

SUPERFUND

# W.R. Grace (Acton Plant) Site Acton, MA

U.S. EPA | HAZARDOUS WASTE PROGRAM AT EPA NEW ENGLAND



**THE SUPERFUND PROGRAM** protects human health and the environment by investigating and cleaning up often-abandoned hazardous waste sites and engaging communities throughout the process. Many of these sites are complex and need long-term cleanup actions. Those responsible for contamination are held liable for cleanup costs. EPA strives to return previously contaminated land and groundwater to productive use.

## SITE DESCRIPTION:

The W. R. Grace (Acton Plant) Superfund site is located in the towns of Acton and Concord, Massachusetts and has been used for industrial purposes since the 1800's. The W. R. Grace property is composed of approximately 260 acres of land including several surface water bodies and various wetlands. Grace produced a variety of latex and rubber-based products as well as cellulose battery separators. All production ceased at the Grace site in 1991.

## IS THE DRINKING WATER SAFE?

Yes. The Acton Water District (AWD) continues to closely monitor, sample and treat the towns' drinking water to ensure that safe drinking water standards are maintained. The AWD will continue providing oversight during the groundwater and sediment cleanup actions.

## REMEDY DESIGN ACTIVITIES

Since the decision on the cleanup approach for the W. R. Grace site, formally known as a Record of Decision (ROD), was signed by EPA in 2005, EPA and MassDEP project managers in coordination with stakeholders from ACES, the Town of Acton Health Department and the Acton Water District have worked with W. R. Grace on the design of the remedy. EPA has regularly held conference calls to discuss design details with community stakeholders. In addition, community stakeholders have had an opportunity to review and provide comments on technical reports, well locations and work plans related to the design of the site remedies. Stakeholder comments were communicated and/or discussed with W.R. Grace's contractors and incorporated into the remedy designs.

## WHERE ARE WE NOW?

There are three major areas where cleanup work is now required at the W. R. Grace site: groundwater at the Northeast Area; groundwater at the Landfill Area; and sediment at Sinking Pond and the North Lagoon Wetland area. Below is a summary of actions that have been taken in each area, as well as descriptions of the work remaining at each of these three areas. In addition, we have included information on what residents can expect during the upcoming 2011 continued >

## INFORMATION SESSION

On May 18th, 2011, 7:00 pm, EPA will hold a Public Information Session at the Acton Memorial Library to update residents about upcoming activities at the WR Grace Superfund site. The public is welcome to come beforehand to gather information, preview exhibits and talk informally to representatives from the EPA, MassDEP and the community. The meeting space is fully accessible. For more information, contact: Sarah White, EPA Community Involvement Coordinator (at right).

## KEY CONTACTS:

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## GENERAL INFO:

### EPA NEW ENGLAND

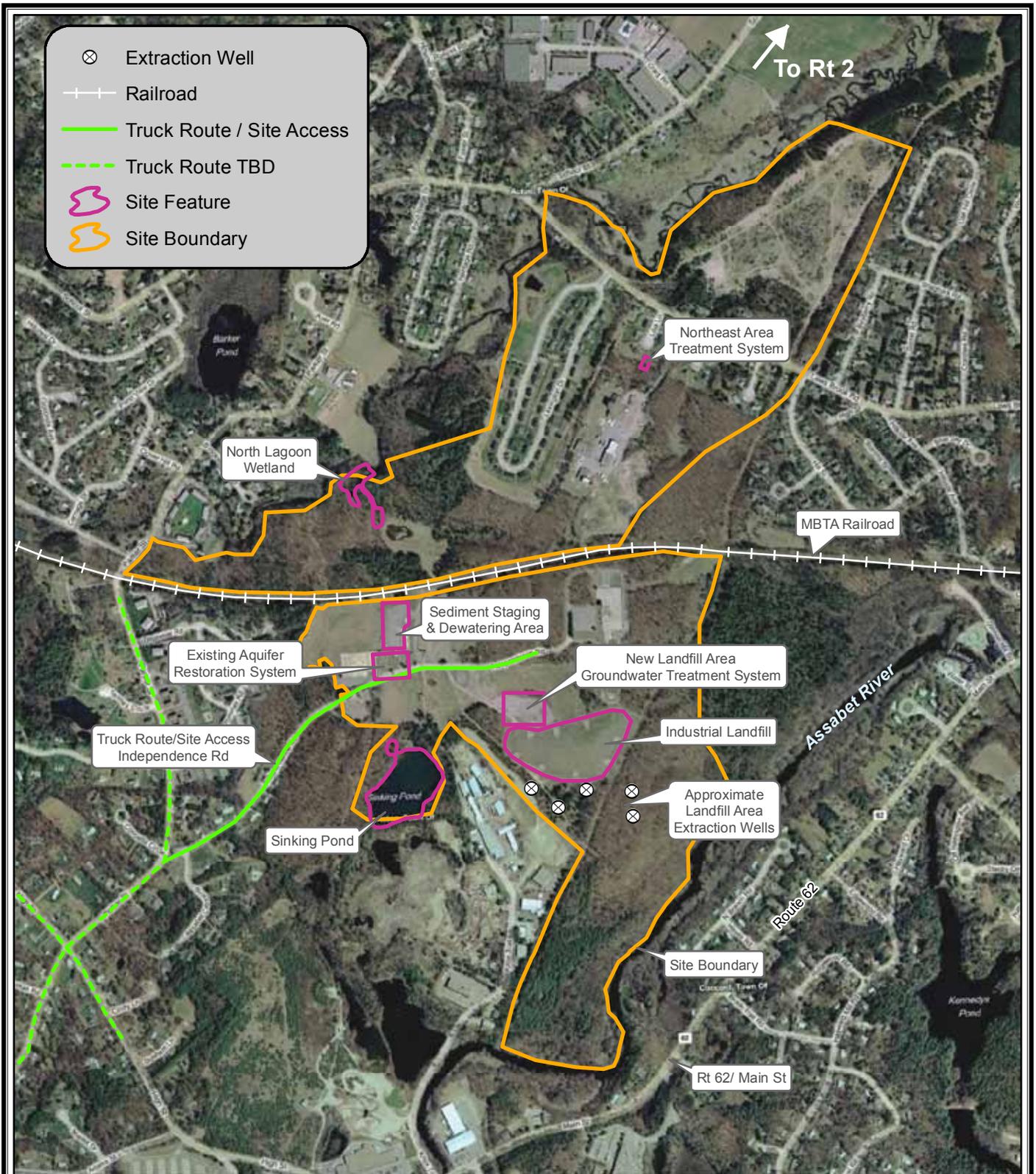
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### LEARN MORE AT:

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**Figure 1**  
**W.R. Grace Superfund Site**  
 Acton, Massachusetts



Map created by EPA Region 1 GIS  
 April 13, 2011 Data Sources: Aerial  
 Photo / Base Map - Bing Maps;



0 0.25  
 Miles

**EPA TO HONOR OF  
MARY MICHELMAN WITH A LIFE-  
TIME ACHIEVEMENT AWARD**

EPA will honor Mary Michelman with a Lifetime Achievement Award for her work during the environmental cleanup of the W.R. Grace site at EPA's Environmental Merit awards ceremony to be held on Wednesday, May 11 from 1 to 3:00 pm at Faneuil Hall in Boston. While serving as President of ACES, Mary committed herself to promoting the safety of Acton's citizens. She was a dedicated environmentalist and community activist who made a tremendous difference. She had a positive impact on all who worked with her. EPA would like to extend an invitation to those who knew and worked with Mary to this event.



*Fig.2 - Components of Northeast Area treatment system*

construction season. EPA is providing oversight to ensure that measures to protect public health and the environment are in place during construction.

