

**WEST HIGHWAY 6 &
HIGHWAY 281**

NEBRASKA

EPA ID# NEN000704738

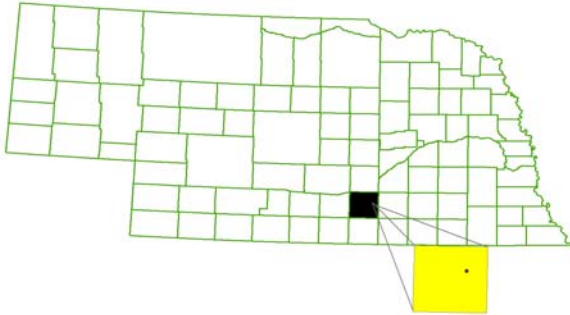
EPA Region 7

City: Hastings

County: Adams County

Other Names:

03/04/2009



SITE DESCRIPTION

The West Highway 6 and Highway 281 Site is located on the southwestern edge of the city of Hastings, Nebraska. Tetrachloroethylene (PCE) contamination has been found in two City of Hastings municipal water supply wells and in three private water supply wells. Ground water represents the sole source of drinking water for the city of Hastings and nearby communities. One known source of the ground water contamination is the former Dana Corporation facility, 1900 Summit Avenue, Hastings, Nebraska. The Dana Corporation (Dana) operated on the Site from 1978 to October 2002, manufacturing a variety of cast piston rings for internal combustion engines. The facility housed four vapor degreasing units inside concrete pits that utilized the volatile organic compounds (VOCs) tetrachloroethylene (PCE), trichloroethene (TCE), and 1,1,1-trichloroethane (TCA) as degreasing solvents to clean the piston rings between processes or prior to plating. Chromium, nickel, zinc and barium compounds were used to plate the piston rings in a series of four chrome-plating bath tanks. The Dana Corporation reported two accidental releases of PCE to the environment, in approximately 1984 and 1987. Investigations by Dana Corporation, at its former Hastings facility, show that VOC contamination, including PCE, is found in the ground water and soils. PCE contamination, as high as 57,000,000 ug/kg, has been identified in the soil at former Dana Corporation Hastings facility. The soil contamination appears to be limited to areas beneath the facility. PCE contamination, as high as 182,000 ug/l, has been identified in the ground water at former Dana Corporation Hastings facility. Further investigations conducted by the Nebraska Department of Environmental Quality (NDEQ) and EPA have identified an approximately 2-mile long plume of PCE-contaminated ground water that extends in an easterly direction from the former Dana Corporation facility.

Site Responsibility:

Dana Corp. declared Chapter 11 bankruptcy on March 3, 2006. Dana Corp. notified EPA on May 3, 2006, of its intention to cease potentially responsible party (PRP) actions at the site on or before June 3, 2006.

On behalf of EPA, on September 21, 2007, the Department of Justice filed a Proof of Claim in the Bankruptcy Court for the Southern District of New York for past and future costs incurred by EPA. This filing included costs related to such activities as operating the existing treatment systems, routine sampling, characterization of the nature and extent of contamination, and alternate water provisions.

This site is currently being addressed through Federal actions.

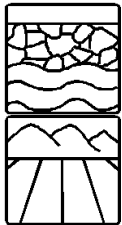
NPL LISTING HISTORY

Proposed Date: 09/14/2005

Final Date: 04/19/2006

Deleted Date:

THREATS AND CONTAMINANTS



The soil and ground water are contaminated with VOCs. PCE is the main contaminant of concern; however, other VOCs, including 1,1,1-TCA and TCE, a degradation compound of PCE, have been identified in the soil and ground water at the former Dana Corporation Hastings facility. PCE contamination above the EPA MCL Drinking Water Regulatory Level of 5 ug/l has been found in two City of Hastings municipal water supply wells and in three private water supply wells. People could be exposed to these contaminants through the use of water from contaminated wells. The two contaminated municipal wells are no longer utilized as supply wells by the City. Impacted residential/business water wells are being addressed through alternate water provisions, whole-house purification systems or connection to the municipal water supply.

CLEANUP APPROACH

Response Action Status



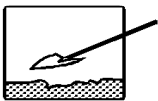
Site Studies: The Dana Corp. conducted several on-site investigations at the facility beginning in 1998. Many of these early investigations were conducted under NDEQ's Remedial Action Program Monitoring Act (RAPMA) Voluntary Cleanup Program (VCP). None of these investigations assessed the extent of off-site migration of contaminants, and were limited for the most part to the property owned by the facility. The investigations revealed VOCs in the soil and ground water beneath the site at high levels. The levels of contamination observed indicated the area was a continuing source of contamination to the ground water.



Initial Actions: Dana Corp. initiated remedial activities while participating in the NDEQ's VCP. These activities included the installation and operation of systems to address contaminated soil and ground water, and measures to prevent exposures to contaminated private well users. To address contaminated soils, Dana Corp. installed a soil vapor extraction (SVE) system to treat contaminated vapor from the soils beneath the facility. The SVE began operation in January 2003. The system was expanded in October 2004, with the addition of two additional SVE wells that were brought on-line in February 2005. Contaminated vapors from the SVE system are treated by a catalytic oxidation unit before being discharged to the atmosphere. To address ground water contamination, Dana Corp. installed and operated a ground water extraction system. The system consisted of four extraction wells and was installed in phases, beginning with the installation of the first well in October 2002. Dana Corp. did not begin operating the ground water extraction system until November 2002, when it started operation of the first well. Two additional ground water extraction wells began operation in late 2004. The fourth ground water extraction well started operating in mid-2005. Dana Corp. ceased operation of the SVE and ground water extraction systems in May and June 2006, respectively, after declaring bankruptcy. The Dana Corporation completed a well survey in October 2005, in order to identify potentially impacted private water well users. The well survey identified several residences/businesses with private water wells that were impacted. These residences/businesses were connected to the municipal water supply to prevent exposure to the contaminated private well water.

