Amphenol Frequently Asked Questions
Risk Communication and Site Contamination & Cleanup

1. What is vapor intrusion?

For an in-depth description of vapor intrusion, visit EPA’s webpage on vapor intrusion.

2. What are the health effects of the chemicals associated with vapor intrusion?

Health risks vary based on the type and amount of contamination and are also determined by how healthy you are and how long you are exposed. Most residential exposures to Trichloroethylene, often referred to as TCE, in indoor air are associated with exposure to low amounts and not likely to result in health effects. However, exposure to TCE in the first eight weeks of pregnancy may increase the risk of heart defects in the baby. TCE may also affect the immune system; this includes changes to the developing immune system in early life. Studies in workers and animals breathing very high levels of TCE suggest that long-term exposures may increase the risk of certain types of cancer (kidney, liver, and non-Hodgkin’s lymphoma). It also has the potential to harm the central nervous system, kidney, liver, and male reproductive system.

For more information on TCE, visit the ATSR’s ToxFacts fact sheet on TCE.

3. How many homes in the Amphenol Study Area were sampled for vapor intrusion?

In the area where environmental media were impacted by historical contaminant releases by the former Bendix Corp, or the Amphenol Study Area, seven homeowners granted access for indoor air sampling; five others declined. Amphenol completed the sampling under EPA oversight, consistent with the Resource Conservation and Recovery Act, or RCRA, Corrective Action program during both summer and winter months from September 2018 to July 2020.

Five sampled homes showed a small exceedance of TCE when compared to EPA’s and the Indiana Department of Environmental Management, or IDEM’s, health-based screening levels. Two homes were impacted from sewer vapors only, one home was impacted from soil gas only (via contaminated groundwater), and two homes were impacted by both soil gas and sewer vapor sources.

For a summary of indoor air sampling results, visit the Amphenol webpage’s Air Sampling Updates section.

4. Are people near the Amphenol site currently at risk of exposure from vapor intrusion?

All homes within the impacted area where access was granted have been sampled for vapor intrusion, and homes with the potential for sewer vapor intrusion had pressure tests conducted on their plumbing systems. These investigations resulted in the installation of seven vapor mitigation systems and plumbing repairs in nine homes. As all response actions have been completed where access was granted and vapor intrusion sampling showed potential risk, EPA believes there is no immediate risk to public health.
5. What is being done to evaluate cumulative risk in Franklin?

The Agency for Toxic Substances and Disease Registry, or ATSDR, a federal public health agency under the U.S. Department of Health and Human Services, is preparing an environmental health assessment of both Amphenol Site and a site known as Hougland [Note: the Hougland site is located less than a mile north of the Amphenol site and under the jurisdiction of IDEM]. ATSDR has been compiling data on outdoor air, indoor air, groundwater, and drinking water provided by EPA and IDEM to assess whether documented exposures from the sites have the potential to impact public health, including cancer rates. As an objective third party, ATSDR reviews all available exposure data regardless of the regulatory or enforcement process. The Agency has a draft report that is currently under review. The final report should be released to the public in 2022.

6. Was vapor intrusion found at Webb and Needham elementary schools?

Extensive environmental testing performed at and near the schools showed vapor intrusion was not occurring at either school. To confirm vapor intrusion from a source such as an industrial release, multiple positive lines of evidence are needed. Sampling of soil, groundwater, surface water (specifically Hurricane Creek), soil gas, outdoor air, indoor air, and sewers in the area established that vapor intrusion was not occurring. The Amphenol nor Hougland contaminant releases were not present near, nor impacting the schools.

The lines of evidence included independent sampling completed by Franklin Community School’s environmental consultant to test for volatile organic compounds, or VOCs, and vapor intrusion. While some VOCs were found in some of the samples collected under the building’s concrete slab, no VOC vapors were found in the indoor air of the schools or in the surrounding outside air. Out of an abundance of caution, the school district installed vapor depressurization systems in both schools to eliminate the possibility of any future potential vapor intrusion. A summary of the school results from multiple sampling events are available on the Franklin Community School’s Environmental Study webpage.

The city of Franklin and IDEM also investigated other potential remote vapor sources by sampling sewer lines at access points on school property and along Eastview Drive. IDEM and/or the city’s consultant also tested groundwater, surface water, and soils in the vicinity of the schools. Test results showed that TCE and PCE were not detectable in the groundwater, surface water, or soils, nor at the sewer connections closest to the elementary schools.

