Statement of Basis Released:  
Public Comment Period Open  

Amphenol/Franklin Power Products  
Franklin, Indiana  
May 2022

U.S. Environmental Protection Agency is seeking public comment on the proposed cleanup for the Amphenol/Franklin Power Products site in Franklin, Indiana. During a prior investigation, EPA determined that a former owner and operator of the site released volatile organic compounds, or VOCs, and other chemicals into the environment. These contaminants then migrated outside of property boundaries.

Beginning in 1995, interim remedial actions were taken due to the release of these chemicals, some of which were known carcinogens. An in-depth investigation was completed to determine what was released and where it may have travelled, as well as determined the potential health risks and environmental effects of the contamination. A contaminated sewer line was replaced, contaminated soil was removed from a source area on-site, and a groundwater pump-and-treat system was installed. EPA continues to oversee performance of this cleanup.

In July 2018, concerns were raised to EPA and the Indiana Department of Environmental Management, or IDEM, about VOCs such as trichloroethylene, or TCE, and tetrachloroethene, or PCE, potentially causing vapor intrusion within properties in Franklin. An investigation into the site was reopened and vapor intrusion was confirmed. Actions were then taken to address the vapor intrusion, including the installation of seven vapor mitigation systems and the repair of 11 plumbing systems within nine properties. The additional remediation actions outlined in the Statement of Basis document are necessary to reduce on-site and off-site VOCs in groundwater and soil to safe levels.

Public Review and Comment

EPA will make available a pre-recorded presentation where people can learn more about the proposed Statement of Basis. A 45-day public comment period on the proposed remedy begins May 18 and runs through July 1, 2022. Once EPA has reviewed the public comments, the Agency will address them in the Final Decision/Response to Comments document that will present the final selected cleanup method.
Background

The former Amphenol Corp. (Amphenol) Facility is located on the northeast side of Franklin, approximately one-mile northeast of downtown. The site is bound on the east by Hurricane Road, on the south by Hamilton Street, on the north by an abandoned rail line, and on the west and northwest by former Farm Bureau Co-Op facility and former Arvin Industries. Land use around the facility is light industrial to the west, north, and east, agricultural to the northeast, and residential to the south.

Historical industrial activities at the site consisted of manufacturing electrical connectors, electroplating, machining, and storing products and raw materials required for production. From approximately 1961 to 1983, waste acid, cyanide, and wastewaters from plating operations were routed into a sanitary sewer manhole, which discharged into the municipal sanitary sewer system south of the facility. In addition, spills on-site migrated to the soil beneath the building through cracks in the foundation. In 1981, the property owner built a wastewater pretreatment system in a small building at the southwestern end of the parking lot to treat the plating room wastewater for cyanide and chromium; treated wastewater was then discharged to a sanitary manhole south of the facility. Although the wastewater was treated for metals, it was still contaminated with VOCs and flowed through a sanitary sewer in the residential area—leaking from cracks and joints in the pipeline and contaminating soil and groundwater beneath. The soil and groundwater became secondary sources of VOC vapors that entered the sewers.

Between 2018 and 2021, Amphenol investigated the conditions in groundwater, soil vapor, soil, sewer vapor, residential and commercial indoor air, and ambient air. The extent of contamination defined the boundaries of the Amphenol Study Area, or “Study Area”, which is the area in which clean-up will occur.

Proposed Cleanup

Based on thorough assessments EPA is proposing a cleanup for the Study Area, detailed below. The Agency’s site investigation focused on impacts from historical releases within the area immediately beneath, adjacent, and down-gradient (south) of the former plating room at the Facility, including the area along the former sanitary sewer line. The off-site corrective measure evaluation focused on impacts within the nearby residential area where historical VOC releases to the sanitary sewer line contaminated the soil and groundwater, which created a vapor intrusion risk.

EPA is proposing the following:

- Treat VOC-impacted soil in a phased approach using technologies such as In-Situ Chemical Oxidation, or ISCO, and In-Situ Chemical Reduction, or ISCR, with Permeable Reactive Barriers, or PRBs, and/or bioremediation;
- Utilize Monitored Natural Attenuation, or MNA, to ensure groundwater cleanup goals are reached;
- Enforce institutional controls, or ICs, and long-term stewardship to ensure the property remains safe for workers in the future.

