

# Sitewide Remedial Investigation Report (RIR) Addendum- Plain Language Overview

## Summary

- The activities summarized in this report include work completed after RIRs were submitted and approved for various Areas of Interest (AOIs) at the former Philadelphia Refinery.
- As other ongoing or future characterization activities are completed at the facility, they will be summarized similarly in RIRs or other Act 2 reports where appropriate.

## Activities

This report presents 4 data sets:

### AOI 5: Cumene Area Investigation:

- At the recommendation of Pennsylvania Department of Environmental Protection (PADEP), Evergreen conducted further investigation in an area with high levels of cumene, a petroleum compound. Evergreen collected additional soil and groundwater samples as well as performed desktop evaluations of the area conditions.
- Data showed levels consistent with past soil concentrations and high levels of cumene in groundwater onsite but did not identify (light non-aqueous phase liquid (LNAPL).
- The new soil and groundwater data still demonstrate that the cumene is delineated (known and defined extent), and the data do not change the conclusions of the previously approved RIR.

### Sitewide: Forensics for Potential Recent Releases

- Evergreen collected oil samples from wells where levels of oil had recently gone up. Evergreen had the samples analyzed to see if they might be from a new release to the environment.
- The data showed that several areas could have oil releases that happened after Philadelphia Energy Solutions Refining & Marketing, LLC (PESRM) bought and assumed operation of the former Philadelphia Refinery.

### Sitewide: Soil Sampling, Lead in Surface Soil

- Evergreen collected more soil samples around the property boundary for lead analysis.
- The samples showed lead levels below PADEP standards near the property boundary except for the northwestern corner of AOI 9, the Schuylkill River Tank Farm (SRTF).
- Before SRTF was a tank farm, the area was filled by the City of Philadelphia to elevate the land surface from its natural level. The source of much of the lead is likely from the fill which was placed before the 1950s.

### Sitewide: Natural Source Zone Depletion

- Evergreen collected samples of air coming out of the ground to measure whether microbes are breaking down oil underground.

- The samples showed that natural biological breakdown is likely occurring in many areas. This information will be used to help choose what remediation methods Evergreen will select for future cleanup activities.

**For more information:**

- View the detailed report that was submitted to PADEP (Report attached herein and can also be downloaded from: [www.phillyrefinerycleanup.info/act-2-documents](http://www.phillyrefinerycleanup.info/act-2-documents))
- During the public comment period, May 20, 2022 through June 19 2022, comments, and questions regarding the report may be submitted to Evergreen which will be addressed and submitted to PADEP as part of their review of this report.
- Comments/Questions can be submitted via the following methods:
  - Website comment page: [www.phillyrefinerycleanup.info/comment-submission-form](http://www.phillyrefinerycleanup.info/comment-submission-form)
  - Via email to: [phillyrefinerycleanup@ghd.com](mailto:phillyrefinerycleanup@ghd.com)
  - Via USPS to: PO Box 7275, Wilmington, DE 19803