FINAL

Semi-Annual Remediation Status Report August 2024 to February 2025

Former Philadelphia Energy Solutions Refinery

3144 West Passyunk Avenue, Philadelphia, PA

Prepared for

Bellwether District Holdings, LLC
3144 West Passyunk Avenue
Philadelphia, Pennsylvania 19153

Prepared by

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February 2025

Project Number P044.001.008

terraphase engineering

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Acronyms and Abbreviations

Act 2	*Land Recycling and Environmental Remediation Standards Act*
Act 32	*Storage Tank and Spill Prevention Act*
AST	aboveground storage tanks
BDH	Bellwether District Holdings, LLC
bgs	below ground surface
COPC	chemicals of potential concern
CO&A	Consent Order and Agreement
EDB	1,2-dibromoethane
EMC	Environmental Maintenance Company
ICE	internal combustion engine
In	inch
the Facility	Former Philadelphia Energy Solutions Refinery, 3144 West Passyunk Avenue, Philadelphia, Pennsylvania
ft	foot or feet
Langan	Langan Engineering and Environmental Services, Inc.
LNAPL	light non-aqueous phase liquid
MDL	method detection limit
MSC	Medium Specific Concentrations
NIR	Notice of Intent to Remediate
NorthStar	NorthStar Contracting Group, Inc.
PADEP	Pennsylvania Department of Environmental Protection
PES	Philadelphia Energy Solutions
ROW-3	Right-of-Way-3
SHS	Statewide Health Standard
SSS	Site-Specific Standard
Stantec	Stantec Consulting Services, Inc.
Status Report	*Semi-Annual Remediation Status Report*
SVE	soil vapor extraction
Terraphase	Terraphase Engineering Inc.
USEPA	United States Environmental Protection Agency

1 Introduction

On behalf of Bellwether District Holdings, LLC (BDH), Terraphase Engineering Inc. (Terraphase) has prepared this *Semi-Annual Remediation Status Report* (Status Report) to document the progress of activities being completed by BDH to characterize and remediate certain areas of the Former Philadelphia Energy Solutions Refinery (former PES; the Facility). The Facility, which is undergoing redevelopment, is located at 3144 West Passyunk Avenue, Philadelphia, Pennsylvania.

The releases discussed in this *Status Report* do not include those which are associated with "Pre-Existing Contamination" as defined in the 2012 Consent Order and Agreement (CO&A)[1] among the Pennsylvania Department of Environmental Protection (PADEP), Evergreen,[2] and BDH, which are being addressed by Evergreen. In accordance with the CO&A, BDH has assumed responsibility for releases of hazardous or regulated substances from the Facility which have been identified to have occurred after September 8, 2012. The releases discussed herein are:

1. Releases that occurred during refinery operation (i.e., between September 2012 and June 2020) that BDH plans to close under the *Land Recycling and Environmental Remediation Standards Act* (Act 2) Program.
    a) A 2019 release of light naphtha from an aboveground line near 136 process unit at the former refinery (136 Naphtha Release);
    b) A 2013 release from a process sewer near the No. 3 Separator at the former refinery (No. 3 Separator Release);
    c) A 2018 release from the UDEX feed line at the former refinery (UDEX Feed Release); and
    d) A 2016 release east of former tank PB 253 (Release East of Former Tank PB 253); and
    e) A Post-2012 release of light non-aqueous phase liquid (LNAPL) near the Former Point Breeze Tank Farm (Post-September 2012 LNAPL near Former Point Breeze Tank Farm).
2. More recent releases (i.e., after June 2020) that occurred during decommissioning and demolition of the former refinery.
    a) A 2021 release from overhead piping near the 860 Unit Cooling Tower and Hartranft Street (860 Unit and Hartranft Street Release);
    b) A 2021 release from piping along the Dike Roadway near PB 881 (PB 881 Dike Roadway Release);

[1] August 14, 2012 CO&A as amended June 26, 2020 and referred to as the "Buyer-Seller Agreement".

