



DNREC/EPA Fact Sheet #9 May 16, 2003



Metachem Products, LLC The DNREC and EPA Cleanup Team & Cleanup Action Update

Over the past year, a wide variety of federal and state agencies have been involved with the collective emergency response to the abandonment of the Metachem facility. This fact sheet describes the role of each team member in the current and future cleanup of the Metachem facility (see organizational chart on the following pages).

Historical State and Federal Agency Involvement with Cleanup at the Metachem Site

DNREC's **Division of Air and Waste Management (DAWM)** first became involved with the cleanup activities at the Metachem site (then owned by Standard Chlorine of Delaware) in 1981 because of the release of 5,000 gallons of chlorobenzene from a railcar. DNREC was the lead environmental agency overseeing the site cleanup until 1987, when the site was formally added to the National Priority List (NPL) because of the 500,000-gallon chlorobenzene spill that occurred in January 1986. This made the site a "Superfund site" for which EPA had authority to oversee cleanup activities.

The Superfund law separates short-term (removal actions) and long-term (remedial actions) responses by the threats posed by sites, based on the immediacy of the threats to public health and the environment. Based on the information available in 1987, the Standard Chlorine site was set up as a long-term response, and the **EPA Remedial Program** became the lead environmental agency. Long-term responses, also called remedial actions, involve complex and highly contaminated sites that often require several years to fully study the problem, develop a permanent remedy, and clean up the contamination.

Since 1987 the **EPA Remedial Project Manager (RPM)**, with the assistance of DNREC, has been responsible for overseeing the contamination studies, developing the soil and ground-water contamination remedies, and supervising the cleanup actions. Prior to May 2002, Metachem (and its predecessor Standard Chlorine), conducted most of the studies and were in the process of designing the remedy for the final cleanup of the site, under the oversight of EPA and DNREC.

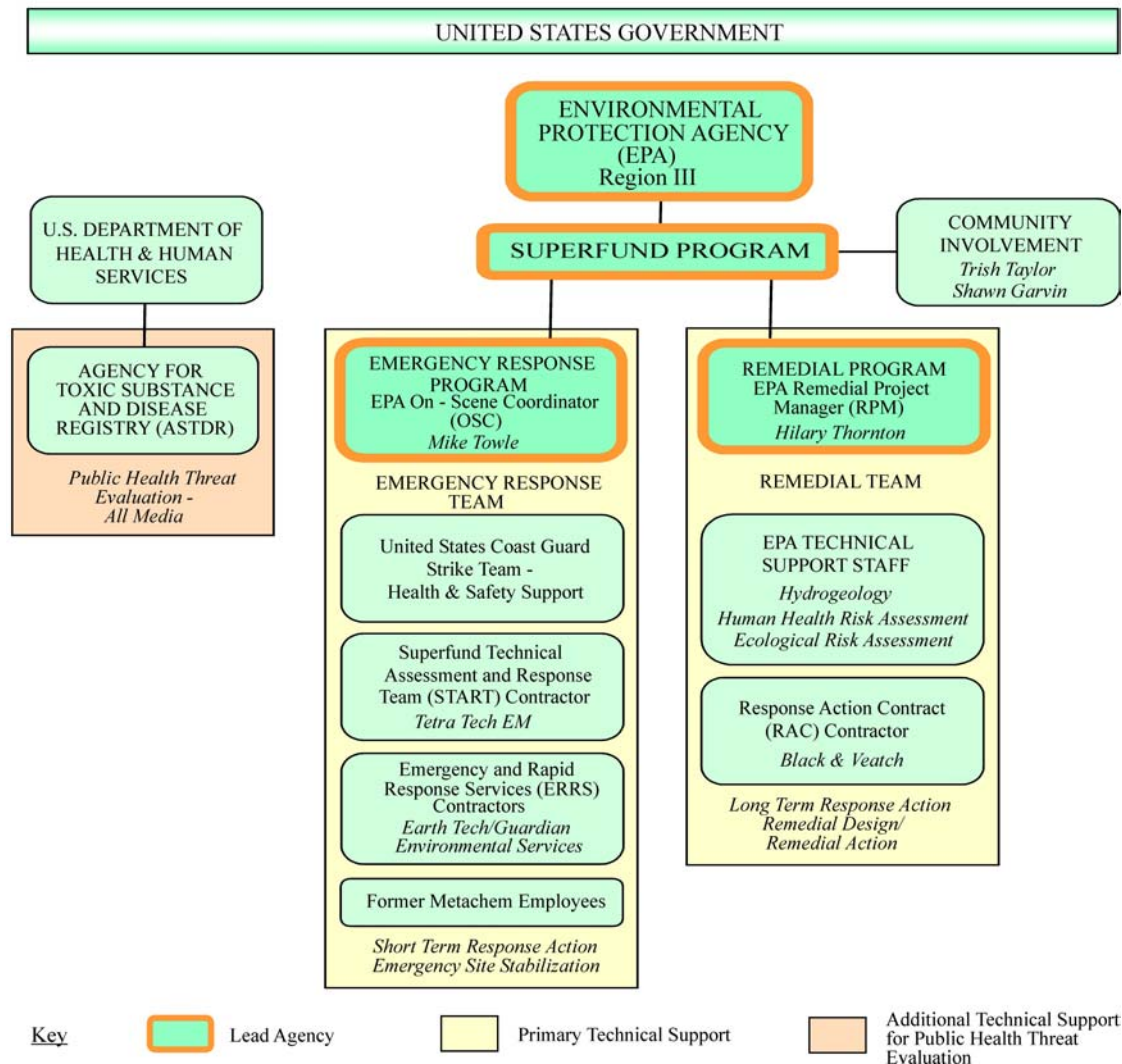
Federal Agency Response to the Metachem Bankruptcy