EPA has issued the Statement of Basis document to share with the public details of the facility’s history, the studies that have been completed, and a detailed description of the cleanup items proposed above. That document, along with EPA’s Administrative Record to support the RCRA 1998 Administrative Order on Consent, is available online at https://www.epa.gov/in/amphenolfranklin-power-products-franklin-ind and at the Franklin Public Library, at 401 State Street, Franklin, Indiana. A frequently asked questions document regarding the site is also posted online.
Summary of Cleanup Methods

*Treating Impacted Soil at the Source with Bioremediation*

On-site submerged soil impacts continue to provide a source for dissolved VOCs in groundwater which could generate soil vapors. Treating the contaminated VOCs near the Unit B/Unit C contamination area will limit future migration. Further, once the higher source area concentrations have been reduced via ISCO injections, then ISCR and bioremediation activities will subsequently occur in the area of contamination. These sequential injections are expected to dechlorinate chlorinated VOCs to non-toxic end products with no long-term accumulation of daughter products such as vinyl chloride, and to create a clean waterfront which would migrate downgradient and reduce VOC levels in groundwater. PRBs placed along Hamilton Avenue would prevent off-site migration of any residual contamination. An ISCR pilot test was completed in 2020 following the off-site interim measures, which demonstrated the effectiveness of this technology.

*Off-Site Groundwater Migration Control*

To prevent downgradient plume migration to the south of the source area treatment system, a PRB with ISCR injections in the southern boundary is proposed. Vapor monitoring and operation and maintenance of the existing vapor intrusion mitigations systems until groundwater no longer serves as a source of contamination to soil vapors is proposed.

*Treating Contaminated Groundwater South of the Property Line*

Impacted groundwater in the off-site area would be remediated using PRBs, with ISCR technology. Installation of PRBs would consist of injected carbon-based substrates and ISCR in select off-site locations along Hamilton Avenue, Forsythe Street, and Ross Court. Off-site PRBs would be located south of the source areas, creating permeable treatment zones for impacted groundwater after passing through the barriers.

*Groundwater Monitored Natural Attenuation*

Following source area treatment, MNA is proposed to achieve long term Corrective Action Objectives, or CAOs, for groundwater. Following establishment of the PRBs, groundwater concentrations would be monitored to ensure short-term CAOs are achieved and MNA would be employed to verify long-term CAOs are reached and maintained. Groundwater monitoring will be performed throughout the off-site area to confirm that long-term groundwater CAOs are achieved.

*Remedial Monitoring*

Following implementation of the remedy, a period of groundwater monitoring will begin to confirm the effectiveness of the selected technologies and determine if additional active remediation is warranted. Amphenol will submit a monitoring plan to EPA as part of the final design document. Long-term monitoring will also demonstrate MNA processes are creating groundwater conditions that provide continuous reductions in VOC concentrations or established plume stability (at concentrations less than short-term groundwater CAOs).

*Institutional Controls & Long-Term Stewardship*

To limit exposure to remaining contaminants, EPA will require that Amphenol and Franklin Power Products, Inc. establish an enforceable institutional control to restrict the land use of the property to industrial or commercial use now and in the future—and some ICs have already been recorded for the site. EPA requires that an Environmental Restrictive Covenant also be established, as well as a long-term stewardship plan for the duration of time contamination remains on-site above unrestricted-use levels.
You’re invited to view and comment on…

EPA’s Statement of Basis for the Amphenol/Franklin Power Products site
Public Comments Accepted from May 18 to July 1, 2022

The Statement of Basis describes the process EPA uses under the Resource Conservation and Recovery Act to select measures for containing or cleaning up a hazardous waste management facility. Specific information in the document includes description and environmental setting of the facility, names and concentrations of contaminants detected at the facility, associated exposure pathways, preferred remedy, innovative technologies considered in determining the remedy, and public involvement requirements under corrective action.

The presentation is pre-recorded and posted online at:
https://www.epa.gov/in/amphenolfranklin-power-products-franklin-ind

EPA project contacts will be available in-person to answer your questions on Thursday, June 9, from 6-7 p.m. at Franklin City Hall, at 70 E. Monroe St., Franklin, Indiana. A formal public hearing, where you are invited to provide comment on record, will follow at 7 p.m. COVID-19 protocols will be followed during the event, which are subject to change without notice.