[2] Evergreen Resources Management Operations, a series of Evergreen Resources Group, LLC, is managing the legacy remedial work for Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC ("Evergreen") and Sunoco (R&M), LLC. For clarity, Sunoco, Inc. n/k/a ETC Sunoco Holdings LLC, Sunoco, Inc. (R&M) n/k/a Sunoco (R&M), LLC and Evergreen shall be referred to collectively as "Evergreen" in this Report.

c) A 2022 overflow release from the No. 4 Separator due to a check valve failure and backflow from Tank 1136 to the No. 4A Separator (No. 4 Separator Release); and

d) A 2023 release from subsurface pipe within Right-of-Way-3 (ROW-3) approximately 0.45 miles south of Frontage Road (ROW-3 Release on June 22, 2023 Area).

3. Potential releases identified during the decommissioning and closure of aboveground storage tanks (ASTs) which are being completed in accordance with the *Storage Tank and Spill Prevention Act* (Act 32) and 25 PA Code §245 (Subchapter D).

BDH plans to remediate the releases identified above in accordance with applicable portions of Act 2, 25 PA Code §250, Act 32, and Subchapter D. The location of these release areas is shown on **Figure 1**. The status of the characterization and remediation of each release area is discussed and summarized below.

This is the sixth *Status Report*. It discusses remedial activities completed during the period from August 1, 2024 through February 1, 2025. The next semi-annual *Status Report* will cover activities completed from February 1, 2025 through August 1, 2025.

2 Releases During Refinery Operation

This section summarizes the status of historical releases that BDH plans to close under the Act 2 Program.

2.1 136 Naphtha Release

On February 22, 2019, approximately 53,000 gallons of petroleum-product, identified as light naphtha, was released to the ground surface from defects in above-ground piping associated with former Process Unit 137, near the location of the former Unit 136. The petroleum-product was observed by Stantec Consulting Services, Inc. (Stantec) while on-site performing routine monitoring. The response actions included the removal of water and product from a nearby storm sewer and culvert and from test pits installed along the compromised product line via a vacuum truck. The removed water/product mixture was stored in a waste oil tank and then treated via the on-site wastewater treatment system. The defective section of product line was replaced with new above-ground piping.

In March 2019, Stantec collected 20 soil samples in the vicinity of the release to determine the extent of the impacted area. Samples from the area outside and surrounding the release were collected based on visual observation of the extent of the impacts. The samples were analyzed for the unleaded gasoline parameters (“unleaded gasoline short list”) listed in Table III-5 Short List of Petroleum Products from the PADEP’s (2021) *Land Recycling Program Technical Guidance Manual*.

Between November 25 and December 12, 2019, BDH conducted an excavation of the soil impacted by the release. The excavation of surface soils was completed beneath approximately 130 feet (ft) of product piping that runs north to south, and then toward the storm sewer catch basin located approximately 50 ft to the east. The excavation was guided by visual observations of soil impacts and

excavation depths ranged from approximately 2 to 6 ft below ground surface (bgs). Approximately 377 tons of soil were excavated and transported offsite for disposal at Clean Earth of New Castle, Delaware.

Post-excavation soil sampling[3] conducted by Stantec involved the collection of 12 samples from the excavation base and sidewalls. Samples were analyzed for unleaded gasoline short list parameters. The post-excavation soil sample results identified no chemicals at concentrations greater than the applicable PADEP Statewide Health Standards (SHS) Medium Specific Concentrations (MSC).

A Notice of Intent to Remediate (NIR) was submitted to PADEP on June 2, 2021 (eFacts 850105) by Langan Engineering and Environmental Services, Inc. (Langan) to address the soil-related impacts associated with the release under the non-residential SHS. A copy of the NIR was also submitted to the local municipality (City of Philadelphia) and a legal notification was published in the *Philadelphia Inquirer*. Langan subsequently submitted a *Combined Remedial Investigation Report/Final Report* to PADEP on June 29, 2021, to document the remediation of the release area. PADEP identified technical deficiencies in the report in a letter dated August 26, 2021.