When Metachem notified the government of its intent to abandon the facility in early May 2002, DNREC requested assistance from the **EPA Emergency Response Program (also known as the Removal Program)**, to evaluate the conditions at the facility during shutdown. The **EPA On-Scene Coordinator (OSC)**, with the assistance of DNREC, determined that the site posed an imminent threat to human health and the environment, and emergency action was needed to reduce the threats. Federal funding to initiate an emergency removal action at the Metachem site was approved on May 17, 2002.

Consequently, the EPA Removal Program became the lead environmental agency, and the EPA OSC is responsible for directing the emergency cleanup efforts. The Removal Team conducting the emergency response at the site includes:

- The EPA OSC and Removal Program support staff direct all aspects of the emergency cleanup activities and manage the government cleanup contractors;
- **United States Coast Guard Strike Team** provides health and safety support for the cleanup, and acts as the site safety officer;
- The **Superfund Technical Assessment and Response Team (START) contractor (Tetra Tech EM, Inc.)** provides technical science and engineering support for the cleanup, and also conducts air monitoring and other sampling required for the cleanup; and
- The **Emergency and Rapid Response Services (ERRS) contractors (Earth Tech and Guardian Environmental Services (GES))** are actually performing the cleanup activities, including operation and maintenance of the wastewater treatment plant, ground-water treatment plant, and other plant systems, waste removal, equipment cleaning and decontamination, etc. Both the ERRS and START contractors have also hired **former Metachem employees** (such as production, maintenance, and technical personnel) for their plant expertise to assist with the cleanup.

METACHEM SITE CLEANUP TEAM



The Metachem bankruptcy also required EPA, with the assistance of DNREC, to completely take over the long-term response (remedial action) activities at the site. The Remedial Team consists of the following:

- The EPA RPM directs all aspects of the future remedial design/remedial action (RD/RA) activities with soil, sediment, surface-water and ground-water contamination, as well as any low-risk residual wastes, which may remain at the Metachem site after the completion of the Removal Program effort, which is expected in 2004;
- **EPA Remedial Program Technical Support staff**, including a hydrogeologist, human health toxicologist, and members of the Biological Technical Assessment Group (BTAG) provide expertise in the area of ground-water, contamination travel paths and effects, as well as human health and ecological risk assessment; and
- The **Response Action Contract (RAC) contractor (Black & Veatch)** provides the science and engineering support to collect the data necessary to complete the remedial design plans and actions.

In addition to the Removal and Remedial Program teams, EPA Community Involvement staff coordinate with DNREC and its contractor Tetra Tech to provide community relations support for the short-term and long-term response cleanup activities.

The **Agency for Toxic Substances and Disease Registry (ATSDR)** is another federal agency involved at the site. Congress established ATSDR in 1980 under the Superfund law to conduct public health assessments at each Superfund site. ATSDR conducted an initial assessment at the site in 1989, and is currently updating the public health assessment for the site based on a petition by concerned citizens. For the current cleanup project, ATSDR is advising the EPA Remedial Program on the current public health impacts of the Metachem site.

