



U.S. Environmental Protection Agency
Fact Sheet # 16
Standard Chlorine of Delaware
(aka Metachem) Site



Delaware City, New Castle County, Delaware

Superfund Site Cleanup Progress Update

September 2006

The U.S. Environmental Protection Agency (EPA) is using both its Removal and Remedial Programs in the cleanup effort at the Standard Chlorine of Delaware Superfund Site (the Site), also known as the Metachem Site, located in New Castle County, Delaware. EPA's Removal Program is focused on removing immediate potential Site-related risks, and the Remedial Program focuses on long-term cleanup remedies. This fact sheet provides an update on both programs' progress at the Site.

On-site Removal Activities Ending Soon

EPA's Removal Program actions are scheduled to be completed at the Site by late September 2006, pending weather conditions. EPA and the Delaware Department of Natural Resources and Environmental Control (DNREC) have removed millions of pounds of chemicals from the Site. Some were chemical products, and some were chemical wastes.

The Removal Program's work to date includes:

- ◆ Returning over 18 million pounds of product for use in commerce, and by doing so, has
 - - generated about \$250,000 for Site cleanup operations,
 - - saved about \$12 million in estimated disposal costs, and
 - - reduced the amount of new chemicals needed to be made by industry.
 - ◆ Removing approximately 14 million pounds of chemical wastes for proper disposal.
 - ◆ Decontaminating on-site equipment and piping, by steam-cleaning and removing any chemical residue.
- Other on-site work also includes:
- ◆ Dismantling on-site facility buildings and structures such as
 - - tanks,
 - - piping, and
 - - related equipment. (See Photo #1.)
 - ◆ Recycling or disposing of on-site debris and building and structure materials.

Ongoing work at the Site includes continuing to dismantle old facility structures, disposing or recycling the structure materials, and the disposing of stored chemical wastes.

Currently, EPA is focused on removing the remaining estimated 11 million pounds of chemicals from the Site. The majority of the waste is stored as a solid and is securely contained in "totes." (See Photo #3.) As noted in the 2004 Record of Decision, Amendment #1, EPA's Remedial Program will assist with the remaining approximated 2,900 totes awaiting proper disposal. Removal activities are estimated to be completed by late September 2006. However, EPA's Remedial Program will continue to work with DNREC on the remaining long-term work at the Site.



Photo #1: On-site Demolition



Groundwater Barrier Wall Work Begins

The remedial design (RD) for the Columbia Aquifer barrier wall and pump-and-treat system was finalized in September 2005. The first phase of the Remedial Action (RA) involved contractor and subcontractor bidding. The bidding was finished and contracts were signed in spring 2006. Initial work for the barrier wall, such as vegetation clearing and installing sediment and storm water control measures, began in early summer 2006. (See Photo #2.)

The groundwater barrier design includes an underground wall ranging from 45- to 75-feet deep, which will surround the chemical plant area and adjacent areas that are the source of the contaminants. The barrier will stop contaminants from migrating and allow the contaminated groundwater to enter the pump-and-treat system. This barrier wall is projected to take about one year to build. While work has begun to prepare for the barrier wall installation, the pump-and-treat system is in the contract bidding phase. Specialized subcontractors (some may be local to the region or state) will be used for specific portions of the construction. Once the contracting phase is complete, work on the pump-and-treat system will begin.