Additionally, there is no physical connection or migration pathway between the Amphenol site and the elementary schools, as the schools are on a different branch of the sanitary sewer system and the Amphenol Site plume is distant from the schools. Combined with IDEM’s determination that the Hougland Cannery plume does not reach the schools, IDEM, which co-led the school investigation, determined vapor intrusion was not occurring. For information on Hougland Cannery, also known as the Hurricane Development site, see IDEM’s webpage for the Site.

7. Does contamination from the Site impact drinking water in Franklin?

Contamination from the Amphenol site does not impact the Franklin’s drinking water supply. The source for most of Franklin’s drinking water is the Indiana American Water company; the well
fields used by this company are located around five miles north/northeast of Franklin, near the Shelby County line. Franklin also has a drinking water ordinance prohibiting the use of groundwater for drinking water purposes. However, at least one subdivision is exempt from the ordinance. In 2018, IDEM tested private wells for VOCs at homes in the Paris Estates subdivision, the closest area to the site on a private water supply and found no contamination. As previously mentioned, site groundwater impacts are well-defined.

8. What is an Environmental Indicator, or EI, and why, in June 2019, did the EPA Office of the Inspector General, or OIG, send a management alert to EPA Region 5 about an outdated EI?

EPA developed EI determinations in 1999 as an internal tracking mechanism, with the intended purpose of identifying data gaps needing investigation and any immediate response actions needed at a site. For example: if data shows that a drinking water source is threatened by a contaminated groundwater plume, an immediate response action is taken to prevent exposure by either stopping the plume or replacing the water supply. EI determinations use a static snapshot of conditions based upon existing data and are generally made early in the site investigation. EI 750, Human Health, determines whether human exposure is under control and EI 725, Groundwater, determines whether groundwater migration is under control.

EPA completed Amphenol’s EI determinations in 2000 using the best data available at that time. EPA’s 1997 formal decision named “Interim Final Remedy” was to continue operating and improving the existing groundwater pump-and-treat system already on-site.

In 2018, when EPA renewed corrective action activity and community engagement at the site, the Agency did not update the Amphenol site’s 2000 EI documents. In 2019, in response to public inquiry and new information, the EPA OIG sent Region 5 a management alert pointing out the Region’s outdated EI. When the EI database was updated, the OIG stated that its concern had been resolved.

9. What is the report that was released by the EPA OIG about?

The OIG 2021 report, referred to as the Report, discussed EPA’s need to improve risk communication practices across the country. The Report focused on eight sites, one of which was Amphenol. The Report highlighted the management alert it sent to EPA regarding Amphenol’s outdated human health EI and expressed general concern about the timeliness of EPA’s release of information at its cleanup sites. Future national guidance to address the OIG’s concern about communicating risk to residents living on or near contaminated sites can be expected.

EPA has significantly strengthened the quality and consistency of the Agency’s risk communication. This work will continue with an additional focus on the Biden Administration’s priorities of environmental justice and climate change, including an Environmental Justice Action Plan that is currently under development.

10. How does EPA communicate risk to the public?

At a 2018 public meeting in Franklin, EPA stated that it had renewed investigations at the Amphenol site. Consistent with Agency guidance for best practices on risk communication, EPA has since:
• Launched a Site webpage
• Held four in-person meetings in Franklin
  o Note: EPA ceased holding in-person public meetings in March 2020 due to the COVID-19 pandemic.
• Developed and distributed fact sheets to the community
• Mailed postcards to residents
• Started an email listserv which announces any updates to the site’s webpage
• Placed newspaper advertisements in the Daily Journal announcing Site updates
• Issued press releases through EPA’s Press Office
• Wrote a Stakeholder Information Plan
• Updated EPA Region 5 social media including Facebook and Twitter
• Continued conversations with residents, stakeholders, and Agency partners
  o Note: During the investigation phases and interim remedy construction, door-to-door contact was made to those potentially affected properties.

