

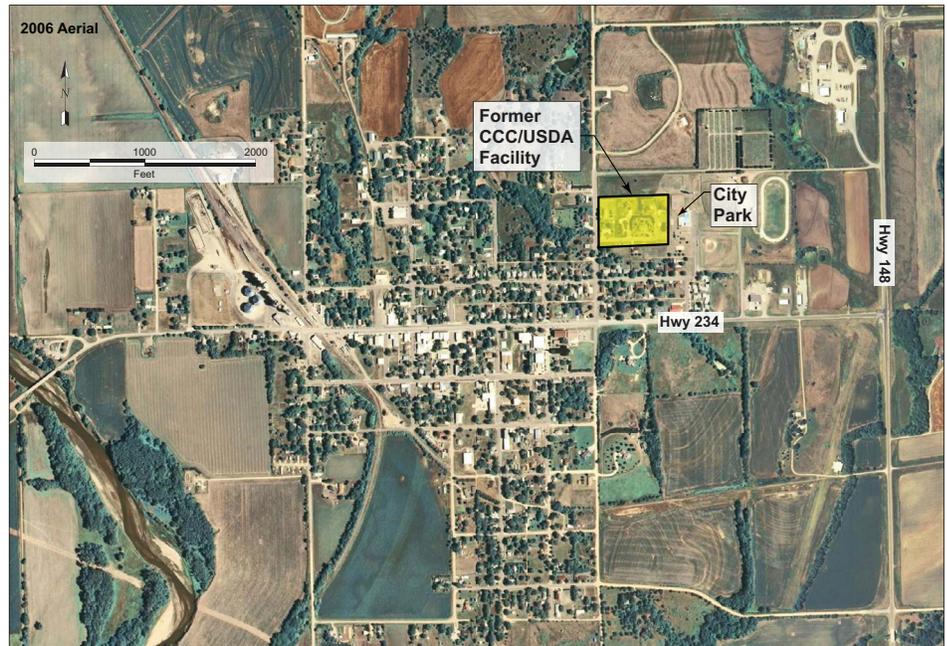
Former Grain Storage Facility in Hanover, Kansas

Former U.S. Department of Agriculture Grain Storage and Contaminant Release

From approximately 1950 to the early 1970s, the Commodity Credit Corporation, an agency of the U.S. Department of Agriculture (CCC/USDA), operated a grain storage facility at the northeastern edge of Hanover, Kansas. During this time, commercial grain fumigants containing carbon tetrachloride were commonly used by the CCC/USDA and private industry to preserve grain in storage.

In February 1998, trace to low levels of carbon tetrachloride — near the regulatory limit of 5 µg/L (micrograms per liter) for drinking water supplies — were detected in three private wells near the former CCC/USDA facility at Hanover. The well testing was part of a statewide USDA private well sampling program implemented by the Kansas Department of Health and Environment (KDHE) near former CCC/USDA facilities.

In April 1998, the KDHE collected soil samples to determine whether the former CCC/USDA facility could be a source of the contamination detected in the private wells. Samples were collected at 10.5-19.5 feet below ground level at nine separate locations on the property. The analytical results indicated the detection of carbon tetrachloride at a single location, at a relatively low concentration.



The environmental investigation will focus on property at the northeast edge of Hanover that was formerly leased by the CCC/USDA for grain storage.

In 2007, the CCC/USDA conducted shallow soil sampling on the former CCC/USDA property. No contamination was detected in laboratory analyses of the soil samples.

Hanover Residents' Drinking Water Is Safe and Is Not Affected

City residents are served by a public water supply system that obtains water from Washington County Rural Water District (RWD) #1, which has wells located several miles north of the investigation area. The drinking water from RWD #1 is not affected by the contamination detected in private wells in Hanover in 1998.

The Planned Site Investigation

Because the carbon tetrachloride found in private wells near its former grain storage facility might be linked to historical use of fumigants containing the chemical, the CCC/USDA is planning an investigation to determine the source and extent of the contamination. The results will be used to determine whether the potential contamination warrants remedial actions such as cleanup or monitoring. The investigation will be conducted in accordance with the intergovernmental agreement between the KDHE and the Farm Service Agency of the USDA.

The site investigation at Hanover will be performed, on behalf of the CCC/USDA, by the Environmental Science Division of Argonne National Laboratory. Argonne is a nonprofit, multidisciplinary research center operated by UChicago Argonne, LLC, for the U.S. Department of Energy (DOE). Under an interagency agreement between the CCC/USDA and DOE, Argonne provides technical assistance to the CCC/USDA with environmental site characterization and remediation at its former grain storage facilities.

A work plan that describes the site investigation is available for viewing at the Hanover City Hall. The plan has been reviewed and approved by the KDHE. The planned work will affect the former CCC/USDA property and immediately adjacent properties, subject to access approval by the owners. All of the planned activities have been analyzed extensively and subjected to Argonne's rigorous review and approval processes, to be certain that all appropriate health and safety precautions are taken. Argonne will have a health and safety manager on-site during the investigation.

The site investigation will have the following objectives:

- Identify any carbon tetrachloride sources and the extent of resulting soil and groundwater contamination beneath the former CCC/USDA facility.
- Characterize groundwater contamination beneath the former CCC/USDA facility.
- Evaluate the aquifer and determine groundwater flow patterns.
- Identify any other potential carbon tetrachloride sources that are not related to CCC/USDA activities.
- Determine whether vapor intrusion attributable to CCC/USDA activities is a problem at the site.

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