

Defense Electronics Supply Center (DESC, aka Gentile)

Frequently Asked Questions

Question: What were the chemicals of concern at Gentile? How did they get there?

Answer: The Defense Electronics Supply Center (DESC) or Gentile was a military supply depot for electronics materials from 1944-1962. Most of the contamination in soil, creek sediments and ground water at Gentile came from chemicals associated with coal, solvents or petroleum products used for parts cleaning or vehicle maintenance.

- The solvent TCE (or trichloroethylene) was the main chemical of concern and was used to clean electronics parts and components. During its use, small amounts of TCE may have been spilled or poured onto the ground, or were dumped into sumps; over time, the sumps may have leaked into the ground and caused ground water contamination. As rain and snow melt flowed through the contaminated surface soils, the contamination made its way down into the ground water 15-30 feet under the surface.
- Other solvents perchloroethylene (or PCE), dichloroethylene (or 1-2 DCE), benzene and vinyl chloride were found in the ground water under the former complex of buildings. These compounds came from 2 sources: industrial solvents and breakdown products of TCE. (Over time TCE can degrade or break down into the compounds TCA, 1-2 DCE and vinyl chloride).
- PAHs (or poly-aromatic hydrocarbons) were found in the creek sediments. At one time there was a coal pile at DESC and PAHs are one type of chemical associated with coal. PAH's are not water soluble. Over time, with rain and snow melt, they moved down into the soil; they also moved into the unnamed tributary of Little Beaver Creek. PAHs can also be associated with asphalt (parking lot runoff), auto exhaust, coal burning and oil burning, so it is likely creek sediments were also contaminated from areas upstream of Gentile.

Question: What has been done to clean up Gentile?

Answer: Originally, the U.S. Air Force began investigating potential environmental contamination at DESC in 1993. This investigation was part of Base Closure and Reuse, a process in which military bases are transferred to cities so the property can be used for industrial, commercial or residential purposes. First, the Air Force investigated the

contamination, then they chose appropriate cleanup methods. Ohio EPA and U.S. EPA oversaw their efforts.

Over the past decade, the following materials were cleaned at Gentile:

1. TCE and other solvent contamination removed from ground water (sites R2, S1,D1,C7) -

From 1996 until 2002, the Air Force removed contaminated soils from various areas which were contributing to ground water contamination. They also installed wells to monitor and track movement of ground water contamination.

2. TCE and TCA removed from soil (site D1) -

In 1999, the top 18 feet of contaminated dirt and waste from former disposal area D1 was completely removed from the site. The contaminated material (old concrete, excess construction soil, some contaminated material) was properly disposed of at an off-site facility. In 2002, additional solvent contaminated soil was removed from D1.

3. PAHs removed from soil at bottom of stream, or sediment (site C1) -

In 2000, the Air Force removed contaminated sediment from the unnamed tributary of Little Beaver Creek.

4. Arsenic removed from soil (along Wilmington Pike) -

In 1997, arsenic was found in the former base commander's yard. (Before the 1950s, it was common to use arsenic as an insecticide to treat fruit trees). Contaminated soil was removed from the area.

5. Pesticides removed from soil (site S3) -

In 1997, pesticides were detected in the area of the former pesticide storage building on the west side of Gentile. Soil contaminated with the pesticide chlordane was removed.

6. Heating oil tanks, diesel tanks and demolition material removed -

In 1996, as part of the re-development of the Gentile property, several buildings were demolished and all former oil/water separators and underground storage tanks (diesel, heating oil) were removed. Contaminated soil was removed from the site. Old roads and parking lots were also removed.

Question: Is my water safe?

Answer: Yes, water in the area meets the Safe Drinking Water Act requirements for drinking water. The Safe Drinking Water Act establishes federal standards for drinking water and according to the U.S. Environmental Protection Agency and the Kettering Consumer Confidence Report, Kettering's water is safe to drink.

It's important to note that *the ground water at and around Gentile is not used for drinking water*. If you live in a home near Gentile, your drinking water is piped to your home from a public water supply, and has been since the 1940s. For more specific information on your local drinking water quality, please call your local municipality.

• **If you live in Dayton** (Patterson Park), please contact the City of Dayton Department of Water, 320 West Monument Street, Dayton, (937) 333-3725.

• **If you live in Kettering**, please contact the Montgomery County Sanitary Engineering Department, 1850 Spaulding Road, Kettering, (937) 781-2566.

• **If you live in Oakwood**, call the City of Oakwood Public Works Center, 210 Shafor

Boulevard, Dayton, (937) 298-0777.

Question: Did DESC cause health problems in my neighborhood?

Answer: Chemicals must have a way to get into a person's body to cause health problems. During a ten-year investigation and cleanup of Gentile from 1993-2003, we found no evidence or environmental record that shows a pathway for residents to come in contact with on-site contamination (TCE, PCE, 1-2 DCE, vinyl chloride, TCA, PAHs, insecticides) whether in soil or ground water. Soils with possible environmental contamination were removed.

However, some residents living along the creek did play and wade in the creek over the years. Though there were no confirmed reports of dumping in the creek, both creek water and sediment were tested in 1995 and 1996 for all chemicals used at Gentile. Two separate investigations found only PAH contamination in creek sediments on site.

Former DESC workers may have been exposed to solvents during cleaning of electronics parts or vehicle maintenance. However, current workers at the facility are not exposed to contamination, since contaminated soil was removed from the site before the property was transferred to the City of Kettering.

Of course, we also seek the expertise of public health professionals at local, state and federal agencies. The Agency for Toxic Substances and Disease Registry (ATSDR), the Ohio Department of Health and the Combined Health Districts of Montgomery County conducted studies to further investigate health concerns in the Kettering community. If you would like more specific information on these studies, or information about potential health affects of contamination found at Gentile, please contact:

• **ATSDR (Agency for Toxic Substances and Disease Registry)**

77 West Jackson Blvd.

Rm 413, M/S 4J

Chicago, IL 60604

(312) 886-0840

Contact: Mark Johnson

• **Ohio Department of Health**

246 North High Street

P.O. Box 118

Columbus, OH 43266-0588

(614) 728-9180

Contact: Robert Indian

• **Combined Health District of Montgomery County**

Reibold Building

117 S. Main Street

Dayton, OH 45422

(937) 225-4443

Contact: Mark Case

Useful links:

- [DESC Home](#)
- [Parcel A-F map and description](#)
- [Photographs of March 2000 stream removal](#)
- [City of Kettering](#)
- [Administrative Record](#)

For environmental questions
contact:

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