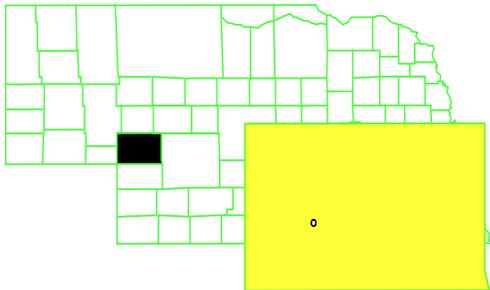


**OGALLALA
GROUND WATER
CONTAMINATION SITE
NEBRASKA
EPA ID# NED986369247**

**EPA Region 7
City: Western part of Ogallala
County: Keith
Other Names: American Shizuki/Ogallala
Electronic Co.**

02/09/2009



SITE DESCRIPTION

The Ogallala Ground Water Contamination Site consists of two distinct areas or operable units (OUs) located in the western part of Ogallala along the South Platte River. This area of the community is primarily industrial, commercial, and residential. OU1 includes a company that formerly manufactured electrical components since the early 1960s. The facility on this property was owned and operated by TRW, Inc. until 1986. American Shizuki Corp. took over the operations in 1987. Ogallala Electronics, which occupies a second area within OU1, also manufactures electronics components and is considered a potentially responsible party at the site. In 1987, the Nebraska Department of Health first detected volatile organic compounds (VOCs) in five of the nine municipal wells serving Ogallala. The two locations used by the companies were identified as the source of contamination during subsequent investigations. Public and private wells located within 4 miles of the site supply drinking water to an estimated 5,100 people; the water from these wells is also used for irrigation. OU2 is contaminated with solvents from Tip-Top Cleaners, a dry cleaner operation.

Site Responsibility:

The site is being addressed through private party, Federal and State actions.

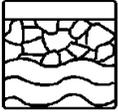
NPL LISTING HISTORY

Proposed Date: 10/14/92

Final Date: 12/16/94

Deleted Date:

THREATS AND CONTAMINANTS



Various VOCs, including trichloroethane (TCA), cis 1,2-dichloroethylene, 1,1-dichloroethane, tetrachloroethylene (PCE), trichloroethylene (TCE) and gasoline products (benzene, toluene, ethylbenzene and xylene) were detected during a soil-gas survey conducted by the Nebraska Department of Environmental Control in mid-1990. TCE, PCE and TCA are related to both OU1 facilities. Similar contaminants have been detected in monitoring wells in and around both properties and in numerous municipal wells. Tetrachloroethylene (PCE) and carbon tetrachloride (CT) are also contaminants of concern. OU1 is contaminated with PCE, TCE, and CT. EPA believes that the CT contamination source is from the grain storage operation in OU1. Tip-Top Cleaners used PCE until it ceased operation in 2007. PCE is the only chemical of concern at OU2.

CLEANUP APPROACH

Response Action Status

This site is being addressed in a long-term remedial phase focusing on cleanup of both OUs. For OU1, EPA released its ROD in April 1999, and selected the continuation of the extraction and treatment system at American Shizuki Corp. until contaminant concentrations were susceptible to remediation by natural attenuation; institutional controls; and ground water monitoring for eight quarters to determine if natural attenuation would address the residual contamination. In 2004, additional monitoring wells were installed to determine the extent of the contamination for OU1. In 2005, the PRPs completed a treatability study using in-situ chemical oxidation to determine if this technology would address the "hot spots" which remain. They also installed additional ground water monitoring wells and requested that EPA consider extending the quarterly ground water monitoring for the newly installed wells for at least 8 quarters. In 2007, the PRPs were granted an additional 18 months to submit documentation to support natural attenuation and in-situ chemical oxidation. The documentation, which includes a report and updated modeling, was received November 2008. For OU2, EPA released its Action Memorandum on September 2001, which selected soil vapor extraction (SVE) to remove the source of the PCE at Tip-Top Cleaners. Installation of the vadose zone extraction wells was completed in December 2001. Installation of the SVE system was completed in February 2002. EPA monitored the progress of the SVE on a monthly basis. EPA selected 0.300 ppmv as the removal action goal for this OU. The SVE work was completed in December 2001, and EPA removed the equipment and restored the site. To address the contamination in the ground water at OU2, EPA conducted two treatability studies. The first study used reductive dechlorination and was completed in December 2000, and the second study used chemical oxidation technologies, was initiated in December 2001, and completed in April 2002. EPA completed a ground water investigation in June 2002, and installed five monitoring wells downgradient of the Tip-Top Cleaners. Ground water samples were collected from these newly installed wells to aid

