

FINAL

Semi-Annual Remediation Status Report February 2025 to August 2025

Former Philadelphia Energy Solutions Refinery
3144 West Passyunk Avenue, Philadelphia, PA

Prepared for

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Acronyms and Abbreviations

Act 2	<i>Land Recycling and Environmental Remediation Standards Act</i>
Act 32	<i>Storage Tank and Spill Prevention Act</i>
AOI	Area of Interest
AST	aboveground storage tanks
BDH	Bellwether District Holdings, LLC
bgs	below ground surface
COPC	chemicals of potential concern
CO&A	Consent Order and Agreement
cy	cubic yard(s)
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
PWD	Philadelphia Water Department
ROW-3	Right-of-Way-3
SHS	Statewide Health Standard
SRTF	Schuylkill River Tank Farm
SSS	Site-Specific Standard
Stantec	Stantec Consulting Services, Inc.
Status Report	<i>Semi-Annual Remediation Status Report</i>
SVE	soil vapor extraction
Terraphase	Terraphase Engineering Inc.
USC	underground containment structure



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 2019 release of light naphtha from an aboveground line near 136 process unit at the former refinery (136 Naphtha Release);
 - A 2013 release from a process sewer near the No. 3 Separator at the former refinery (No. 3 Separator Release);
 - A 2018 release from the UDEX feed line at the former refinery (UDEX Feed Release);
 - A 2016 release east of former tank PB 253 (Release East of Former Tank PB 253);
 - 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); and
 - A Post-2012 release of LNAPL South of Former 870 Unit (Post-September 2012 LNAPL South of Former 870 Unit); and
 - A Post-2012 release of LNAPL near Tank 37 in the Schuylkill River Tank Farm (SRTF) (Post-2012 LNAPL Near Tank 37, SRTF).
2. More recent releases (i.e., after June 2020) that occurred during decommissioning and demolition of the former refinery:

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

² Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC (“Evergreen”) is managing the legacy remedial work for Sunoco (R&M), LLC. For clarity, Sunoco, Inc. n/k/a ETC Sunoco Holdings LLC, Sunoco, Inc. (R&M) f/k/a Sunoco (R&M), LLC n/k/a Energy Transfer (R&M), LLC effective 4/19/2021 and Evergreen shall be referred to collectively as “Evergreen” in this Report.



- A 2021 release from overhead piping near the 860 Unit Cooling Tower and Hartranft Street (860 Unit and Hartranft Street Release);
 - A 2021 release from piping along the Dike Roadway near PB 881 (PB 881 Dike Roadway Release);
 - A 2022 release from an underground containment structure caused by a water main break along River Road (August 2022 River Road Release Area);
 - 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
 - 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 has or 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 locations of these release areas are shown on **Figures 1** and **2**. The status of the characterization and remediation of each release area is discussed and summarized below.

This is the eighth *Status Report*. It discusses remedial activities completed during the period from February 1, 2025 through August 1, 2025. The next semi-annual *Status Report* will cover activities completed from August 1, 2025 through February 1, 2026.

2 Releases During Refinery Operation

This section summarizes the status of prior 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 soil 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 off-site for disposal at Clean Earth of New Castle, Delaware.

Post-excavation soil sampling³ 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 PF No. 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 submitted a *Remedial Investigation and Final Report* to PADEP on April 17, 2025 to document the additional efforts performed by BDH to address the deficiencies identified by PADEP. As part of this effort, additional “post-excavation” attainment sampling was completed within the footprint of the prior excavation area in May 2024 at 20 locations determined using PADEP’s Systematic Random Sampling tool. Samples were analyzed for unleaded gasoline short list parameters. The results of the sampling indicated two locations with concentrations of benzene greater than the applicable MSCs.