BDH is working to address the technical deficiencies identified by PADEP, including the collection of additional attainment samples in May 2024 and additional characterization samples in October 2024. BDH is currently reviewing the May and October 2024 analytical results and is preparing a Final Report for the 136 Naphtha Release area.

2.2 No. 3 Separator Release

The No. 3 Separator Remediation System was a 10-well total fluids recovery system installed by Evergreen in 2012 to address LNAPL from a prior release in the area of the property along the Schuylkill River near the No. 3 oil-water separator. In 2013, BDH assumed primary responsibility for the No. 3 Separator Remediation System due to petroleum releases from a process sewer system, which connected the 137 Unit to the No. 4 Separator.

BDH continued to operate and monitor the recovery system until October 2021 when it was shut down due to the termination of the compressed air supply from the Facility as part of decommissioning. The compressed air had been used to power the pneumatic pumps for the system. Increases in LNAPL thicknesses were periodically observed in the monitoring and recovery wells associated with the system between 2013 and October 2021. These occasions of increased thickness are likely associated with leaks from the adjacent process sewer. Increased LNAPL thickness/product recovery also coincided with the decommissioning of the 137-process unit during the spring and summer of 2021. Since the completion of decommissioning activities on August 16, 2021, the process sewer has been cleaned to remove residual oil.

After the shutdown of the plant air in October 2021, skimmer pumps have been used to remove measurable LNAPL from the monitoring and recovery wells associated with the No. 3 Separator Remediation System. Stantec (on behalf of BDH) previously conducted bi-weekly LNAPL gauging of the monitoring and recovery wells. Stantec's recent LNAPL gauging data for C-169 is presented in

[3] Sample locations were chosen using a systematic random approach.

Attachment A. LNAPL levels have been generally stable in the monitoring and recovery wells in this area since December 2021 with the exception of monitoring well C-169. The LNAPL level in C-169 increased in March and April 2022 and fluctuated in May and June 2022. When the measurable LNAPL thickness reaches 1 ft, a skimmer pump is used to remove the LNAPL from C-169. The LNAPL level in C-169 last exceeded 1 ft in September 2022; this increase in LNAPL coincided with the end of demolition of the 137 Process Unit. LNAPL levels have not exceeded 1 ft in C-169 since September 2022; however, the skimmer pump was utilized to remove free product in January 2023 when the LNAPL level reached 0.7 ft. The skimmer pump was also utilized in August 2023 while a contractor was in the area, despite the LNAPL level being 0.1 ft at that time. As of January 2023, Stantec has reduced the gauging scope to routine gauging of recovery well C-169. LNAPL levels did not exceed 0.02 ft in C-169 in the period from February 2024 to July 2024; however, the skimmer pump was utilized on three occasions during this time period to remove the thin LNAPL accumulation. No LNAPL was observed from August 2024 to January 2025.

A NIR was submitted to PADEP on March 1, 2022 (eFacts 856439) to address the soil and groundwater-related impacts associated with the release under the non-residential SHS. A copy of the NIR was also submitted to the local municipality (City of Philadelphia) and a legal notification was published in the *Philadelphia Inquirer*. BDH is continuing to conduct active monitoring associated with this release.

BDH is planning to abandon the sewer in place by filling it with flowable fill in early 2025. The objective of the sewer abandonment is to mitigate the potential for residual LNAPL and sludge in the sewer to serve as an ongoing source of contamination to groundwater. Prior to abandonment, the sewer will be jet cleaned using a high-pressure water hose and nozzle and inspected via in-sewer camera survey to verify that obstructions, which may hinder the filling of the pipe, have been removed. Waste from the cleaning process will be collected and either treated through the on-site construction water treatment system or shipped off-site for disposal. After the sewer has been abandoned, BDH anticipates completing additional site characterization in the next six months, which will likely include soil and groundwater sampling and gauging of existing monitoring wells. BDH will evaluate the results of the additional site characterization, determine if additional remedial action is necessary, and will prepare a Remedial Investigation Report and Cleanup Plan as needed.

