



U.S. Environmental Protection Agency Fact Sheet # 14 Standard Chlorine of Delaware (aka Metachem) Site



Delaware City, New Castle County, Delaware

EPA Remedial Program Update

December 3, 2004

The Standard Chlorine of Delaware (aka Metachem) Site, located in New Castle County, Delaware, includes a chlorinated benzene chemical manufacturing facility that made chemical compounds from 1966 until Metachem Products, LLC declared bankruptcy in 2002. EPA and the Delaware Department of Natural Resources and Environmental Control (DNREC) continue to move forward with the remedial design activities relating to the long-term cleanup of contamination from past on-site spills and releases. The purpose of this fact sheet is to provide an update on the various ongoing remedial cleanup activities. Contact information and sources for additional information are listed at the end of this fact sheet.

Update on Groundwater Sampling...

EPA has found site-related contamination in two water-bearing layers, or aquifers, beneath the site. See Table 1 for the characteristics of each aquifer.

Table 1: Characteristics of the Aquifers

Columbia Aquifer	Potomac Aquifer
<ul style="list-style-type: none"> • Shallow • Extends from ground surface to 75 feet deep • Not a drinking water source • Site-related contamination detected • Cleanup plans include a groundwater barrier wall and a pump-and-treat system 	<ul style="list-style-type: none"> • Deep • Extends from 75 feet to as much as 1000 feet below surface • Several water bearing zones, each separated by layers of thick clay (Site-related contaminants detected in shallow zone) • Deep zones are used as a drinking water source by public water utilities in the area



Standard Chlorine of Delaware
(aka Metachem)
Superfund Site

Legend

- Monitoring Well
- Approximate Metachem property boundary

1 inch equals 500 feet

Groundwater Sampling Results...

Validated results for the samples collected in summer 2004 from the Potomac Aquifer are back.

Here's what we found:

- Site-related contaminants are detected in the uppermost water-bearing zone of the Potomac Aquifer.
- The levels of contamination found do not pose an immediate threat to human health.
- The area of contamination is not located in the drinking water supply.
- The area of contamination is located near the site.

The groundwater flows very slowly, and the nearest drinking water supply well is not close to the site (about four miles away). DNREC notified the local water utilities about the initial findings and the utilities' testing indicates that the contamination is not reaching, or otherwise affecting the drinking water supply. The Delaware Division of Public Health tested about 15 residential wells within about 1.5 miles of the site. Results show no elements above Maximum Contaminant Level (MCL) standards and that the water quality is in accordance with the federal Safe Drinking Water Act.

Delaware City municipal water is routinely tested, and its water quality is also in accordance with the Safe Drinking Water Act. If you have questions regarding testing procedures for municipal water, please contact **Anita Beckel, Delaware Division of Public Health, Office of Drinking Water, at 302-739-5410.**

Additional Potomac Aquifer wells have been installed as part of EPA's investigation to identify the extent of contamination and monitor the rate of movement. In September 2004, samples were collected from these new wells.

These samples will help in this investigation as well as help determine the overall water quality in the Potomac Aquifer. EPA is also working with neighboring industrial facility, Premcor (formerly known as Motiva), to sample their wells. The results should be available by late December 2004.

To review the sampling data, please visit EPA's website at:
<http://epa.gov/reg3hwmd/super/sites/DED041212473/PotomacAquiferMonitoringWellSampling.pdf>. If you do not have access to the internet and would like to request a paper copy of the data, please call Trish Taylor at the number provided at the end of this fact sheet.