The EPA OSC and the Removal Program will remain the primary EPA project lead at the Metachem site until the “emergency” status has been removed, which is expected in 2004. At that point, the EPA Remedial Program and the RPM will become the primary EPA project lead for the remainder of the Metachem cleanup.

State of Delaware Agency Response to the Metachem Bankruptcy

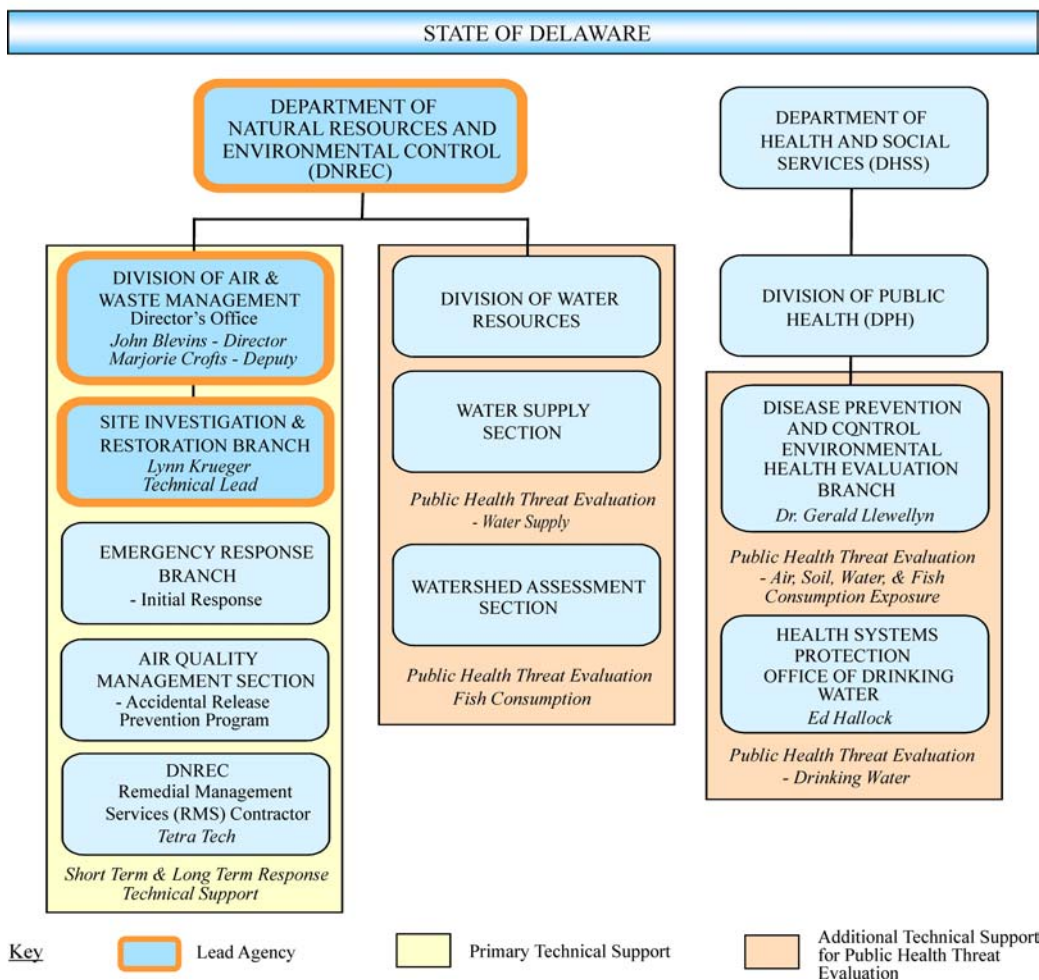
When Metachem declared bankruptcy in early May 2002, DNREC's **Emergency Response Branch (ERB)** was the first state agency to respond to the site with the assistance of the EPA OSC. ERB conducted daily inspections and assisted EPA with the on-going evaluation of the situation in the early stages of the response. At the same time, DNREC's **Site Investigation and Restoration Branch (SIRB)**, which was already involved with the on-going Remedial Program activities, also responded. Initially, SIRB and the EPA RPM evaluated the existing ground-water pump-and-treat system during the plant shutdown.