2.3 UDEX Release

In the summer of 2018, Stantec (on behalf of Evergreen) performed a routine annual well gauging event across the Facility. During their review and analysis of the data, Stantec identified LNAPL in two monitoring wells where LNAPL had not been previously identified (i.e., S-414 and S-283) and an increased LNAPL thickness in an additional well (i.e., S-382). In July 2018, Stantec (on behalf of Evergreen) collected samples of the LNAPL from the wells for analysis and fingerprint comparison to known products and refinery intermediates. The laboratory indicated that the LNAPL was a refinery intermediate called reformate. The laboratory also provided a basic interpretation indicating that the LNAPL collected from the two wells (that previously did not contain LNAPL) was a light petroleum distillate of unknown weathering degree. The LNAPL collected from the well with increased LNAPL thickness was chemically similar to the other samples, but also contained smaller amount of extremely

weathered middle petroleum distillate. Based upon the results, it is believed that comingled LNAPL plumes are present in this area.

In late July 2018, BDH identified a leak from an underground portion of a product line that conveyed reformate (a feed for the UDEX unit). The line was emptied, isolated, bypassed and replaced with a new aboveground line constructed in the same location as the underground line. BDH has retained Stantec to characterize and remediate the release area. Multiple rounds of subsurface investigation have been conducted to characterize the nature and extent of the release. Additionally, over 96,000 gallons of free product was recovered from the subsurface by skimmer pumps operated at three recovery wells between September 2018 and November 2021, and over 24,000 gallons of free product was converted to vapor, extracted, and combusted during a pilot test of soil vapor extraction (SVE) technology between April 2021 and January 2022. A Full-Scale SVE Design Technical Memo was prepared by Stantec in February 2022 and was included in the August 2022 Status Report. The full-scale SVE system, consisting of six internal combustion engines (two double-engine units and two single-engine units) supplied by Remediation Services International and 22 extraction wells began operation in May 2022. Targeted air sparge treatment has been used to augment the SVE system since September 2024. As of January 2025, the air sparge system consists of two blowers each manifolded to inject air into up to five sparge wells at a time. A total of 20 air sparge wells have been installed in the target treatment area interspersed among the existing extraction wells in areas where groundwater concentrations remain elevated. The combined air sparge and SVE remedy is expected to continue to operate for the first six months of 2025. As of January 24, 2025, a total of 278,724 gallons of LNAPL were recovered/destroyed since UDEX release remediation activities began in 2018. A NIR was submitted to PADEP on March 1, 2022 to address the soil and groundwater-related impacts associated with the release under the non-residential SHS. BDH anticipates that a Remedial Investigation Report and Cleanup Plan for this release will be submitted in 2025.

2.4 Release East of Former Tank PB 253

In July 2016, PES personnel discovered product-soaked soil at the ground surface just outside of the emergency containment berm for AST PB 253. As part of immediate response actions, the area around the product-soaked soil was excavated and removed. In addition, an underground product line which ran north-south along the access road adjacent to this area was suspected by PES personnel to have leaked as well. This north-south pipe was unearthed and repaired. It is unknown how much product was released from the pipeline or for how long before remedial actions were initiated.

In December 2021, BDH conducted Site Assessment sampling in the vicinity of PB 253 in support of efforts to close ASTs in Tank Group 05 in accordance with the Storage Tank and Spill Prevention Act (Act 32) and Title 25 Pennsylvania Code (25 Pa. Code) Chapter 245 (Subchapter D). This sampling identified benzene and naphthalene in soil at concentrations greater than the non-residential MSC in samples collected east of PB 253. While there was no obvious evidence of a release to the environment from the tank, since the nature and extent of these constituents in soil had not yet been defined, a potential

release from PB 253 was reported[4] to the PADEP on January 3, 2022. In response, PADEP assigned the potential release to Incident No. 57203.