Comprehensive Groundwater Study

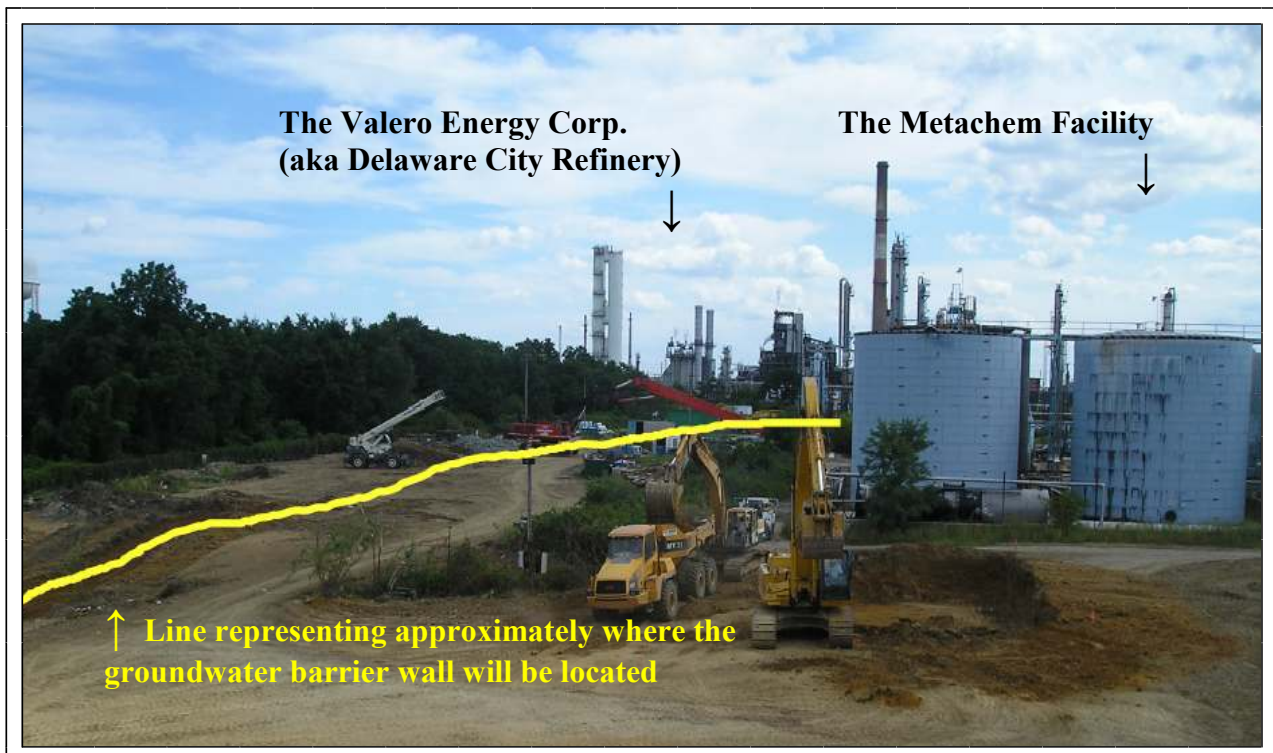
EPA and DNREC are continuing the Potomac Aquifer groundwater study with scientists from the U.S. Geological Survey (USGS) and the Delaware Geological Survey. The study includes:

- ♦ Monitoring groundwater quality (in regards to Site-related contaminants)
- ♦ Gathering groundwater flow information, such as direction and flow rate,
- ♦ Exploring the possibility of a connection, or passage, between the Columbia and the Potomac aquifers.

EPA and DNREC began quarterly sampling of the Potomac Aquifer in November 2003. Additional wells will be installed and sampled in phases as part of the study. A summary of the latest quarterly sampling results is on page 3.

The full, validated groundwater study results are published on the Internet and available online at: www.epa.gov/reg3hwmd/super/sites/DED041212473/PotomacQuarterlyMonitoringResults12-05.pdf

↓ Photo #2: Preparations for the Barrier Wall Construction



Recent Groundwater Sampling Results

The results from the latest Potomac Aquifer well samples, collected in September and December 2005, are back. Here is a summary of what we found:

- ◆ The sampling results from September 2005 show one sample with an elevated level of contamination above the national Maximum Contaminant Level (MCL) standard. Benzene was detected at a level of 11 parts per billion (ppb). The MCL standard for drinking water is 5 ppb. All of the other monitoring well samples show no significant levels of Site-related contaminants (they were “non-detect”).
- ◆ All of the sampling results from December 2005 show no signs of elevated Site-related contaminants above MCL standards, including the sample taken from the well that had detected elevated level of benzene from the previous sampling (September 2005) mentioned above.
- ◆ EPA and DNREC will continue to investigate groundwater quality and monitor the Potomac Aquifer.
- ◆ The next round of sampling will be conducted using the new wells to be installed. Sampling is scheduled to take place in winter 2006.

↓ Photo #3: “Totes” in storage.



↑ Photos #4 and #5: Cleaned and dismantled processing equipment is being removed from the Site for proper disposal, reuse and/or recycling.

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Administrative Record Locations

You can review Site-related documents at the following locations:

Delaware Department of Natural Resources & Environmental Control Site Information and Restoration Branch, 391 Lukens Drive, New Castle, DE 19720, 302-395-2600, and at the **U.S. EPA Region 3 Public Reading Room**, 1650 Arch Street - 6th Floor, Philadelphia, PA 19103, 215-814-3157. Please call to schedule an appointment.

For More Information

Please contact one of the following representatives:

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or visit the following websites:

- ♦ www.epa.gov/reg3hwmd/super/sites/DED041212473/index.htm
- ♦ www.dnrec.state.de.us/DNREC2000/Divisions/AWM/do/metachem.asp
- ♦ www.epaossc.net/Metachem

This and previously mailed fact sheets are available for review online and are also at the **Delaware City Public Library**, located at 250 Fifth Street, Delaware City, DE 19706.

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