**NORTHEAST AREA**

Construction of the Northeast Area groundwater pump and treatment system began in June 2009 and was completed in March 2010. This system extracts approximately 20 gallons per minute (gpm) of contaminated groundwater from 140 to 210 feet below the ground surface (fbgs), it then treats this contaminated water to remove Volatile Organic Compounds (VOCs) and arsenic and then re-injects the clean water back into the aquifer. This system began operation on April 5, 2010 and it continues to pump and treat groundwater from this area. To date, the Northeast Area treatment system has pumped over 7.2 million gallons of contaminated groundwater and has removed approximately 5.9 pounds of total VOCs. See Figure 1 for a site map depicting the location of the system and see Figure 2 to view the components of the Northeast Area groundwater pump and treatment system.

**LANDFILL AREA**

Construction of the building for the Landfill Area groundwater treatment system began in October 2010, and the installation of the treatment equipment is ongoing. This treatment system is scheduled to begin operating in early May



*(Fig.3a - above) Landfill Area treatment system (Fig.3b - below) UV Oxidation unit destroys contamination*

2011, and operation will continue until cleanup levels are met and groundwater does not present an unacceptable risk. This treatment system will extract 50-55 gpm of contaminated groundwater from five extraction wells located in the vicinity of the Industrial Landfill at various depths. See site map (Figure 1) for the approximate location of the Landfill Area treatment system and extraction wells.

### LANDFILL AREA GROUND-WATER TREATMENT SYSTEM

Inorganics (metals) will be removed from the extracted groundwater via a microfiltration unit. Other contaminants (VOCs and 1,4 Dioxane) are destroyed by using ultraviolet light to activate a titanium dioxide (TiO<sub>2</sub>) slurry catalyst. The clean water will then be discharged to Sinking Pond. Figure 3a and 3b shows the interior equipment for the Landfill Area treatment system.

### SEDIMENT REMEDIATION-SINKING POND & NORTH LAGOON WETLANDS

Numerous studies and sampling events have identified unacceptable human health and ecological risks from prolonged exposure to sediment in Sinking Pond and the North Lagoon Wetland. Beginning in the summer of 2011, approximately 9,000 cubic yards of sediments contaminated with arsenic and manganese will be excavated. After the contaminated sediments are removed, post excavation sampling and analysis will be performed in Sinking Pond to determine if the appropriate and protective cleanup levels have been met within the remaining sediment. Excavated sediment will be dewatered and dried onsite. The sediments will then be transported via trucks and disposed of at an appropriate offsite disposal facility. After the cleanup activities are completed, these areas will re-vegetated and monitored to ensure the wetland areas are properly restored.

### CONSTRUCTION SCHEDULE

Hauling in of equipment and excavation at the Sinking Pond-North Lagoon area will begin in June 2011, and trucks will be accessing the site from Independence Road. See site map Figure 1 to view the sediment removal locations and staging area. Residents who live on Independence Road should expect an increase in truck traffic when the dried sediments are taken off the property for disposal. The schedule will be Monday through Friday, during the hours of 7:00 am – 6:00 pm. The entire construction period is expected to last 16 weeks. The trucks are expected to begin transporting equipment from May until mid June. Sediment removal and transport will take place in August and September. The speed limit of 30 miles per hour on Independence Road will be strictly enforced while the trucks enter and leave the W.R. Grace site. The truck route is depicted on the site map (Figure 1).

### ENVIRONMENTAL & PUBLIC HEALTH SAFETY PRECAUTIONS

The trucks will be required to be free of dust and dirt prior to exiting the site. Sediments contained inside the trucks will be covered during transport to prevent dust generation. Air quality monitoring in the work areas will be conducted to ensure that protective air levels are maintained. Measures will be taken to control dust on site.

### NEXT STEPS

Upon completion of excavation and disposal of contaminated sediments, the wetland areas in Sinking Pond and the North Lagoon Wetland will be restored and monitored. Long term groundwater monitoring will also continue.

### ADDITIONAL CONTACTS

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Fig. 4 - Boat at the location of water collection station at the center of Sinking Pond