Subsequent Site Characterization sampling to define the nature and extent of constituent concentrations in soil in the area, data evaluation, and a review of historical documentation led to the determination that the presence of these constituents in soil was not the result of a release from the PB 253 system. Results of the investigation demonstrated that the extent of release-related contamination (predominantly benzene) associated with the 2016 release is limited to soil and proximal to where the product-soaked soil and the north-south underground pipeline were identified. As discussed on a conference call with PADEP on February 9, 2024, and memorialized in the *Tank Group 05 Subsurface Investigation Report* (March 2024), BDH informed the Department that it was withdrawing the release notification for PB 253, and that the soil contamination identified east of PB 253 would be further investigated and managed as necessary by BDH as a separate matter under Act 2. In its May 23, 2024 correspondence, PADEP indicated that the March 2024 report demonstrated that the contamination associated with the 57203 incident was the result of a release outside the regulated storage tank containment area, thus administratively closing incident No. 57203.

A NIR was submitted to PADEP on March 5, 2024 (eFacts 874428) to address the soil-related impacts associated with the release under the non-residential Site-Specific Standard (SSS). A copy of the NIR was also submitted to the local municipality (City of Philadelphia) and a legal notification was published in the *Philadelphia Inquirer*. BDH is currently preparing a Remedial Investigation Report and Cleanup Plan for the release area east of former tank PB 253.

2.5 Post-September 2012 LNAPL near Former Point Breeze Tank Farm

During demolition and redevelopment activities at the Facility, LNAPL having a potential release date after September 8, 2012 was identified near the Former Point Breeze Tank Farm. LNAPL that was released prior to September 8, 2012 is also present in the area and is being addressed by Evergreen as Pre-Existing Contamination (e.g. was released prior to September 8, 2012).

The contamination consists of oil of varying compositions. The specific mechanism of release is unknown. The post-September 8, 2012 LNAPL (i.e., oil) is often located in the same general areas as LNAPL that is considered Pre-Existing Contamination.

A NIR was submitted to PADEP on November 27, 2024 to address the release under the non-residential SHS. A copy of the NIR was also submitted to the local municipality (City of Philadelphia) and a legal notification was published in the *Philadelphia Inquirer*.

BDH is planning the necessary assessment and remediation to address the LNAPL release under the non-residential SHS. Remedial options are still being evaluated; however, they may include LNAPL collection and recovery and use of engineering and institutional controls.

[4] The notification indicated that unknown amounts of petroleum-related substances were potentially released in Tank Group 05 from PB 253.

3 Releases During Decommissioning and Demolition

Below is a summary of the status of releases that have occurred during the decommissioning and demolition of the former refinery.

3.1 860 Unit Cooling Tower and Hartranft Street Release

As discussed in the August 2024 *Status Report*, the 2021 release from overhead piping near the 860 Unit Cooling Tower achieved regulatory closure in April 2024.

3.2 PB 881 Dike Roadway Release

As discussed in the August 2024 *Status Report*, the 2021 release from piping along Dike Roadway near PB 881 achieved regulatory closure in April 2024.

3.3 No. 4 Separator Release

On October 8, 2022, a release from the No. 4 Separator occurred as a result of an overflow from the unit due to a check valve failure and backflow from Tank 1136 to the No. 4A Separator. Based upon the information provided by NorthStar, the oil and water level rose over a portion of the Separator's wall and then flowed along the overland grade of the adjacent roadway and eventually reached the bulkhead along the Schuylkill River. Oil and water then migrated through gaps in the sheet pile bulkheads and entered the Schuylkill River. Oil and water also entered the on-site sewer system and overflowed at several sewer box and sewer inlet locations along the bulkhead. The release area was approximately 6,700 ft^2 and approximately 10,900 gallons of fluids were estimated to have been discharged.

