

EVERGREEN'S REMEDIATION PROGRAM - REGULATORY REQUIREMENTS

WHAT REGULATIONS APPLY TO REMEDIATION AT THE FORMER PHILADELPHIA REFINERY?

- Environmental activities have occurred at the site pursuant to consent orders with the Pennsylvania Department of Environmental Protection (PA DEP) since 1993. In 2012, Sunoco, Philadelphia Energy Solutions, and the PA DEP entered into the most recent Consent Order & Agreement (CO&A) setting forth individual obligations for site cleanup. The consent order was amended in 2020.
- The investigation and remediation of legacy impacts (pre-2012) at the Former Philadelphia Refinery are managed by Evergreen under the **Pennsylvania Land Recycling Program**, also called "**Act 2.**"
- The Former Philadelphia Refinery is also part of the **One Cleanup Program** which unifies the cleanup process to address both state and federal requirements. For this Site, federal requirements under the Resource Conservation and Recovery Act (RCRA) are being addressed through a coordinated cleanup under Act 2. Therefore, EPA also reviews and makes decisions on submitted reports.
- Releases from regulated storage tanks are managed through PA's **Storage Tank and Spill Prevention Program**. For this project, the Tank Reports were often submitted along with Act 2 Reports and may be incorporated into future Act 2 deliverables.

What is the Act 2 (Land Recycling) Program?

- Act 2 is a risk-based environmental cleanup program regulated by the Pennsylvania Department of Environmental Protection (PA DEP). This program was established by a series of regulations enacted in 1995 known as the "Land Recycling Program" or simply "Act 2."
- Act 2 encourages cleanup of contaminated vacant or underutilized former industrial properties, also referred to as brownfields, with the goal of returning them to productive use. This stimulates economic growth and maximizes the use of existing infrastructure, helping to preserve farmland and open spaces.
- Risk-based cleanup means that the cleanup standards and cleanup decisions under Act 2 are based on the actual risk that contamination at the site may pose to public health and the environment, considering the current and future property use. This also considers the degree to which contamination could potentially spread off-site.
- Cleanup standards are, by law, protective of human health and the environment. Remediators have the option to select background standards, state-wide health standards, or site-specific standards (also called cleanup levels).
- Per the 2020 First Amendment to the CO&A, the Former Philadelphia Refinery property will be used for non-residential use. The site will be remediated to non-residential use standards under Act 2.

DEFINITIONS

▶ **Contaminated property**

a property with a chemical present in environmental media (e.g. soil or groundwater) that is regulated by PA DEP or EPA and is at a concentration above the selected PA DEP or EPA standard

▶ **Remediation**

the process of addressing environmental contamination that is present above a cleanup standard

▶ **Consent order**

a legal contract used to settle environmental liability and set forth obligations

▶ **Conceptual site model**

an understanding of the physical, chemical, and biological processes and site conditions that control the transport, migration, and impacts of contamination to human health and/or the environment

REGULATIONS

Major Steps of the Remediation Process and the Act 2 Program

- **Notice of Intent to Remediate** – submitting a Notice of Intent to Remediate to PA DEP formally enters the site into Act 2
- **Remedial Investigation** – also called site assessment or site characterization, this step consists of sampling environmental media (e.g. soil, groundwater) and evaluating site conditions to determine what contaminants exist, where, and at what concentrations. This information helps build what is called a “conceptual site model”. The results of the investigation are included in a Remedial Investigation Report.
- **Risk Assessment** – if a site is being remediated to site-specific cleanup levels, a risk assessment is conducted to establish the cleanup levels based on evaluation of the level of risk contamination may pose to human health or the environment. PA DEP and EPA must approve site-specific cleanup levels.
- **Remediation** – remediation of contamination is conducted to meet selected cleanup levels. This process includes remedial technology selection, the design, planning and construction of the remediation system, operation and maintenance of the remedy, and the resultant reduction and/or control of contaminant mass. The recommended remediation is included in a Cleanup Plan.

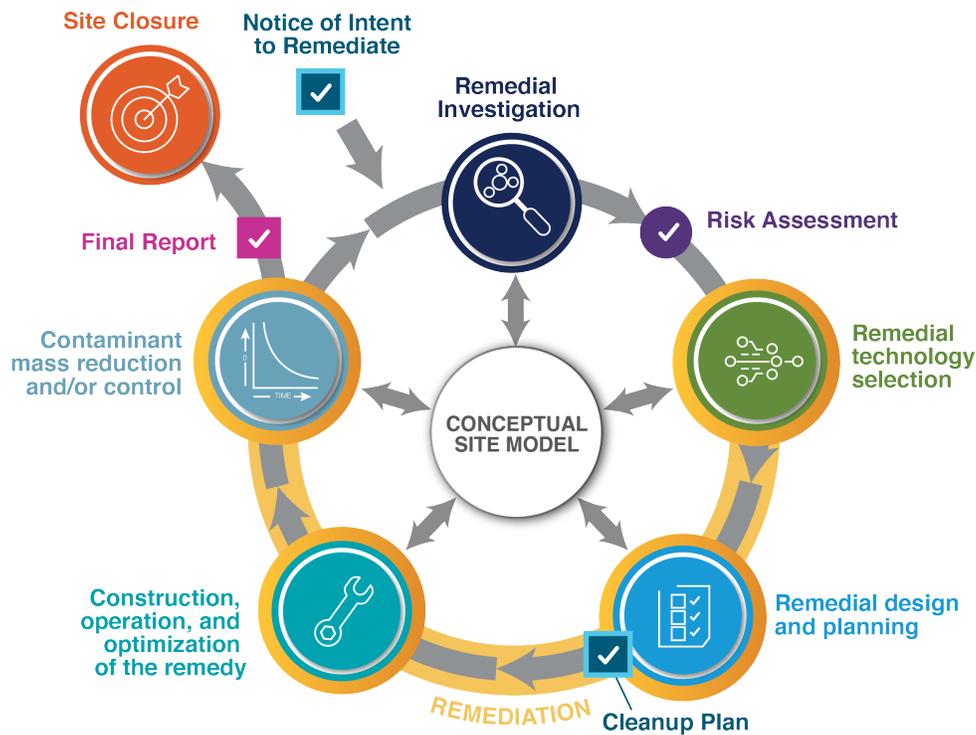
the design, planning and construction of the remediation system, operation and maintenance of the remedy, and the resultant reduction and/or control of contaminant mass. The recommended remediation is included in a Cleanup Plan.

- **Final Report** – after remediation is complete, the remediator submits a final report to PA DEP and EPA to demonstrate that cleanup levels have been met

There are public involvement opportunities throughout the Act 2 program. At the end of the Act 2 program, the property is available for reuse.

Where can I learn more?

- Learn more about Act 2 at www.dep.pa.gov/Business/Land/LandRecycling
- Deliverables for the completed steps of the Act 2 program for the Former Philadelphia Refinery can be found at phillyrefinerycleanup.info including plain language summaries



Philadelphia Refinery

LEGACY REMEDIATION