



Iowa Department of Public Health

Hazardous Waste Site Health Assessment Program

Railroad Avenue Groundwater Contamination Site

Highlights: The Railroad Avenue Groundwater Contamination Site comprises residential, commercial and light industrial properties. Much of the land contained within the 120-acre site was once used for railroad car repair and servicing. Underneath the site, **volatile organic compounds** (VOCs) have contaminated the shallow (i.e., 30-50 feet deep) groundwater. These compounds have compromised several shallow wells within the West Des Moines water works system. A Public Health Assessment completed by the Iowa Department of Public Health in 2004 determined that the site poses **No Apparent Public Health Hazard**. This category is used when exposure to chemicals might be occurring or might have occurred in the past, but at levels below any known health hazard.

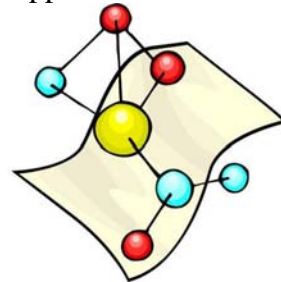
Background

In 1993, a routine water distribution sample collected by the West Des Moines water works was found to contain the volatile organic compound (VOC) 1,2 cis-dichloroethylene (1,2 DCE). Prior to 1993 no evidence of VOC contamination had been found in West Des Moines water. The WDM well field contains the 25 municipal water supply wells that have historically supplied or currently supply water to the WDM water treatment plant. Further investigation found that ground water beneath the Railroad Avenue Superfund site is contaminated with tetrachloroethene (PCE), trichloroethylene (TCE), dichloroethylene (DCE), and vinyl chloride. As a result of these investigations, five shallow municipal wells were taken out of service.



What are VOCs?

VOCs stands for Volatile Organic Compounds. VOCs are a group of chemicals that share similar properties. VOCs always contain carbon, they evaporate quickly, and they are generally used as solvents and cleaners in industrial applications.



Why was a Health Assessment written?

The Railroad Avenue Groundwater Site was placed on the National Priorities List in September 2002, making it eligible for cleanup under EPA's Superfund Program. The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the law that created the Superfund program, requires a Public Health Assessment be completed for all sites that are placed on the National Priorities List.

Is the municipal water in West Des Moines safe to drink?

Yes. West Des Moines relies on a blended system of water distribution whereby water from several municipal wells is combined into a finished product. The blended nature of the water supply ensures that no one well will supply a significant fraction of the total water used by the community.

Water supplied to West Des Moines residential and commercial customers is tested quarterly, and has not shown evidence of VOC contamination approaching any levels of health concern. In November 2004, an additional measure of protectiveness for the water system was implemented with the installation of new aerators at the WDM Drinking Water Plant.

Where can I get a copy of the Health Assessment?

The Health Assessment is available for review at the following locations:

West Des Moines Public Library
4000 George M. Mills Civic Parkway
West Des Moines, Iowa

EPA, Region 7 Records Center
901 N. 5th Street
Kansas City, Kansas

It is also available for viewing or printing at the following URL:
http://www.idph.state.ia.us/eh/toxicology_env_health.asp#waste

What were the Conclusions of the Health Assessment?

Based on available information, no adverse health effects are expected in residents or commercial water customers who consume water from the city of West Des Moines. As a result, IDPH and ATSDR have determined that the Railroad Avenue site presents **No Apparent Public Health Hazard**.

The health hazard category for any *past* exposures at the site is also **No Apparent Public Health Hazard**. Exposure to VOCs in the West Des Moines water supply might have occurred before any contaminated wells were taken out of service, but at levels far below any that have been shown-or suggested to cause-adverse health impacts.

What if I have additional questions or need more information?

The following Hazardous Waste Site Health Assessment Program Staff are available to answer your questions or provide more information.

Stuart Schmitz, P.E.
Health Assessor
Phone: (515) 281-8707
Email: sschmitz@idph.state.ia.us

Sara Colboth
Health Educator
Phone: (515) 281-5894
Email: scolboth@idph.state.ia.us



Written requests should be made to:

Charles Barton, Ph.D., DABT
State Toxicologist
Iowa Department of Public Health
321 E. 12th Street
Des Moines, IA 50319-0075