



# U.S. Environmental Protection Agency

## Fact Sheet # 20

### Standard Chlorine of Delaware (aka Metachem) Superfund Site



New Castle County, Delaware

#### Community Update on Cleanup Progress

October 2012

The U.S. Environmental Protection Agency (EPA) continues its cleanup effort at the Standard Chlorine of Delaware Superfund Site (Site), also known as the Metachem Site, located in Delaware City, New Castle County, Delaware. EPA has been cleaning up the Site in four separate parts, called “operable units,” or OUs. This fact sheet provides a brief status report of the overall cleanup progress and upcoming OU-3 activities.

#### UPCOMING CONSTRUCTION ACTIVITIES

##### EPA is Dismantling Onsite Warehouse

This month, EPA will begin dismantling the Site’s warehouse building and remove remaining items inside the warehouse. Material that is not contaminated, such as steel trusses and beams, will be recycled to the extent possible. The remaining material will be disposed of as hazardous or non-hazardous wastes, in a properly licensed facility.

The warehouse is one of the few remaining structures left onsite.

The work is estimated to take three months to complete, depending on work schedules and weather conditions.

The concrete pad for the warehouse will remain in place until EPA is ready to address the potentially contaminated soils beneath where the warehouse building once stood. In the meantime, EPA will clean the concrete pad and apply a weather resistant coating.

#### WHAT YOU MAY NOTICE

Once work on the warehouse begins, you may notice an increase in large equipment and truck traffic coming to and from the Site work area. Workers will be wearing standard personal protective gear, such as hard hats, safety goggles and/or coveralls.

**Photo: On-site warehouse to be dismantled.**

#### OU-3 REMEDIAL DESIGN PHASE COMPLETED FOR SURFACE SOIL

As part of the OU-3 cleanup progress, EPA has completed the Remedial Design for the surface soils, which includes capping the contaminated soils. The design includes:

- ♦ Constructing a 22.7 acre multi-layer soil and geosynthetic material surface cap;
- ♦ Soil gas collection and treatment system;
- ♦ Surface cover of topsoil to support vegetation.

#### NEXT STEPS

EPA will host a community briefing in early 2013 to discuss the design details for the surface soil cleanup. The design will be implemented once funding for the project is received.

EPA will notify the community in advance of the briefing using the local newspaper to advertise the date, location and time of the briefing.



## REMEDIAL WORK DONE TO DATE

Below is a brief description of the work done to date for each OU:

### **OU-1:** Interim (short-term) remedy for contaminated ground water:

- ◆ Ground water monitoring wells were installed and quarterly sampling has been ongoing since 2004.
- ◆ In 2007, EPA installed a pump-and-treat system that uses multiple wells; replacing the previous ineffective onsite wastewater treatment system that was operated by the facility before EPA took over the cleanup at the Site.
- ◆ In June 2007, a sub-surface barrier wall was constructed to help keep contaminated ground water from migrating off site.
- ◆ Both the pump-and-treat system and the barrier wall will remain in place, operate, and be evaluated for use in the OU-4 remedy.
- ◆ To date, more than 33 million gallons of water have been successfully treated, removing more than 22 thousand pounds of site contamination.

### **OU-2:** Addresses contaminated soils and sediments contaminated by historic spills:

- ◆ Historic spill areas of the Site included the rail car loading area where several above ground storage tanks collapsed.
- ◆ Contamination from these spills flowed into wetlands near Red Lion Creek. Approximately 40 acres were impacted by these spills.
- ◆ EPA is developing Remedial Design plans for OU-2 as other cleanup activities are underway.

### **OU-3:** Long-term remedy for contaminated soils and soil-gas in the former plant area.

To address contaminated soils and related soil-gas in the area where the manufacturing plant once stood, the OU-3 cleanup plan consists of:

- ◆ capping approximately 23 acres of surface soil.
- ◆ connecting that cap to the existing sub-surface barrier wall.

The OU-3 cleanup Remedial Design phase has been completed and will be implemented once funding for the project is received.

### **OU-4:** Long-term remedy for Site-related contaminated ground water:

- ◆ The U.S. Geological Survey (USGS) has been working with EPA on an aquifer study. This study is separate from the on-site ground water monitoring and cleanup activities.
- ◆ EPA, working with the Delaware Department of Natural Resources and Environmental Control (DNREC), has installed a network of 21 ground water monitoring wells to evaluate the deeper ground water at and near the Site. Contamination has been detected in the upper portion of the deeper ground water aquifer to the north, east, and west of the Site.
- ◆ The level of benzene and chlorobenzene contamination EPA detected is considered high; however, the area of concern is located far from public drinking water supplies and is not impacting drinking water quality. EPA and DNREC will continue to monitor these wells closely.
- ◆ EPA plans to install additional deeper ground water monitoring wells and complete the aquifer study in 2013. The information obtained as part of the study will be used to develop EPA's proposed long-term remedy for contaminated ground water.

## BRIEF SITE BACKGROUND

The Standard Chlorine of Delaware, Inc. Site is a former chemical manufacturing plant located in an industrial area in New Castle County, DE, three miles northwest of Delaware City.

Chlorinated benzene compounds were made on the 65-acre Site from 1966 to 2002. As a result of those activities, chlorobenzenes from spilled material have been found in the ground water, soil, sediments and surface water. Wetlands near the Site are also contaminated.

The Site was added to the National Priorities List (NPL) in 1987, making it eligible to receive Superfund monies.

EPA has taken responsibility for the Site cleanup since there is no viable Potentially Responsible Party (PRP). In 2002, the Site's owner declared bankruptcy and abruptly closed the facility, leaving an approximately 40 million pounds of chlorobenzenes and related chemicals in insecure tanks, pipelines, process vessels and treatment systems.

To evaluate and address the different areas of contamination, EPA divided the site into four parts or "Operable Units" (OUs).

EPA's Region 3 office has been working with DNREC and other state and federal agencies, to help study and clean up the contamination at this Site.

## REMOVAL WORK COMPLETE

Cleanup activities performed under EPA's Removal Program were completed in September 2006. EPA and DNREC removed millions of pounds of abandoned chemicals from the Site.

## THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009 (ARRA OR "RECOVERY ACT")

Cleanup work at this Site has been partially funded by the American Recovery and Reinvestment Act (ARRA or "Recovery Act").

EPA received more than \$2.5 million in "stimulus money" that was used for removing the last of the bulk liquid chemicals left onsite by the former owners and for upgrading the ground water treatment system.

The funding made it possible for these tasks to be started and/or completed in a shorter period of time than without the funding.

**Photo below: Upgraded ground water treatment system facility located on-site.**



### **For More Information**

Online Resources:

<http://www.epa.gov/reg3hwmd/npl/DED041212473.htm>

<http://www.awm.delaware.gov/Pages/Metachem%20cleanup%20update.aspx>

If you have additional questions, please contact:

**Trish Taylor**, EPA Community Involvement Coordinator, 215-814-5539

**Brad White**, EPA Remedial Project Manager, 215-814-3217

**Todd Keyser**, DNREC Project Manager, 302-395-2600

Affix Label Here

U.S. Environmental Protection Agency Region 3  
Attn: Trish Taylor  
1650 Arch Street (3HSS2)  
Philadelphia, PA 19103

