

US EPA ARCHIVE DOCUMENT



Environmental Cleanup at Solutia Krummrich Plant

EPA RCRA Corrective Action

Sauget, East St. Louis, and Cahokia, Illinois October 2012

For More Information

EPA invites you to review technical plans and reports, correspondence, and other official documents related to the cleanup of the Solutia hazardous waste site in Sauget, IL at the information repository located at:

Cahokia Public Library
140 Cahokia Drive
Cahokia, IL

Documents can also be viewed online at:

www.epa.gov/region5/cleanup/rcra/solutia
www.epa.gov/region5/waste/permits/actions.htm#2007
www.epa.gov/region5/sites/saugetarea1

Contact EPA

If you have additional questions or concerns, please contact:

Ken Bardo
Project Manager
312-886-7566
bardo.kenneth@epa.gov

Rafael Gonzalez
Community Involvement Coordinator
312-886-0269
gonzalez.rafaelp@epa.gov

Region 5 toll-free: 800-621-8431,
8:30 am - 4:30 pm, weekdays

U.S. Environmental Protection Agency Region 5 has a Resource Conservation and Recovery Act (RCRA) Consent Order with Solutia to investigate and clean up releases of hazardous waste at the Krummrich Plant (formerly owned by the Monsanto Company). The Krummrich Plant is located in Sauget, Illinois, with East St. Louis located just to the north and Cahokia just to the south. In 2008, EPA issued a Final Decision to perform a cleanup that requires Solutia to:

- Remove benzene and chlorobenzene spilled in soil and groundwater at former production and storage areas on-site. These chemicals have migrated off-site in deep groundwater to the Mississippi River and to the north beneath East St. Louis.
- Operate a groundwater capture system at the river's edge to eliminate the discharge of chemicals such as benzene and chlorobenzene to the Mississippi River.
- Remove PCBs in soil remaining on-site at the Krummrich Plant beneath the former PCB manufacturing area.
- Remove and/or contain PCBs, lead, and mercury found in soil at various locations throughout the Krummrich Plant.
- Monitor the migration of chemicals such as benzene, chlorobenzene, and PCBs in groundwater to make sure they are not impacting human health or the environment.
- File an Environmental Covenant for the Solutia industrial property in the St. Clair County Recorder's Office to protect current and future workers and owners.
- Maintain financial assurance (currently at \$22 million) so the cleanup can be completed.
- Make sure municipal ordinances that restrict groundwater use in East St. Louis, Sauget, and Cahokia remain in force and that off-site activities do not affect the migration of chemicals.

Successful Cleanups

Most of the work to clean up the Solutia Krummrich Plant has been completed. Some work is ongoing that continues to remove chemicals from the environment.

- March 2009 - Solutia removed soil contaminated with mercury and contained on-site soil contaminated with lead to protect workers.
- December 2009 - Solutia partially removed on-site soils contaminated with PCBs in various areas and paved the areas with asphalt to further protect workers.
- May 2011 - Solutia removed an area of soil contaminated with PCBs off-site along the Route 3 (Mississippi Ave) right-of-way.
- Summer 2012 - Solutia started remediation systems that extract benzene and chlorobenzene from on-site soils and groundwater. The work is expected to take four or more years to properly cleanup five former production and storage areas.

Work to be Completed

Some work still needs to be conducted to clean up PCBs in soil and better understand where benzene and chlorobenzene in groundwater are migrating to. There are three tasks that need to be completed.

- PCBs in soil along an off-site rail line at Route 3 (Mississippi Ave.) will be cleaned up this year or in 2013.
- PCBs in soils at the former PCB manufacturing area still need to be removed and disposed of off-site. Solutia is pursuing permits from Illinois EPA and U.S. EPA to do this (see discussion below)
- Benzene and chlorobenzene in deep groundwater are migrating at least a mile to the north under East St. Louis and additional investigations are currently being conducted (see discussion below).

Former PCB Manufacturing Area Cleanup Proposal

About 12,000 cubic yards of soil contaminated with PCBs must be removed from an on-site area located near the Krummrich Plant entrance off Monsanto Ave. PCBs are chemicals made by the former Monsanto Company and were widely used in electrical equipment and hydraulic fluids. Commercial production of PCBs ended in 1977 but they have been found to accumulate and persist in the environment.

Solutia is pursuing a Remedial Action Plan Permit (RAPP) from Illinois EPA and a Federal permit to be able to dispose of soil contaminated with PCBs at a nearby landfill located off Judith Lane in Cahokia. If a draft permit is issued, there will be a public comment period and an opportunity for an informal public hearing before a final decision is made. Cleanup will involve opening up a large excavation on-site and hauling the contaminated soil about half a mile to the south to be disposed of at the Judith Lane landfill.

Monitoring of Contaminated Groundwater

Groundwater contamination underlying the Solutia Krummrich plant has been found migrating deep below the surface and further north than previously known. It appears that dewatering wells used along the highways running through East St. Louis are drawing contaminants to the north. Solutia will be installing monitoring wells in East St. Louis to better understand the extent and depth of groundwater contamination and any potential impacts on human health and the environment. Groundwater is not used in the local area. Safe public water supplies for East St. Louis come from the Mississippi River north of St. Louis.

Residential Soil Sampling Work in East St. Louis and Sauget

In 2009 and 2012, EPA sampled surface soil for PCBs at over 40 residences and some parks in East St. Louis and Sauget. Exposure to PCBs at elevated levels has been shown to cause a variety of adverse health effects in people and animals. Exposure in soil would be expected to occur mainly through direct contact with skin or by incidental swallowing of dirt particles.

The EPA results are presented and discussed in the October 2012 fact sheet, "Results Released for Homes and Former Dead Creek Area". All EPA fact sheets are available at the EPA websites shown on page 1.

Next Steps

EPA will keep the communities informed on the additional work being performed by Solutia at its Krummrich plant and in areas off-site in East St. Louis. Before a permit is issued to Solutia to dispose of PCB waste in the Judith Lane landfill, public comments will be taken and meetings held on the proposed cleanup.

Public outreach to local communities is being conducted by EPA to understand your concerns. Public meetings may be held using information obtained from focus group sessions held by EPA in September in East St. Louis and Cahokia.