Based on the May 2024 sampling results, BDH completed additional soil characterization sampling in October 2024 to help support a determination of the vertical and horizontal extent of impacts associated with the February 2019 release. This effort included the collection of additional surface and subsurface soil samples from 14 locations, each analyzed for benzene and toluene. The results of the October 2024 soil sampling identified benzene or toluene in 10 of the 14 locations at concentrations greater than the applicable MSCs. BDH determined that benzene and toluene are present in soil in the general area as a result of Pre-Existing Contamination not associated with the February 2019 release. PADEP identified technical deficiencies in the report in a letter dated June 9, 2025. BDH addressed the technical deficiencies identified by PADEP within the 60-day review period and submitted a *Revised Remedial Investigation and Final Report* to PADEP on August 7, 2025. BDH is awaiting comments from PADEP.

³ Sample locations were chosen using a systematic random approach.



2.2 No. 3 Separator Release

The No. 3 Separator Remediation System was a 10-well total fluids recovery system installed 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. PESRM took over operation of the recovery system from Evergreen in 2013 after additional LNAPL was found to be impacting the area.

The recovery system operated until it was decommissioned in November 2021 due to a lack of recoverable LNAPL. After the shutdown of the plant air, 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 **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. No LNAPL was observed from February 2025 to July 2025, beyond a sheen observed in May and July 2025.

A NIR was submitted to PADEP on March 1, 2022 (eFacts PF No. 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*.

Following the closure of the process sewer piping in January and February 2025, Terraphase conducted site characterization activities (i.e., groundwater sampling) in the No. 3 Separator area in March and April 2025 at 13 existing monitoring wells. Groundwater samples were analyzed for PADEP's Short List of Petroleum Products inventory. Measurable LNAPL was identified in two monitoring wells. Dissolved-phase groundwater samples were collected from the wells with measurable LNAPL. The March 2025 and April 2025 groundwater analytical results identified benzene concentrations greater than the applicable MSCs in the two monitoring wells with measurable LNAPL. No other targeted constituents were identified at concentrations greater than the applicable MSCs during these two groundwater sampling events.

To further evaluate the LNAPL identified in these two wells, a baildown test was performed in March 2025 to estimate LNAPL transmissivity. The results and associated observations demonstrated that LNAPL is residual and no longer mobile or recoverable and therefore, the LNAPL has been remediated to the maximum extent possible (MEP).

An updated NIR was submitted to PADEP on April 17, 2025 (eFACTS No. 856439). A copy of the NIR was sent to the local municipality (City of Philadelphia) and a legal notification was published in *The Philadelphia Inquirer* with service to the area. The updated NIR indicated that BDH intended to remediate groundwater and LNAPL at the Site to attain the SSS, via pathway elimination. BDH submitted a *Remedial Investigation Report and Cleanup Plan* for this release to PADEP on August 8, 2025.

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 reformat. 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 reformat (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 consisted of two blowers each manifolded to inject air into up to five sparge wells at a time. A total of 20 air sparge wells were installed in the target treatment area interspersed among the existing extraction wells in areas where groundwater concentrations remained elevated. The combined air sparge and SVE remedy continued to operate for the first six months of 2025, with one unit running until July 31, 2025. As of July 25, 2025, a total of 293,909 gallons of LNAPL were recovered/destroyed since UDEX release remediation activities began in 2018. Based on groundwater sampling conducted in June 2025, benzene concentrations in groundwater continue to support plume stability and source decay.



A NIR was submitted to PADEP on March 1, 2022 (eFACTS No. 856431) to address the soil and groundwater-related impacts associated with the release under the 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 the area was suspected by PES personnel to have leaked as well. The 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 reported⁴ 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 concentrations 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 PF No. 874428) to address the soil-related impacts associated with the release under the 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 anticipates that a *Remedial Investigation Report and Cleanup Plan* for this release will be submitted in 2025.

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

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

In April and July 2019, Evergreen identified changes in measurements of apparent LNAPL thickness in two monitoring wells near the Former Point Breeze Tank Farm. The contamination consists of oil of varying compositions. The specific mechanism of release is unknown. The LNAPL has a potential release date after September 8, 2012. 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).

