the underlying soil in accordance with PADEP-approved soil sampling plans submitted in December 2021 and August 2022. The samples were submitted for laboratory analysis to assess whether soil has been impacted by previously unidentified releases to the environment from historic operations of the hazardous waste storage areas.

Part II.I of the Permit provides that "The Permittee shall close the facility as required by 40 CFR 264.111 and in accordance with the Closure Plan." On September 13, 2023, PESRM and the Department amended the January 15, 2020, Consent Order and Agreement ("CO&A") to clarify that the United States Environmental Protection Agency ("USEPA") has interpreted 40 CFR 264.111 to allow for a risk-based clean closure. The following describes how PESRM intends to evaluate the results of soil samples collected from the former hazardous waste storage areas and is provided as a Supplement to the Closure Plan for the Point Breeze Hazardous Waste Container Storage Pad, the Girard Point Hazardous Waste Container Storage Pad, and the Two Girard Point Hazardous Waste Aboveground Storage Tanks located at 3144 Passyunk Avenue, Philadelphia, PA 19145 and identified under RCRA Permit #PAD049791098:

(1) Chemical concentrations in soil will first be compared to PADEP Statewide Health Standard (SHS)Medium Specific Concentrations (MSCs) for non-residential direct contact and non-residential used aquifer migration to groundwater. If soil sampling results from a given storage area are less than MSCs, the area is considered to have met the requirements for risk-based clean closure.

(2) Because the hazardous waste storage areas are within Areas of Interest subject to environmental investigation and cleanup being conducted by Evergreen Resources Management Operations, a

series of Evergreen Resources Group, LLC ("Evergreen") under PADEP Land Recycling Program (Act 2) and the One Cleanup Program, chemical concentrations in soil exceeding PADEP SHS MSCs may be the result of pre-existing contamination associated with historical refinery operations or the presence of historic fill and not with previously unidentified releases associated with operation of the hazardous waste storage areas. If chemical concentrations in soil samples collected by PESRM in the former hazardous waste storage areas exceed MSCs, the concentrations of chemicals with exceedances will be compared to concentrations in shallow soil samples collected by Evergreen in the corresponding AOI under its Act 2 and One Cleanup Program obligations. The comparison of the two data sets will be performed using statistical hypothesis testing consistent with the general methodology used by the PADEP for demonstrating attainment of a Background Standard[1] (per 25 Pa. Code 250.707(d)(1)). If the results of statistical hypothesis testing indicate that the results from soil samples collected from the former hazardous waste storage areas are not significantly different than the data collected by Evergreen in the corresponding AOI, the area is considered to have met requirements for clean closure because the data indicate that soil contamination in the area is consistent with pre-existing contamination and is not the result of previously unidentified releases to the environment associated with operations of the hazardous waste storage area. The pre-existing soil contamination is being addressed under PADEP Act 2 and the One Cleanup Program.

(3) If the results from soil samples collected from a former hazardous waste storage area exceed PADEP SHS MSCs and there is a statistically significant difference between the results and pre-existing soil contamination previously identified by Evergreen, PESRM will pursue risk-based clean closure using approaches consistent with demonstrating attainment of the Site-Specific Standard (SSS) under PADEP Act 2. These approaches may include:
   a. Pathway elimination through implementation of engineering or institutional controls for exposure pathways with exceedances of PADEP SHS MSCs.
   b. Performance of human health and ecological risk assessment in accordance with PADEP and USEPA risk assessment guidance. Human health risk assessment will include evaluation of data using published exposure factors and chemical-specific toxicity information to demonstrate that cumulative excess lifetime cancer risk (ELCR) and noncancer hazard index (HI) are less than risk limits (ELCR $\leq 1x\ 10^{-6}$ and HI ≤ 1.0). Ecological risk assessments will be conducted in accordance with Section II.B.2.e of the Act 2 guidance to screen for potential impacts to ecological receptors identified in 25 Pa Code Section 250.311(a).

   If the data from a given hazardous waste storage area indicate attainment of the SSS using either of the approaches outlined above, the area is considered to have met the requirements for risk-based clean closure.

(4) If the data evaluation conducted in accordance with Items 1 through 3 above indicates that previously unidentified releases to the environment have resulted in an unacceptable risk to human health or the environment, remedial actions will be performed, and the data evaluation process will be repeated until the clean closure performance standard has been achieved.

In accordance with the CO&A between PESRM and the Department dated January 15, 2020, as amended, this Supplement to the Closure Plan will be published on PESRM's website. PESRM will hold a public meeting prior to June 30, 2024 to discuss the soil sampling results and the results from the data evaluation for each storage area. PESRM will provide public notice of the meeting at least 30 days prior to the meeting and will submit a summary of the meeting to the Department as part of its Notification of Closure for each hazardous waste storage area.

[1] The Evergreen data set is not considered a Background Standard; however the methodology is appropriate for the comparison of two data sets.

If you have any questions or comments concerning the information presented in this letter, please do not hesitate to contact Joe Jeray at (781)-590-1125 or via email at jjeray@hilcoglobal.com. We appreciate the Department's consideration.

Sincerely,



Anne R. Garr
Assistant Secretary

cc: Sachin Shankar
Patrick Patterson
Shawn Mountain
Brian Glass
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Joe Jeray