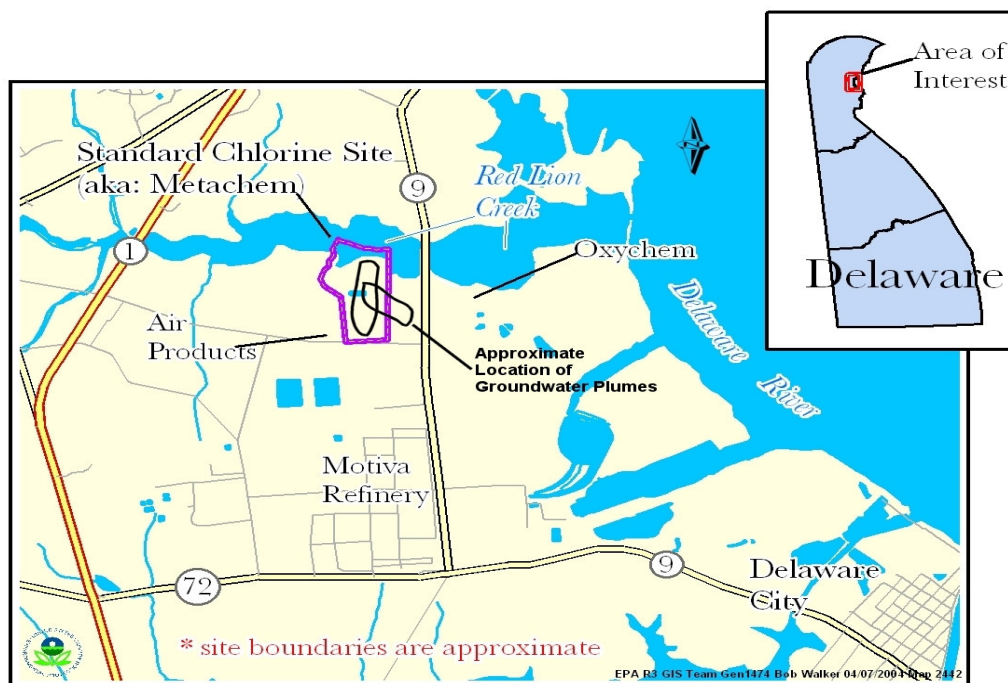


Figure 1 - Standard Chlorine Site Map

Next Steps...

- ***Quarterly Testings***

EPA will conduct quarterly testings, as part of the groundwater contamination investigation.

These quarterly testings will:

- ✓ monitor water quality,
- ✓ help identify the contamination boundaries, and
- ✓ track any movement of contamination.

- ***Continuing Outreach Efforts***

Throughout the project EPA will continue to share information with the community, elected officials and the Delaware City area municipal water utilities.

- ***Two Remedial Goals at the Same Time***

The Potomac Aquifer groundwater investigation is being conducted while the ongoing remedial design for the Columbia Aquifer containment barrier wall and pump-and-treat system is already underway. The remedial design is scheduled to be completed by spring 2005.

The groundwater barrier design includes an underground wall about 75 feet deep, which will fully encircle the chemical plant and other nearby areas that are the source of the contaminants. This wall is projected to take about one year to construct and will prevent flow two ways:

- ✓ keeping contamination in, and
- ✓ directing uncontaminated water out and away.

The pump-and-treat system will help control the groundwater level, keeping the water pressure stable.

- ***Seeking Connection between Aquifers***

EPA has concluded that the contamination in the Potomac Aquifer came from the known contamination in the Columbia Aquifer. As part of the investigation, EPA is tracking the contaminants in hopes of finding a point-source of passage from one aquifer into the other.

Record of Decision (ROD) Amendment Announcement

EPA recently completed a Record of Decision (ROD) Amendment for the site that will address the liquid chemicals remaining on-site. EPA chose off-site incineration as the Selected Remedy for the estimated 1.3 million gallons of bulk liquid chemicals that will need to be removed from above-ground on-site storage tanks. DNREC concurs with this ROD Amendment and has issued the contract to begin removing the liquid chemicals.

The Selected Remedy was chosen in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended, 42 USC §§9601 *et seq.*, and with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR Part 300.

The Administrative Record, which includes “Amendment No. 1 to the 1995 Record of Decision for the Standard Chlorine of Delaware Inc. Superfund Site Operable Units One and Two,” the Responsiveness Summary, and other supporting documents relating to the site, is available online at www.epa.gov/arweb.

You can also view the documents at the following locations:

**Delaware Department of Natural
Resources and Environmental Control**
391 Lukens Drive
New Castle, DE 19720
302-395-2600

**Environmental Protection Agency
Region 3
6th Floor Reading Room**
1650 Arch Street
Philadelphia, PA 19103
Call Anna Butch at 215-814-3157

FOR MORE INFORMATION

If you would like more information about any of the ongoing activities, please contact:

Trish Taylor, U.S. EPA
Community Involvement Coordinator
215-814-5539

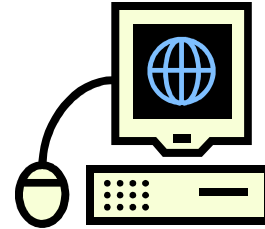
taylor.trish@epa.gov

Lynn Krueger, DNREC
302-395-2600

lynn.krueger@state.de.us

Tad Yancheski, Tetra Tech
302-283-2251

tad.yancheski@tetrattech.com



This and previously mailed fact sheets are available for review at the
Delaware City Public Library, 250 Fifth Street, Delaware City, DE.
Or, for additional information about the project, visit the following websites:

EPA's web sites: www.epaosc.net/Metachem and
www.epa.gov/reg3hwmd/super/DE/standard-chlorine-de/

DNREC's web site: www.dnrec.state.de.us/DNREC2000/Divisions/AWM/do/metachem.asp

Trish Taylor – U.S. EPA Region 3
1650 Arch Street (Mailcode 3HS43)
Philadelphia, PA 19103