

Former Tecumseh Products Company Site and Project Phoenix Environmental Contamination and Cleanup

This Frequently Asked Questions (FAQ) Document was prepared to outline the current status of the environmental work being completed at the Former Tecumseh Products Company Site in Tecumseh, Michigan at the request of the City of Tecumseh. This FAQ document was prepared by TRC, the environmental consulting firm hired by Tecumseh Products Company to support site investigation and cleanup efforts.

Background

In November 2021, Lenawee County purchased the former Tecumseh Products Company site in Tecumseh, Michigan (the “Site”) with the intent of redeveloping it as a multi-use facility with indoor and outdoor sports courts and fields, also known as the Project Phoenix. This 53-acre property has been mostly unused and vacant since Tecumseh Products Company (The Products) sold the property in 2010 to Tecumseh Bakery LLC, a division of Consolidated Biscuit Company. When Consolidated Biscuit Company was purchased by Hearthside Food Solutions a few months later, plans to use The Products Site to make cookies and crackers were abandoned. Since that time, the City of Tecumseh has been working hard to identify and attract a new owner. Although the Site has changed hands a few times since 2010, none of the proposed plans advanced beyond the demolition of some of the buildings. Project Phoenix is a collaborative development that is expected to drive significant economic activity into Lenawee County by attracting sport competitions which will draw competitors from Washtenaw County, Metro Detroit, and beyond.

Where did the contamination come from?

From 1934 through 2008, The Products used the Site to manufacture a variety of products particularly compressors and condensers for refrigeration. There was no big spill or dumping during that time. Unfortunately, prior to the 1970s, we didn’t really understand the risks involved with using some chemicals. Best practices and laws for proper management of chemicals were not really developed until the 1970s and 1980s. Before that, small amounts of chemicals would have dripped onto the concrete floors. Over the decades, chemicals seeped through the concrete, through the soil and eventually into the groundwater.

What chemicals are in the ground?

The Products used chlorinated solvents, particularly trichloroethene or TCE, in their manufacturing processes for cleaning and degreasing parts. Chlorinated solvents break down slowly under natural conditions, but they do break down. The chemicals that are the “active” agents in solvent solutions and their breakdown products are the chemicals identified at the Site. These compounds include tetrachloroethene or PCE, TCE, and 1,1,1-trichloroethane or TCA as “parent” compounds and cis-1,2-dichloroethene or cis-DCE, vinyl chloride, and 1,1-dichloroethane or 1,1-DCA as breakdown or “daughter” compounds.

Is the water I drink contaminated?

No. Drinking water in Tecumseh is provided by the City of Tecumseh. Groundwater contamination from the Site is moving away from the City of Tecumseh’s supply wells. Like all public water supplies,

the City of Tecumseh is required to complete regular testing to confirm that the water provided is safe. That testing includes the compounds associated with the Site. None of these compounds are detected in the City of Tecumseh's drinking water. Sampling results are reported to residents annually. The most recent Annual Water Quality Report can be found here:

https://www.mytecumseh.org/departments/utilities_department/water_quality_report.php

Would it be safe to play on the fields?

Yes. Investigation work at the Site included collection of approximately 600 soil samples. Concentrations of contaminants were compared to safe values established by the State of Michigan (https://www.michigan.gov/egle/0,9429,7-135-3311_4109-251790--,00.html). Of these samples only five had concentrations above the safe values for "direct contact". A combination of soil removal, soil treatment and a surface barrier such as pavement will prevent kids and others from touching the soil. Note that the safe values for "direct contact" include both touching the soil and "incidental ingestion." In other words, your kids would be safe even if they occasionally got dirt in their mouth during rough play.

Would it be safe to work or play in a building on the Site?

Yes, with the planned controls. Because no one is drinking contaminated water and the soil concentrations are too low to be a direct contact concern, the most serious potential risk with the contaminants is something called "vapor intrusion". Some chemicals including the ones found at the Site can evaporate. If these chemicals are present in soil or groundwater under a building, they can form vapors that rise through the open spaces in the soil and seep into buildings through foundation cracks and holes. To ensure that the air in any new buildings at the Site is safe, they will be built with something called a "vapor mitigation system". The exact system will be building specific, but in most cases, it will include two parts. First a special plastic liner below the building foundation that is designed and installed specifically to prevent vapors from the soil or groundwater from entering the building; this is called a "vapor barrier". Second a network of piping under that vapor barrier that is connected to a fan. The pipes and fan move contaminated vapors safely away from the building foundation. To check that the "vapor mitigation system" is working, testing will be required to verify that the indoor air is safe and stays safe. More information on vapor intrusion can be found in a fact sheet prepared by USEPA: <https://www.epa.gov/sites/default/files/2017-03/documents/201408tecumseh-vapor-intrusion-fact-dheet.pdf>

When did environmental work start?

2009. Before Consolidated Biscuit Company purchased the Site, they completed an Environmental Site Assessment. Most banks require this to be done before a business property is purchased. An Environmental Site Assessment includes a study of the site history to see if there is likely to be contamination. If possible sources of contamination (like previous solvent use) are identified, then soil and groundwater samples are collected to see if contamination is present. If the Environmental Site Assessment process is completed correctly then the new owner is legally protected from cleanup responsibilities.

