



Fact Sheet #3

Groundwater Contamination Site near Former Dry Cleaner Site *McHenry, Illinois*

Background

Contamination in soil and groundwater was found during an investigation of a property located on the east side of the Fox River in McHenry, at 3004 W. Elm Street (Route 120) during 2003-2006. The property, currently owned by Inverse Investments, Inc., is enrolled in an Illinois Environmental Protection Agency (Illinois EPA) cleanup program. It is the location of a car rental establishment. Gem Cleaners occupied the site from 1970 to 1977, after which it was occupied by a carpet dealer, an automotive repair facility, and a tire store. Historic use of solvents at the former dry cleaner location has resulted in contamination of the soil and groundwater with chlorinated organic compounds. The chemicals, commonly found in industrial and commercial solvents, tend to break down very slowly once they reach the groundwater.

Similar contamination in groundwater has been identified on the north side of Route 120 on Lincoln Road, northwest of the Elm Street site. Illinois EPA will be meeting with the current and past owners of the suspect property during the next month regarding Agency findings about groundwater contamination.

Groundwater contamination appears to extend beyond the boundaries of both properties to the west towards the Fox River. The contamination is located in mixed industrial, commercial and residential areas. Most of the homes and businesses in the areas use private wells for their water source, since a public water supply is presently available only to a limited number of properties along Route 120. McHenry County Health Department conducted extensive sampling in 2007-2008 of area private wells for site-related contaminants. Illinois EPA conducted an investigation and additional sampling in 2008.

What was found with the most recent investigations?

Additional sampling of private wells by McHenry County and temporary wells by Illinois EPA during 2008 confirmed the main contamination plume that appears to originate from the former dry cleaner site at 3004 W. Elm Street. Contamination spreads out over an area to the west and southwest of the site towards the Fox River, and it threatens to impact private wells between the site and the river.

There is a second, smaller plume of the same solvent-related chemicals north of Route 120. This appears to be an isolated spill that affects a smaller area of private wells between Charles Street and the river.

What chemicals were found in the groundwater?

As in the earlier sampling results, laboratory analysis indicates break-down products from the dry cleaner compound tetrachloroethylene or perchloroethylene (PCE). Vinyl chloride, one of the last breakdown products, and the most toxic, was found in some private well samples at concentrations greater than the safe level for public water supplies. Other samples showed cis-1,2-

Public Availability Session

Illinois EPA, Illinois Department of Public Health, the City of McHenry and McHenry County will hold a public meeting on January 26, 2010, from 6:00 to 9:00 p.m. at the City Council Chambers at 333 S. Green Street, McHenry. Agency staff will present information to update citizens about the area groundwater contamination.

Were any other types of chemicals found during the investigations?

dichloroethene (cis-1,2-DCE) or trichloroethylene (TCE), but at lower concentrations that do not present a threat to public health.

What adverse health effects are related to exposure to VOCs such as TCE or vinyl chloride?

Yes. MTBE – a component of gasoline – was found in some wells near the intersection of Route 120 and River Road, the location of two gas stations where underground fuel tanks leaked in the past. Concentrations of MTBE detected are not at a level of concern, however, for private wells. The releases at the two gas stations are being cleaned up according to the requirements of the Illinois EPA's Leaking Underground Storage Tank Program.

Exposure to levels of PCE and vinyl chloride much greater than those levels found in the McHenry area wells can cause nausea, dizziness or headaches. Exposure to low levels of such chemicals over long periods may lead to impaired immune system function and may increase the risk of liver cancer or other damage.

What can be done to stop exposure to well users from the chemicals in the contaminated ground-water area?

Illinois EPA also evaluated whether gases/vapors from groundwater contamination might migrate into buildings, affecting indoor air quality for residents. Based on the data collected to date, Illinois EPA has not identified a potential health risk from this pathway.

Illinois EPA and the Illinois Department of Public Health (IDPH) recommend that a public water supply be provided to private well users in the area of the groundwater contamination. The City of McHenry is working to finalize engineering drawings and obtain final cost estimates on providing the water mains. The City hopes to work with property owners where contamination originated to provide the necessary resources for the water mains project.

If the area is to be connected to community water, the McHenry County Department of Health will provide residents with specific information regarding the requirements for the proper abandonment of private water wells.

Will the owner of the former dry cleaner site be held responsible for the contamination from that site?

Yes. Illinois EPA issued a violation notice on September 28, 2009 to Inverse Investments, the owner of record for the former Gem Cleaners site, alleging responsibility for groundwater contamination to the southwest of their site. Illinois EPA rejected a recently submitted Compliance Commitment Agreement from the site owner. Illinois EPA will pursue resolution of this matter through additional legal action.

Is cleanup continuing at the former dry cleaner site?

Yes. Inverse Investments continues to pursue the cleanup of the contamination that is on the property at 3004 W. Elm Street. The contamination is mainly underneath the building, so Inverse Investments has been treating it with injections of certain compounds to oxidize the chemicals so they will ultimately break down to non-toxic ethane.