In July 2002, SIRB became the lead branch and assigned a dedicated engineer to the site to participate in the daily cleanup activities, and to help coordinate the efforts of other DNREC and state agencies. SIRB also manages the Small Containers Removal (SCR) and laboratory cleanup aspects of the cleanup project with the assistance of its **Remedial Management Services (RMS) contractor (Tetra Tech, Inc.)**, and Guardian Environmental Services. SIRB continues to provide daily technical support to the EPA OSC, and will be the lead state agency for future remedial program actions at the site.

Various other state agencies are also providing technical support during the Metachem cleanup, including:

- DNREC's **Division of Air and Waste Management (DAWM), Director's Office** provides overall coordination between the State and EPA to ensure that all necessary state resources are available for the cleanup project, community involvement, and policy issues.
- DAWM's **Air Quality Management Section, Accidental Release Prevention Program** provides crucial process safety management review and expertise for the various cleanup operations;
- DNREC's **Division of Water Resources, Water Supply Section** and the Delaware Department of Health and Social Services (DHSS) **Division of Public Health (DPH), Health Systems Protection, Office of Drinking Water** evaluate the threats to public health for drinking water in the Metachem area; and
- DPH's **Disease Prevention and Control, Environmental Health Evaluation Branch** evaluates findings related to possible threats to public health from air, water, and soil emissions during the cleanup. DPH also jointly evaluates health threats from fish consumption related to Red Lion Creek with DNREC's **Watershed Assessment Section**.

METACHEM SITE CLEANUP TEAM



Cleanup Action Update

Chemical Process Area Decontamination Project Completed!

The Chemical Process Area Decontamination project, which started in early January 2003, was completed on Monday April 28, 2003, after the last of the vessels used in the decon project were cleaned. The primary goal of this major decontamination effort was to remove about 1 million pounds of mixed chlorinated benzene materials from the reactor area of the facility.

The chemicals were initially removed from the reactor area in January, and since that time EPA has decontaminated the vessels, tanks, and equipment. The principal decontamination effort included the removal of residual chemicals, followed by steam cleaning and water rinsing. All equipment will be inspected and verified clean, and then turned over to International Process Plants and Equipment Corporation (IPPE), who will dismantle the equipment and remove it from the Metachem site.



Chlorobenzene Removal and Separation Project (CR/SP) Update

EPA and DNREC continue to prepare for the start of the CR/SP, and hope to start the operation sometime in June 2003. The project will not start until all critical system components are tested, and all other technical and operational preparations are complete. Activities currently underway include the completion of the training program, finalization of the Work and Operation Plans, finalization of the air monitoring and sampling plan, continued sampling and analysis of the tank contents, fabrication of new and spare parts, and further inspection and testing of equipment.

As a follow-up to some of the questions posed by the community at the April 10, 2003 CR/SP Public Availability Session, the following provides some additional details about the CR/SP:

- **Boiler Emissions** – The on-site boilers, which will provide steam for the CR/SP, were cleaned, vacuumed, and inspected in April 2003. The boilers will operate with natural gas or fuel oil only -- no chlorobenzenes, other fuels, or wastes will be burned. Emissions from the boilers will be similar to that of any industrial or commercial boiler, and levels of nitrous oxide (NO_x), sulfur oxide (SO_x), carbon monoxide, and particulates will be well below the previous permit limits.
- **CR/SP Work Crew Plan** – The approximate size of the CR/SP work crew is 35 people. This crew will operate the CR/SP in various shifts 24 hour per day once the actual operation is started.
- **Tank Integrity** – EPA has inspected all of the storage tanks at the facility, and has selected the tanks in the best condition for the CR/SP. All of the tanks are located within secondary containment structures that are designed to fully contain any spills or releases. These storage tanks will only be used temporarily to store the liquids from the CR/SP while waiting to be transferred off-site for disposal.
- **Tank Contents** – EPA continues to collect samples from the various storage tanks, vessels, and other equipment in preparation for the start of the CR/SP. Test results available to date can be found at the EPA OSC website (www.epaosc.net/Metachem), under the documents section (Chlorobenzene Analytical Summary-CR/SP). The actual website link to this document is www.epaosc.net/sites/03H6/files/table%20of%20cbs.pdf. EPA will update this website periodically with new information as additional tank content test results become available.
- **Fenceline Air Monitoring** – EPA will monitor air quality at various locations throughout the plant during the CR/SP, including locations along the perimeter of the facility (i.e. along the fenceline), as well as off-site locations. The detection of chemicals at concentrations approaching action levels at any location will prompt immediate investigation and action, including the shutdown of the operation, if necessary, to eliminate the potential hazard.

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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