



Camdenton TCE Sites

Dawson Metal Products/Sundstrand Tubular Products Inc./Modine Heat Transfer Inc., Mulberry Well/Hulett Lagoon, Dawson Metal Products Camdenton Facility #2, and Camdenton Sludge Disposal Area

Trichloroethylene (TCE)

Trichloroethylene, also commonly called trichloroethene and abbreviated TCE, is a volatile organic compound (a chemical that readily evaporates into the air). It, among other uses, is used in manufacturing to remove grease from metal parts. Long-term exposure to TCE can cause potential effects to the immune system and potential increased risk for certain cancers such as kidney, non-Hodgkin's lymphoma and liver. In general, exposure to a chemical does not necessarily mean that health effects will occur. The effect of exposure to any chemical depends on a variety of things, including chemical toxicity, how a person is exposed, how much they are exposed to, and how often and for how long they are exposed. Also dependent are personal factors such as individual health and sensitivity.

Site Background and Status

Operations and disposal activities at the manufacturing facility located at 221 Sunset Drive, Camdenton, Missouri, resulted in releases of TCE and other volatile organic chemicals. For a number of years the Missouri Department of Natural Resources has been engaged with investigative and response work to address releases to the environment that pose risks to human health and the environment. Whenever a potential risk has been identified, the department has directed parties responsible for the contamination to eliminate potential exposures that exceed applicable health-based standards. The Camdenton TCE Sites are commonly discussed in terms of the following locations or subsites:

221 Sunset Drive Facility

Manufacturing operations at the Sunset Drive facility occurred between 1967 and 2012 by three different companies: Dawson Metal Products, Sundstrand Tubular Products Inc., and Modine Heat Transfer Inc. Investigations conducted at the facility and in the surrounding neighborhood have documented TCE contamination.

Past clean-up activities at the facility included closure of interim status hazardous waste management units and removal of impacted gravel and soil. More recently, ground-penetrating radar and remote cameras have been used to identify obstructions to further investigation and assess the condition of any piping under the building that could be a source or pathway for contamination. A work plan is to be submitted to the department by late fall 2017 focusing on investigating potential sources of contamination under the building floor with work expected to begin in early 2018.

In the residential area adjacent to the facility, indoor air sampling is ongoing. Access was granted and sampling was conducted at 24 residences. Because temperature and other seasonal changes can impact the movement of TCE vapors, quarterly indoor air sampling was/is being conducted to ensure TCE concentrations are below certain levels in each season before the indoor air is determined to be protective of human health. Of the 24 houses sampled, two required the installation of mitigation systems to remove TCE vapors. These systems are similar to those used to remove radon from basements and crawlspaces. Eighteen of the houses sampled did not contain TCE vapors at levels of concern. Sampling at the remaining four houses began later than the other houses and is ongoing.

For more information, please call the Missouri Department of Natural Resources' Hazardous Waste Program, at 573-751-3553 or 800-361-4827, or visit the department's website at: dnr.mo.gov/env/hwp/camdentontce.html.

Hulett Lagoon/Mulberry Well

The city operated the Hulett Lagoon from 1961 to 1989. During this time, the lagoon received industrial wastewater containing TCE from the Sunset Drive facility. When the city closed the lagoon in 1989, the city disposed of the sludge in a permitted land application area on property at the Camdenton Memorial Airport (see below investigation of the Camdenton Sludge Disposal Area Site). In 1998 and 1999, the department investigated the Hulett Lagoon and documented TCE in the soil and groundwater in and around the lagoon. The extent of TCE in the soils is limited to the area within the footprint of the former lagoon. As discussed below, TCE has spread throughout the groundwater zones under the lagoon.

In February 1998, TCE above the drinking-water standard was detected in the Mulberry Well, located about 600 feet southeast of the Sunset Drive facility and 1,000 feet south of the former Hulett Lagoon. Due to the TCE contamination, the city officially took the Mulberry Well offline in January 1999. The Mulberry Well is no longer connected to the city's water supply system and is not used for drinking water. The city currently operates the well to remove TCE from the groundwater and contain the spread of contamination. The department regularly tests the public water system that provides drinking water to this area and has not detected TCE concentrations in excess of health standards.

The city will continue pumping the Mulberry Well to extract and treat groundwater in the area. Further investigations will be conducted to determine whether the contamination poses risks to human health or the environment and to identify long-term cleanup options. The public will have the opportunity to comment on those options.

Dawson Metal Products Camdenton Facility #2 Site

Dawson Metal Products originally constructed the Sunset Drive facility. Former employees recently informed the department that a fire occurred at the facility in 1972, requiring the temporary relocation of operations to a building located at 1225 US Highway 54 in Camdenton, known at the time as the Cox building. Former employees who worked at the temporary location reported that used TCE was disposed of directly on the ground behind the building.

The department conducted sampling during the first week of October 2017. The department sampled soil, indoor air, sub-slab vapor, springs and private drinking water wells to determine whether past disposal activities pose risks to human health or the environment. The department will update the public about this investigation once results are finalized.

Camdenton Sludge Disposal Area Site

As part of the Hulett Lagoon closure in 1989, the city disposed of sludge in a permitted land application area at the Camdenton Memorial Airport, referred to as the Camdenton Sludge Disposal Area Site. The department conducted an investigation in 1999 and did not detect TCE in soil or sludge samples or in water samples from three private wells in the area. More recently, the department followed-up on new citizen concerns about the possibility of other sludge disposal sites. The department has not located any additional locations of sludge disposal from the Hulett Lagoon. As a measure of caution, the department sampled additional private drinking water wells within one-half mile of the sludge disposal area during the first week in October 2017. The department will update the public about this investigation once results are finalized.

How Is the Department Involved?

A team of department staff are working on the Camdenton sites, conducting investigations and overseeing work. All work plans and documents are reviewed and approved by department staff before action is taken. The department coordinates communications on health-related issues with the Department of Health and Senior Services.

The department has been working to locate former employees of Dawson/Sundstrand/Modine. Additionally, the department maintains a Camdenton website to provide information from past and current investigations, and to assist with data interpretation. (dnr.mo.gov/env/hwp/camdentontce.html) Citizens can fill out an online form to share comments, questions or concerns about any of the Camdenton sites.

The department held a public meeting on Sept. 28, 2017, to share information with the community about the status of ongoing investigations and cleanup at the sites and to communicate plans for moving forward. Additionally, the department announced the formation of an Advisory Team, a community-led team designed to provide a public forum to present and discuss the community's needs and concerns related to the sites. The community's response was overwhelmingly in favor of formation of the team, and shortly, the department will reach out to community members who expressed interest in participating.

Aerial Map