If my well is not in the area of the plume, should I have it tested for the VOC chemicals?

Illinois EPA and IDPH recommend that if you live in a developed area with historical commercial or industrial use of solvents, fuels or other chemicals, you should have your well tested if you have never done so. For information about testing, go to the web site for the Safe Water Well Initiative fact sheet at: <http://www.epa.state.il.us/community-relations/fact-sheets/safe-water-wells/index.html> or contact the county or state health department.

When might we expect to see work begin on the installation of the water mains?

Illinois Environmental Protection Agency Contacts

The City of McHenry reports that they are nearly ready to let bids on the project. If all goes well, contractors could be in a position to begin work in the spring of 2010, provided funding sources are identified.

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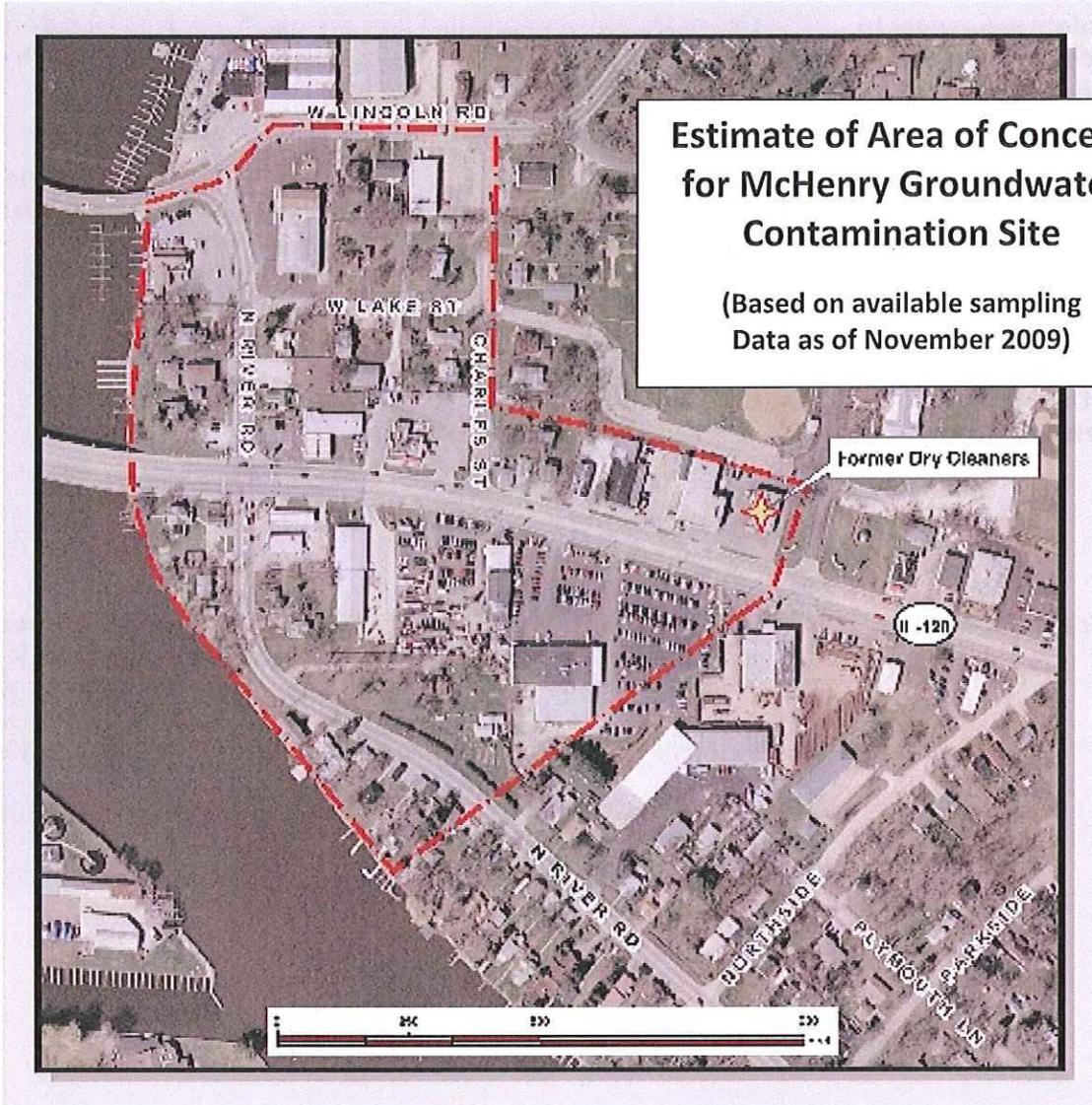
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Additional Information

Site-related documents and additional information is available through the Illinois EPA's Freedom of Information Act office. To obtain more information about this site, please submit a request through the Illinois EPA's website - <http://www.epa.state.il.us/foia/contacts.html>. In your request please reference the site name Inverse Investments and the Illinois EPA Site # 1110605163.

Other site fact sheets are available at: <http://www.epa.state.il.us/community-relations/fact-sheets/gem-cleaners/index.html>



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