Is The Products working to clean up the Site?

Yes. The Products has been working to understand and fix the problem since it was discovered in 2009. To do that The Products hired TRC Companies, Inc. (“TRC”), an independent environmental consulting firm that specializes in site investigation and cleanup, and in March 2010, The Products agreed to an Administrative Order on Consent (RCRA-05-2010-0012) with USEPA which is a legal document that outlines the environmental work that The Products must complete. Between 2009 and 2016, the environmental work focused on understanding the problem and developing a plan to eliminate the risks from potential exposure to contamination; that plan, which is called the Final Corrective Measures Proposal, was submitted to USEPA for review in February 2017. After extensive review and public comment, USEPA and EGLE used that plan as the basis for the Final Decision (June 2019). The Final Decision specifies the remaining cleanup work that The Products must complete. These “Final Corrective Measures” include:

- On-site soil treatment to limit the potential for contaminants in soil to reach the groundwater and reduce the amount of contaminants in on-site soil. Design of the planned treatment systems is complete and has been approved by USEPA. Small changes may be required so that these systems do not interfere with the Lenawee County’s proposed redevelopment. USEPA has agreed that a short-term delay to coordinate the ongoing environmental work and the redevelopment is acceptable. System construction and operation is expected to begin in late 2022 or 2023.
- On-site groundwater treatment to reduce the movement of contaminated groundwater under other properties and reduce the amount of contaminants in on-site groundwater. This treatment system has been constructed. Operation will begin as soon as the permanent power supply (anticipated Spring 2022) is installed.
- Ongoing on-site and off-site monitoring to confirm that concentrations in on-site groundwater reach the treatment goals during treatment and to confirm that off-site concentrations continue to decrease and ultimately reach cleanup goals after on-site treatment is complete.
- Property restrictions that ensure changes to the Site do not result in the unsafe conditions.

When will “clean-up” be done?

On-site soil treatment is expected to take 5-8 years to complete. On-site groundwater treatment is expected to take 1-3 years to complete. It will likely take 10 or more years for the treated water from the Site to reach the entire area of contaminated off-site groundwater. Property restrictions that ensure future development does not result in unsafe conditions are expected to remain in place even after “clean-up” is done. Monitoring once every 1-5 years is also expected to continue to verify that conditions remain safe.

What “clean-up” is Lenawee County responsible for?

Lenawee County is not responsible for any of the clean-up. It is responsible for following the property restrictions developed to prevent unsafe conditions. These include:

- Granting The Products access to the Site to complete their clean-up and monitoring activities. Note that The Products is required to notify Lenawee County of all work, and to work cooperatively with Lenawee County to minimize disturbances to regular site activities.
- Proper management of on-site soils. This means that soils from future excavations either need to be taken to a landfill or tested to verify they are clean before moving them to a different property.



- Maintaining the existing slab (which is no longer practical with the building demolished) or replacing it with an infiltration barrier to control the migration of contaminants in the soil into the groundwater. The slab of any new buildings, paved parking areas and/or a plastic liner placed below the proposed turf fields will all serve this purpose.
- Building any new structures with appropriate vapor controls to ensure that the indoor air in those buildings is safe. See “**Would it be safe to work or play in a building on the Site?**” above for more information on “vapor intrusion”.
- Not allowing the property to be used for purposes that are not approved by USEPA. The current property restrictions do not specifically address use as a multi-purpose facility. In October 2021, prior to purchasing the property, Lenawee County worked with TRC to update the 2017 Risk Assessment to evaluate risks associated with the proposed use as a multi-use facility. With USEPA approval, the language in the property restriction is expected to be updated to clarify that use as a sports complex is allowed.

Note that in many cases, the cost of complying with these restrictions is expected to be off-set by Brownfield Redevelopment funding.

How can I learn more?

- **USEPA:** Basic site information can be found at USEPA’s website: <https://www.epa.gov/hwcorrectiveactionsites/hazardous-waste-cleanup-tecumseh-products-company-facility-tecumseh-michigan>. Note that this website is somewhat out of date and does not reflect work completed since 2016. You could also contact the USEPA Project Manager for more up-to-date site information and cleanup progress.

Joseph Kelly
312-353-2111
Kelly.Joseph@epa.gov

- **Public Repository:** The Products provides the Tecumseh Public Library with copies of all major reports. These reports are available for viewing in the Ready Reference section of the Library. This collection of documents is updated at least once per quarter. All reports are also available electronically. Requests for electronic copies of a report or reports can be made to TRC (see contact information below).
- **TRC:** As noted above TRC is the environmental consulting firm that The Products hired to support their environmental work at the Site. TRC’s project manager, Stacy Metz, can provide up-to-date information about what work is happening at the Site and what is planned for the near future. Also, as the preparer of most project documents, TRC is the best source for electronic copies of those documents.

Stacy Metz
734-585-7825
smetz@trccompanies.com

- **Tecumseh Products Company:** The site contact for Tecumseh Products Company could also be contacted for site information and cleanup progress.

Jason Smith
731-707-2889
Jason.Smith@tecumseh.com