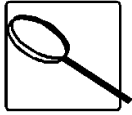


Site Studies: A Preliminary Assessment/Site Investigation was completed by NDEQ on June 9, 2005. The investigation included preliminary off-site characterization of impacts to ground water and to municipal and private wells. The report confirmed the presence of a ground water plume of at least two (2) miles in length and emanating from the former Dana Corp. facility. EPA completed a Removal Assessment on November 22, 2005. The Removal Assessment identified potentially impacted private water supply well users within the area of concern and verified the earlier Dana Corporation well survey results.



Initial Actions: In early June 2006, EPA initiated Federal response actions to abate the continuing threat to the ground water posed by the contaminated soils and ground water beneath the former Dana Corp. facility. These actions included operating the existing ground water extraction system and the soil vapor extraction and treatment system. EPA will continue to sample potentially impacted private

wells and provide alternative water sources to those impacted. The full extent of contamination has been defined. Additional investigations to characterize the nature and extent of contamination started in the fall of 2007.



Site Studies: EPA conducted planning activities for the Remedial Investigation/Feasibility Study from September 2006 through October 2007. The planned field activities were outlined in the RI/FS work plan, which evaluated the existing data on the site, identified areas of uncertainty and provided the rationale and approach to the field activities. EPA conducted field investigations to characterize the site from October 2007 to October 2008. These field investigations focused on the known and suspected areas of contamination associated with the former chrome plating activities. These areas included the shallow soils on the exterior of the facility where fallout from chromium air emissions would most likely occur, shallow soils beneath the chrome plating pits and former degreasing units, and the ground water beneath and downgradient of the former facility.

The results indicate that the volatile organic compounds (VOCs), primarily PCE, originated from the former Phillips and Northern degreasers. Beneath the former Phillips degreaser, PCE was measured at concentrations approaching its solubility limit in water. This suggests the presence of PCE in a dense non-aqueous phase liquid (DNAPL) form beneath the former Phillips degreaser. The PCE-contaminated ground water plume extends from beneath the facility to approximately 2.2 miles east-southeast from the site. The sampling performed outside the former facility indicates minimal or no impact to the surface soil at the site from fallout of chromium emissions. Subsurface soil sampling indicates limited areas of metals soil contamination, limited to areas beneath the building slab. Reports summarizing the results of EPA's remedial investigation activities and assessing the risk to human health and the environment are being prepared.



Cleanup Ongoing: EPA, under removal action authority, continues to operate and maintain both the SVE system to remove volatile organic contaminants (VOCs) from soils beneath the site, and the ground water extraction system to extract VOC-contaminated ground water. Approximately 900 lbs of PCE were removed from the soils beneath the facility by the system over the period from July 2006 through November 2008. In March 2007, EPA completed installation of a tray air stripping system to treat water extracted by the ground water extraction system. Previously, the extracted water was discharged to the Hastings waste water treatment plant under agreements with the City. However, it was determined it would be more economical to install a dedicated tray air stripping system to treat the ground water on-site. Over the period from March 2007 through November 2008, the ground water extraction and treatment system has removed 201 lbs of PCE.

Site Facts:

ENVIRONMENTAL PROGRESS



Removal actions have addressed all private water supply wells where contamination was found to exceed an EPA MCL Drinking Water Regulatory Level. The City of Hastings is using other municipal water wells to supply city residents with clean water. A Preliminary Assessment/Site Investigation was completed by NDEQ on June 9, 2005. Remedial Investigation/Feasibility Study activities commenced in September 2006, and are on schedule to be completed in early 2009. The potential for human exposure to contaminated ground water has been reduced by the City of Hastings ceasing use of the two impacted municipal wells. There is currently insufficient data to conclude all potential human exposure pathways are controlled. Ground water migration of the contaminant plume is currently not controlled. Human exposure pathways are currently being evaluated during the course of the Remedial Investigation/Feasibility Study.

COMMUNITY INVOLVEMENT

9/05 - Fact Sheet announcing EPA's intention to propose site to National Priorities List (NPL) and availability of the Superfund Technical Assistance Grant. Press release sent to media outlets. Display ad in the Hastings Tribune.

4/06 - Fact Sheet announcing site has been added to the NPL and availability of the Superfund Technical Assistance Grant. Press release sent to media outlets. Display ad in the Hastings Tribune.

9/06 - Fact Sheet announcing the start of Remedial Investigation/Feasibility Study and the availability of the Administrative Record.

1/07 - Community Involvement Plan finalized.

EPA has been and remains in close contact with the NDEQ, City of Hastings, impacted private water supply well users, potentially impacted private water supply well users, and Dana Corporation regarding the site situation.

SITE REPOSITORY



Hastings Public Library
517 W. 4th St.
Hastings, Nebraska

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

REGIONAL CONTACTS

SITE MANAGER:

E-MAIL ADDRESS:

PHONE NUMBER:

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COMMUNITY INVOLVEMENT

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MISCELLANEOUS INFORMATION

STATE:

NE

A76N

CONGRESSIONAL DISTRICT:

3rd

EPA ORGANIZATION:

SFD-IANE

MODIFICATIONS

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Lynette
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