A NIR was submitted to PADEP on November 27, 2024 (eFacts PF No. 883479) 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 completed initial LNAPL and soil investigations in April and August 2023, respectively, in the area. Based on the results of the 2023 investigations, BDH installed a monitoring well in the area and completed additional LNAPL characterization in May 2025 with the intent of confirming the presence, or lack thereof, of LNAPL in the area and if present, determining contamination that is associated with Post-2012 release(s) or Pre-Existing Contamination.

BDH determined that LNAPL is still present in the area and is evaluating what can be attributed to Pre- and Post-2012 Contamination. Additionally, for LNAPL that is determined to be associated with Post-2012 release(s), remedial options are still being evaluated; however, they may include LNAPL collection and recovery and use of engineering and institutional controls.

BDH anticipates that a *Remedial Investigation Report* for this release will be submitted in 2025.

2.6 Post-September 2012 LNAPL South of Former 870 Unit

In June 2019, Evergreen identified changes in measurements of apparent LNAPL thickness in one monitoring well south of Former 870 Unit. The specific mechanism of release is unknown. The LNAPL has a potential release date after September 8, 2012. 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).

A NIR was submitted to PADEP on April 28, 2025 (eFacts PF No. 883479) 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 completed initial LNAPL and soil investigations in April and August 2023, respectively, in the area. Based on the results of the 2023 investigations, BHD installed a monitoring well in the area and completed additional LNAPL characterization in May 2025 with the intent of confirming the presence, or lack thereof, of LNAPL in the area and if present, determining contamination that is associated with Post-2012 release(s) or Pre-Existing Contamination.

BDH gauged the newly installed well multiple times in May and June of 2025 and did not identify LNAPL during any of the gauging events. Based on these observations, it was determined that the LNAPL is residual and no longer mobile or recoverable and therefore, the LNAPL has been remediated to the MEP. BDH anticipates that a *Remedial Investigation Report and Cleanup Plan* for this release will be submitted in 2025.

2.7 Post-2012 LNAPL near Tank 37, SRTF

In February 2019, Evergreen identified changes in measurements of apparent LNAPL thickness in one well east of Tank 37. The LNAPL has a potential release date after September 8, 2012. 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).

A NIR was submitted to PADEP on July 1, 2025 (eFacts PF No. 885457) 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 currently conducting a field investigation to support the preparation of a *Remedial Investigation Report*.

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 August 2022 River Road Release Area

In August 2022, three Philadelphia Water Department (PWD) subsurface water line leaks occurred along River Road. One of the water leaks caused a breach in the bottom of an underground containment structure (UCS) along River Road. The UCS contained refinery piping which was no longer in use. During

a subsequent excavation to investigate the water line leaks, stained soil was observed. Residual oil present in the UCS was believed to be the source of the stained soil.

A NIR was submitted to PADEP on February 14, 2025 (eFacts PF No. 882095) 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 completed a soil investigation in May and August 2024. The targeted constituents were detected at concentrations below the non-residential SHS MSCs. BDH submitted a *Remedial Investigation Report/Final Report* on April 7, 2025. PADEP issued its SHS Final Report Approval on June 3, 2025.

3.4 No. 4 Separator Release

As discussed in the February 2025 *Status Report*, the 2022 release from the No. 4 Separator achieved regulatory closure in September 2024.

3.5 ROW-3 Release on June 22, 2023 Area

As discussed in the February 2025 *Status Report*, the 2023 release that occurred during demolition activities and removal of a subsurface pipe within ROW-3 achieved regulatory closure in January 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 reports⁵ 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 Groups⁶ (**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*

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. However, Tank Group 07A will be included in the Tank Group 07 report. 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.

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. As discussed with PADEP, since Site Assessment and Site Characterization work associated with the Tank Groups demonstrated that elevated chemical concentrations greater than the applicable MSCs identified in each area are a result of Pre-Existing Contamination (e.g. was released prior to September 8, 2012), these revised documents will be submitted as Release Investigation Reports. Similarly, BDH prepared Release Investigation Reports for Tank Group 08 and 09 since Site Assessment work in these areas demonstrated that the elevated chemical concentrations greater than the applicable MSCs are a result of Pre-Existing Contamination.

A summary of the closure status of each Tank Group is summarized below.