NorthStar Contracting Group, Inc. (NorthStar) notified PADEP and the National Response Corporation of the release on October 8, 2022 and conducted a prompt interim response, including the deployment of containment booms and sweeps on the Schuylkill River, application of approximately 25 bags of oil dry material, isolation and removal of oil contaminated debris, removal of the contaminated debris between the sheet pile walls, and vacuuming of oil and water from around the exterior of the sewer boxes that overflowed. Approximately 106 tons of surficial soil (between 6 and 12 inches [in] bgs) was excavated and transported off-site for disposal.

Between February and March 2023, BDH conducted initial soil sampling activities in and around the release to characterize the nature and extent of chemicals of potential concern (COPC) in soil in the area of the No. 4 Separator as a result of the release. The targeted constituents were detected at concentrations below the non-residential SHS MSCs at all locations except SEP4-SB19. In September 2023, BDH developed and implemented a sampling plan to demonstrate attainment of the PADEP SHS and/or SSS under Act 2. Sampling locations were selected at random via PADEP's Systematic Random Sampling Workbook. The results from attainment sampling indicate that no additional remediation is warranted. The soil sample results have demonstrated attainment of the SHS.

A NIR was submitted to PADEP on March 12, 2024 (eFacts 874442) to address the soil-related impacts associated with the release under the non-residential SHS. A copy of the NIR was also submitted to the local municipality (City of Philadelphia) and a legal notification was published in the *Philadelphia Inquirer*. BDH subsequently submitted a Final Report to PADEP on April 8, 2024 to document the remediation of the release area. On June 4, 2024, PADEP issued a *Letter of Technical Deficiency* for the report that identified one technical deficiency. Based on conversations with PADEP, BDH performed limited additional sampling in the area of the No. 4 Separator release. BDH submitted a *Response to PADEP Comments on the Final Report* to PADEP on July 19, 2024. PADEP issued its Statewide Health Standard Final Report Approval on September 4, 2024.

3.4 ROW-3 Release on June 22, 2023 Area

On June 22, 2023, a petroleum/water mix was released during demolition activities and removal of a subsurface pipe within ROW-3, approximately 0.45 miles south of Frontage Road. Environmental Maintenance Company (EMC) conducted immediate response actions which included the removal of pooled liquids via vacuum truck and placing oil absorbent pads in the area. EMC identified a 4-in oval shaped hole on the underside of the pipe as the origin of the release. Approximately 40-50 gallons of fluids were estimated to have been released. The liquids removed from the release area were contained in frac tanks on site. Between June and July 2023, impacted soil identified by visual observations and field screening was excavated down to a maximum depth of 7 ft bgs. Approximately 165 cubic yards of soil were removed and transported off-site for disposal.

In July 2023, BDH developed and implemented a sampling plan to demonstrate attainment of the PADEP SHS and/or SSS under Act 2. Sampling locations were selected at random via PADEP's Systematic Random Sampling Workbook. Concentrations of the targeted constituents were detected at concentrations below the non-residential SHS MSCs. While 1,2-dibromoethane (EDB) was not detected in soil, 10 out of 14 samples exhibited method detection limits (MDL) greater than the non-residential SHS MSCs by USEPA Method 8260D. The attainment sampling locations were re-sampled in August 2023 to analyze EDB by United States Environmental Protection Agency (USEPA) Method 8011. All EDB concentrations found during the August 2023 soil sampling event were below the non-residential SHS MSCs. The results from attainment sampling indicate that no additional remediation is warranted.

A NIR was submitted to PADEP on April 10, 2024 (eFacts 875427) by Langan to address the soil-related impacts associated with the release under the non-residential SHS. A copy of the NIR was also submitted to the local municipality (City of Philadelphia) and a legal notification was published in the *Philadelphia Inquirer*. Langan prepared a *Final Report* which was submitted to PADEP on November 18, 2024. PADEP issued its Statewide Health Standard Final Report Approval on January 16, 2025.

4 Releases Identified during AST Closure

Removal of the ASTs and associated infrastructure began in December 2020. In accordance with Terraphase's (2021) *Aboveground Storage Tank Closure Work Plan*, which was approved by the PADEP

on April 23, 2021, Site Assessment sampling was initiated in May 2021 for tanks that had been adequately decommissioned and demolished to facilitate sampling. Monthly status summary reports[5] and monthly teleconference calls have occurred since early May 2021 to document for PADEP the work performed as part of the AST Closure effort.