A Statement of Basis describes the preferred plan EPA uses under RCRA to select methods for containing or cleaning up a hazardous waste management facility; as EPA finalizes this draft plan for the Amphenol site, additional outreach will be conducted. This outreach, which will include a 45-day public comment period, will also consist of:
• Posting a presentation detailing the cleanup plan on the site webpage
• Hosting a live question-and-answer session with the public
• Developing and mailing a fact sheet about the Statement of Basis to the community
• Issuing a press release announcing the plan’s release
• Emailing the Amphenol listserv to alert all subscribers of the proposed cleanup plan
• Placing a newspaper advertisement in the Daily Journal
• Linking to the Statement of Basis on EPA Region 5’s Facebook and Twitter pages
• Gathering resident comments and concerns via email, mail, voicemail, and the site’s webpage
• Responding to all formally submitted comments sent to the Agency during the public comment period

11. Is there a difference between the Amphenol site and a Superfund site?

EPA is using its authority under the Resource Conservation and Recovery Act, RCRA, to order responsible parties, such as Amphenol Corp., to conduct investigations and cleanup of the Amphenol site. Therefore, the Amphenol site is not a Superfund site. Superfund sites are subject to the Comprehensive Environmental Response, Compensation, and Liability Act, referred to as CERCLA, which gives EPA broad authority to respond directly to releases or threatened releases that may endanger public health or the environment. Although both CERCLA and RCRA address hazardous waste, RCRA manages hazardous waste from start to finish including the generation, transportation, treatment, storage and disposal of hazardous waste and non-hazardous solid waste. Due to the site’s history as a treatment, storage, and disposal facility, otherwise known as a TSD facility, EPA pursued cleanup of the site under its RCRA authority.

For more information on RCRA, visit EPA’s webpage on corrective action.
For more information on CERCLA, visit EPA’s [webpage on Superfund sites](#).

12. **Was a community group established for the Amphenol site?**

In July 2019, EPA released a Stakeholder Information Plan describing how it would perform outreach at the Amphenol site, including the development of a stakeholder group to meet community needs. This group’s membership consists of the Franklin Mayor’s office, Congressional offices, local community members, and the EPA, led by a professional who is a neutral facilitator paid for by the EPA. The Agency holds monthly meetings with this group. An agenda for each meeting is sent out in advance of these calls and a formal meeting summary is provided afterwards via email. The summaries are available to the public and can be reviewed on the [Amphenol webpage](#) under the Documents section.

13. **What cleanup has been completed at the Amphenol site?**

Cleanups have been completed and continue to be performed at the Amphenol site, including Interim Measures, or remedial actions, completed by the responsible party in advance of EPA’s Final Remedy selection. A summary of the cleanup performed so far can be found in the Background section of EPA’s [Amphenol webpage](#).

14. **What is left to clean up at the Amphenol site?**

EPA will soon release its *Statement of Basis*, or proposed cleanup plan, for the Amphenol site. After a formal comment period in which EPA listens to public questions and concerns, the Agency will select a final remedy via a Final Decision document. This document will outline the remediation steps necessary to clean up the remaining contaminants in soil and groundwater.

15. **Is Amphenol Corp. responsible for the groundwater contamination?**

Amphenol Corp. is responsible for cleanup efforts under a 1998 Administrative Order on Consent, or AOC. However, prior site operations by Bendix Corp., a company that manufactured electrical connectors from 1961 to 1983, are the presumed source of VOCs in the Site’s groundwater plume. During the release period, waste was discharged to sanitary sewers which then migrated to the soil and groundwater from breaks in sewer lines that have since been repaired.

16. **Why does U.S. EPA clean up some sites while others are performed at the state level?**

The majority of RCRA Corrective Action sites across the country are managed by states, as most states are authorized by EPA to directly implement the cleanup program. In Region 5, the EPA directly manages approximately 20% of RCRA sites, mainly due to each site’s history. The reasons why a site is managed under federal EPA jurisdiction versus at the state level vary—they may depend on the site’s enforcement history or proximity to other sites managed by one of the entities. Sometimes, the lead for a site may change between EPA and the state regulatory agency. The Amphenol site is managed by the EPA whereas other cleanup sites in the Franklin area are managed by IDEM. When federal and state sites are close in proximity, as in Franklin, there is significant coordination between the agencies.
17. Is it possible for the Amphenol groundwater plume to cross Hurricane Creek?

Based on groundwater sampling and soil boring data, EPA previously determined that the groundwater plume from the Amphenol site does not reach or cross Hurricane Creek. In June 2021, a groundwater plume model report prepared by an entity unaffiliated with EPA was released. This model, which did not use any physical groundwater sampling data, showed the plume, which moves in a south/southeasterly direction, crossing Hurricane Creek and spreading thousands of feet southward beyond the creek. EPA and the United States Geological Survey thoughtfully evaluated this model and determined again that groundwater in the unconsolidated aquifer could not cross Hurricane Creek in a direction that would be counter to the natural shallow groundwater flow direction in the unconsolidated aquifer on the south side of the creek.