Tank Group Closure Status

Tank Group	Incident Number	Report Type	Submittal Date	Notes
01	56446	Release Investigation Report	Pending	
02	56377	Release Investigation Report	7/22/2024	Closure Report approval received on 2/21/2025.
03	56663	Release Investigation Report	6/10/2025	BDH is awaiting a response from PADEP.
04	57976	Release Investigation Report	6/26/2025	BDH is awaiting a response from PADEP.
05	57203	Site Characterization Report; Closure Report Addendum; Subsurface Investigation Report	12/23/2022; 8/14/2023; 3/26/2024	Closure Report approval received on 5/23/2024.
06	58434	Release Investigation Report	Pending	
07/07A	57973			
08	60059	Release Investigation Report	10/8/2024	Closure Report approval received on 4/28/2025.
09	60221	Release Investigation Report	12/16/2024	Closure Report approval received on 5/7/2025.

5 Closing

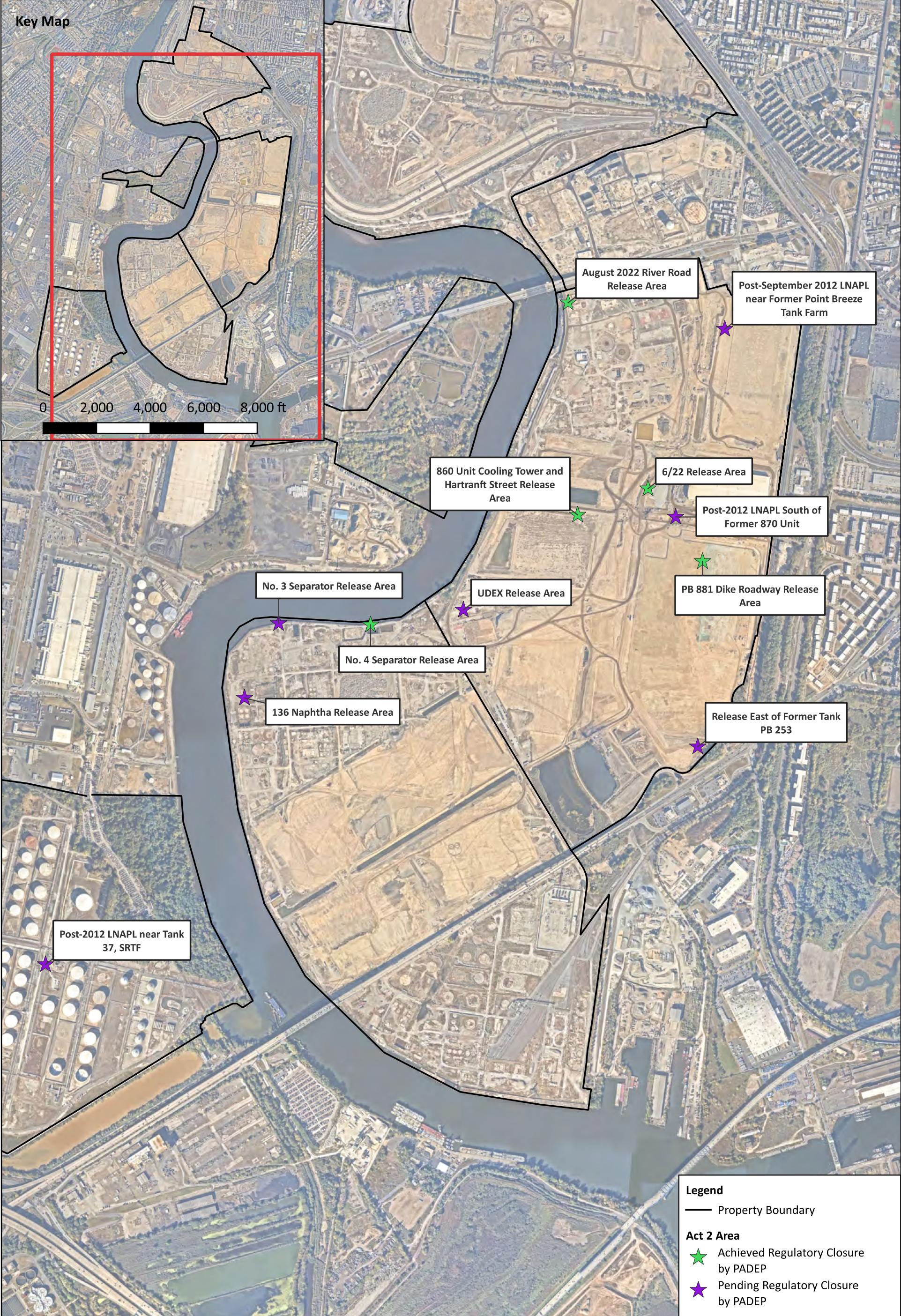
Should you have any questions, please contact Amy Piccone (apiccone@hilcoglobal.com) and Julianna Connolly (jconnolly@hilcoglobal.com) at HRP Group.