As detailed in the *Aboveground Storage Tank Closure Work Plan*, the work is progressing in a phased approach and instead of submitting individual Site Assessment results, closure reports, and closure forms for individual tanks, the Site Assessment and Site Characterization results for tank groupings will be documented in Tank Group Closure reports. The property has been divided into nine Tank Groups[6] (**Figure 2**). To date, demolition has been performed in all nine tank groups (Tank Groups 01 through 09). Additional details relating to AST Closure progress are available in Terraphase's *Monthly Status Summary Reports,* and updates to the AST Closure program are in each Semi-Annual Status Report. *Site Characterization Reports* have been submitted for Tank Groups 01, 02, 03, 04, 06, and 07. BDH has received feedback from PADEP on the Site Characterization Reports and will address these comments in future submissions. A revised *Tank Group 02 Site Characterization Report* was submitted on July 22, 2024. As requested by PADEP, the name of the report was revised to *Tank Group 02 Release Investigation Report* on October 18, 2024. BDH is awaiting a response from PADEP.

A *Tank Group 05 Closure Report Addendum* was submitted on September 21, 2023, indicating that the exceedances of MSCs identified during Site Assessment sampling were not related to a release from the regulated storage tank systems. This release, located east of former AST PB 253, will be closed under Act 2 and is discussed in Section 1. In response to a request from PADEP for additional information regarding subsurface soil conditions associated with Incident No. 57203 (and other historical release areas) in the vicinity of PB 253, a *Tank Group 05 Subsurface Investigation Report* was submitted to PADEP on March 26, 2024. PADEP issued its Closure Report Approval for Tank Group 05 on May 23, 2024.

Soil and groundwater Site Assessment sampling was completed in Tank Group 07A, and there was no indication of a release to the environment from the tanks. A *Tank Group 07A Closure Report* was submitted to PADEP on February 20, 2024. PADEP has requested that this report is included in the submittal in the forthcoming Site Characterization Report for Tank Group 07.

A *Tank Closure Report* for Tank Group 08 was submitted on October 8, 2024, indicating that the lead concentrations in soil that exceeded the MSCs identified during Site Assessment sampling were not related to a release from the regulated storage tank systems, but a result of Pre-Existing Contamination (i.e., associated with historic fill material). Contamination identified during Site Assessment sampling will be managed by Evergreen under their primary facility ID 780190 under Act 2. BDH is requesting that PADEP close Incident No. 60059 and the ASTs in Tank Group 08 in accordance with the provisions of Act 32. BDH is awaiting a response from PADEP.

[5] As of December 13, 2024, status reporting transitioned from biweekly to monthly.

[6] As of December 2022, aboveground storage tanks GP R 250 and GP R 251 have been re-assigned to Tank Group 07A due to inaccessibility for Site Assessment sampling and was evaluated separately from Tank Group 07. In March 2023, Tank Group 09, located in the southern portion of the Girard Point Refinery, was added to the AST Closure scope of work.

A *Release Investigation Report* for Tank Group 09 was submitted on December 16, 2024, indicating that benzene and cumene concentrations in soil that exceeded the MSCs identified during Site Assessment sampling were not related to a post-September 2012 release from the regulated storage tank systems, but related to Pre-Existing Contamination. Contamination identified during Site Assessment sampling will be managed by Evergreen under their primary facility ID 780190 under Act 2. BDH is requesting that PADEP close Incident No. 60221 and the ASTs in Tank Group 09 in accordance with the provisions of Act 32. BDH is awaiting a response from PADEP.

5 Closing

Should you have any questions, please contact Amy Piccone (apiccone@hilcoglobal.com) and Julianna Connolly (jconnolly@hilcoglobal.com) at HRP Group.