EPA in determining which actions to implement. EPA issued its Action Memorandum in September 2002, selecting in-situ chemical oxidation to remove the PCE from the ground water. A series of ten chemical oxidation injections were performed from January 2003 to September 2005. EPA also initiated its remedial investigation/feasibility study (RI/FS) work in 2003, with the installation of three additional monitoring wells. EPA completed the RI/FS in Summer 2005, with the release of the Proposed Plan in October 2005. EPA held a public comment period for the Proposed Plan from October to November 2005. The OU2 ROD, signed in February 2006, was the final ROD for the site and called for the use of in-situ chemical oxidation to treat the PCE in the aquifer. The remedy included performing in-situ chemical oxidant injections for up to five years. EPA initiated the remedy in September 2006. Since then, EPA has performed and is still performing quarterly injections within the OU2 PCE plume. Through the use of the in-situ chemical oxidation remedy, the downgradient portion of the plume has diminished to concentrations below the PCE maximum contaminant level (MCL); however, concentrations remain elevated in the immediate vicinity of Tip Top Cleaners.

Site Facts: For OU1, EPA's remedy is the continuation of the ground water extraction and treatment system, the implementation of institutional controls and the use of monitored natural attenuation. For OU2, EPA selected SVE to address the contamination in the soils at the source area. EPA completed its RI/FS in 2005, and selected the remedy to address the PCE ground water plume in February 2006. Sitewide institutional controls at the site include a series of ordinances, enforced by the City of Ogallala, to protect the public water system.

ENVIRONMENTAL PROGRESS



The City of Ogallala developed a new public water supply well field upgradient from the contaminated area. As a result of this and institutional controls, the Ogallala Ground Water Contamination site poses no immediate threats to the health of the nearby population using water from the city. For OU2, EPA initiated its soil vapor extraction removal action in February 2002. EPA initiated a time-critical removal in 2003, with the use of chemical oxidation. Due to the success of the chemical oxidation injections in reducing contaminant concentrations in the ground water during the time-critical removal action, EPA released its decision document for the Tip-Top Cleaner source area in February 2006, selecting chemical oxidation as the final remedy. Since initiating the remedy in September 2006, the concentration of PCE in the ground water has diminished to below the MCL in areas downgradient of Tip Top Cleaners; however concentrations continue to rebound at the Tip Top Cleaners.

COMMUNITY INVOLVEMENT

5/98 Fact Sheet announcing public meeting to take comments on proposed plan re: ground water contamination. Public notice in Keith County News 5/26/98 re: meeting.

7/01 Fact Sheet announcing public meeting to take comments on the recommended action to clean up contaminated soil at the Tip Top Dry Cleaners. Public notice in the newspaper to announce meeting.

12/01 Public Notice in Keith County News announcing sampling to take place.

9/02 Fact Sheet announcing approval of a time critical removal action to remove high levels of PCE contamination from the ground water migrating from near the Tip Top Dry Cleaners.

12/02 Fact Sheet announcing public availability session to provide info and answer questions on removal action at the Tip To Dry Cleaners.

10/05 Fact Sheet announcing public meeting to take comments on the proposed plan for a remedial action to address ground water contamination at OU2. Display ad in the Keith County News and the North Platte Telegraph.

4/06 Fact sheet announcing the remedial design start and activities.

9/06 Fact sheet announcing start of the remedial action to address ground water contamination at OU2.

9/07 Fact sheet announcing start of remedial action implementation phase 2 to address ground water contamination at OU2.

12/07 Fact sheet announcing start of first five-year review for the Ogallala Ground Water Contamination Site. Display ad in newspaper.

SITE REPOSITORY



Ogallala Public Library,
Ogallala, NE

Superfund Records Center
901 N. 5th St.
Kansas City, KS 66101
Mail Stop SUPR
(913)551-7166

REGIONAL CONTACTS

SITE MANAGER:

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COMMUNITY INVOLVEMENT

COORDINATOR:

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STATE CONTACT:

PHONE NUMBER:

John Flint
308-632-0544

MISCELLANEOUS INFORMATION

STATE:

NE
07HW

CONGRESSIONAL DISTRICT:

03

EPA ORGANIZATION:

SFD-SUPR/FFSE

MODIFICATIONS

| | | | |
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| Created by: | Karla Asberry/SUPRFUND/R7/US EPA/US | Created Date: | 10/17/97 02:42 PM |
| Last Modified by: | Beckie Himes/R7/USEPA/US | Last Modified Date: | 02/09/2009 11:43 AM |