Figures

- 1 Post-2012 Release Areas Pursuing Act 2 Closure
- 2 Tank Groups





N:\GIS\Prj\0404.001_PESRM-PES\OGIS\OGZ and GPKG\Branch_On Call Tasks\20250711\OGZ2328_P044.002_BDH_OnCallTasks.qgz Figure 1 - Post-2012 Release Areas Pursuing Act 2 Closure 2023-10-17T10:19:57.000 Created by: M.Civittello Checked by: N. Scala

 0 500 1,000 1,500 ft 1 Inch = 1000 Feet Note: Aerial Imagery Source: NearMap (October 2024)	SAFETY FIRST	CLIENT: Bellwether District Holdings, LLC	Post-2012 Release Areas Pursuing Act 2 Closure
		PROJECT: August 2025 Semi-Annual Status Summary	
			PROJECT NUMBER: P044.001.008

Legend

— Property Boundary

Act 2 Area

★ Achieved Regulatory Closure by PADEP

★ Pending Regulatory Closure by PADEP

N:\GIS\Prj\P044.001_PESRM-PES\GIS\QGZ and GPKG\Branch_On Call Tasks\20250711\QGZ328_P044.002_BDH_OnCallTasks.qgz Semi-AnnualRpt - Figure 2 - Tank Groups 2023-10-17T10:19:57.000 Created by: M.Ingling Checked by: N.Scala



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

Notes:
Tank Groups with grey shading have been closed.
Aerial Imagery Source: NearMap (October 2024)

N

05001,0001,500 ft

1 Inch = 1000 Feet

<div><div>SAFETY FIRST</div><div></div></div>	CLIENT: Bellwether District Holdings, LLC	Tank Groups
	PROJECT: August 2025 Semi-Annual Status Summary	
	PROJECT NUMBER: P044.001.008	FIGURE 2

Attachment A

Table 1 - 3 Separator LNAPL Gauging Data



Table 1**3 Separator LNAPL Gauging Data**

Well_ID	Gauging Date	LNAPL Thickness	Notes
C-169	2/6/2025	N/A	No access due to poor road conditions/mud
C-169	2/12/2025	0.00	Nearby process sewer vacuumed empty just prior to monitoring
C-169	3/15/2025	N/A	Process sewer filled with concrete; C-169 was being sampling by Terraphase
C-169	3/27/2025	0.00	
C-169	4/10/2025	0.00	
C-169	4/17/2025	0.00	
C-169	4/23/2025	0.00	
C-169	5/2/2025	N/A	No access due to heavy equipment blocking roadway
C-169	5/6/2025	0.00	Sheen observed
C-169	5/12/2025	0.00	Sheen observed
C-169	5/27/2025	0.00	
C-169	6/3/2025	0.00	
C-169	6/25/2025	0.00	Sheen observed
C-169	7/3/2025	0.00	Sheen observed
C-169	7/18/2025	0.00	
C-169	7/23/2025	0.00	
C-169	7/30/2025	0.00	

Notes:

LNAPL - light non-aqueous phase liquid

N/A - not analyzed

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