Figures

Key Map

0 2,000 4,000 6,000 8,000 ft

Post-September 2012 LNAPL near Former Point Breeze Tank Farm

6/22 Release Area

860 Unit Cooling Tower and Hartranft Street Release Area

PB 881 Dike Roadway Release Area

No. 3 Separator Release Area

UDEX Release Area

No. 4 Separator Release Area

136 Naphtha Release Area

Release East of Former Tank PB 253

Legend

Property Boundary

Act 2 Area

Achieved Regulatory Closure by PADEP

Pending Regulatory Closure by PADEP

N

0 250 500 750 1,000 ft

1 Inch = 750 Feet

Note: Aerial Imagery Source: NearMap (October 2024)

SAFETY FIRST

terraphase engineering

CLIENT:	Bellwether District Holdings, LLC
PROJECT:	February 2025 Semi-Annual Status Summary
PROJECT NUMBER:	P044.001.008

Post-2012 Release Areas Pursuing Act 2 Closure

FIGURE 1

N:\GIS\Prj\P044.001_PESRM-PES\QGIS_QGZ and GPKG\Branch_On Call Tasks\(20250124)QGZ328_P044.002_BDH_OnCallTasks.qgz Figure 1 - Post-2012 Release Areas Pursuing Act 2 Closure 2023-10-17T10:19:57.000 Created by: M.Civitillo Checked by: N. Scala

POINT BREEZE NORTH YARD

POINT BREEZE WEST YARD

POINT BREEZE SOUTH YARD

GIRARD POINT

SCHUYKILL RIVER TANK FARM

Legend

- Property Boundary
- Tank Group 01 Boundary
- Tank Group 02 Boundary
- Tank Group 03 Boundary
- Tank Group 04 Boundary
- Tank Group 05 Boundary
- Tank Group 06 Boundary
- Tank Group 07/07A Boundary
- Tank Group 08 Boundary
- Tank Group 09 Boundary

N

0 500 1,000 1,500 ft

1 Inch = 1000 Feet

Note: Aerial Imagery Source: NearMap (October 2024)

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CLIENT: Bellwether District Holdings, LLC

PROJECT: February 2025 Semi-Annual Status Summary

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Tank Groups

FIGURE 2

N:\GIS\Prj\P044.001_PESRM-PES\QGIS_QGZ and GPKG\Branch_On Call Tasks\(20250124)QGZ328_P044.002_BDH_OnCallTasks.qgz Figure 2 - Tank Groups 2023-10-17T10:19:57.000 Created by: M.Civitillo Checked by: N. Scala

Attachment A

Table 1 - 3 Separator LNAPL Gauging Data

Table 1
3 Separator LNAPL Gauging Data

Well ID	Gauging Date	LNAPL Thickness (ft)	Notes
C-169	8/1/2024	0.00	
C-169	8/6/2024	0.00	
C-169	8/23/2024	0.00	
C-169	8/28/2024	0.00	
C-169	9/4/2024	0.00	
C-169	9/11/2024	0.00	
C-169	9/18/2024	0.00	
C-169	9/25/2024	0.00	
C-169	10/1/2024	0.00	
C-169	10/16/2024	0.00	
C-169	10/24/2024	0.00	
C-169	10/28/2024	0.00	
C-169	11/8/2024	- -	No access due to site conditions
C-169	11/15/2024	- -	No access due to site conditions
C-169	11/20/2024	- -	No access due to site conditions
C-169	11/26/2024	- -	No access due to site conditions
C-169	12/6/2024	0.00	
C-169	12/11/2024	- -	No access due to site conditions
C-169	12/17/2024	- -	No access due to site conditions
C-169	1/9/2025	0.00	
C-169	1/16/2025	0.00	
C-169	1/24/2025	- -	No access due to site conditions
C-169	1/30/2025	0.00	

Notes
LNAPL - light non-aqueous phase liquid
LNAPL thickness is in feet and was measured with an optical interface probe (OIP) to the nearest one hundredth of a foot
C-169 - northing 2202266.914, easting 2680430.61