

Community Update

W.R. GRACE Superfund Site Acton, Massachusetts



New England

August 2001

This update is to keep you informed about the ongoing remediation and groundwater investigation at the W.R. Grace Superfund Site on Independence Road in Acton.

Groundwater Investigation Expanded

Sampling in the Assabet River and Fort Pond Brook to begin this fall

Site History

The W.R. Grace Superfund Site located off Independence Road in Acton has been used for industrial purposes since the 1800's. After purchasing the property in 1954, W.R. Grace & Co.'s (Grace's) manufacturing operations produced a variety of latex and rubber-based products as well as cellulose battery separators. Many of the waste products from these operations were disposed on site. In 1980, all on-site waste disposal operations at the facility ceased. In early 1982, Grace discontinued its organic chemical operations at the Acton site. These operations were the primary source of many of the wastes generated at the site.

In 1978, groundwater contamination was detected in two of Acton's municipal supply wells, Assabet 1 and 2, located southwest of the Grace property. This discovery prompted a series of investigations that culminated in the installation of the Aquifer Restoration System (ARS) by Grace in late 1984. The ARS is a network of eleven extraction wells designed to contain and cleanup contaminated groundwater, and it remains in operation. The United States Environmental Protection Agency (EPA) and Massachusetts Department of Environmental Protection (MADEP) Orders requiring the cleanup of this site were first issued in 1979. In 1983, this site was included on the Superfund National Priorities List (NPL). From 1994 through 1997, the excavation, treatment, and containment of over 173,000 cubic yards of

contaminated soil and sludge from eleven source areas were completed.

34 New Wells Installed in 2000

As reported in the last update dated April 2000, the final phase of work - the study and remediation of contaminated groundwater at the site - has begun. A comprehensive review of the groundwater quality and flow conditions since the early 1980's and an evaluation of the effectiveness of the ARS to contain and cleanup contaminated groundwater were conducted in 1999. The review concluded that the ARS has been partially successful in limiting the spread of groundwater contamination and reducing the concentrations of contaminants in the groundwater. In the areas of uncertainty identified by this review - northeast of the Grace property and down gradient of the landfill- 34 new monitoring wells were installed and sampled over the past year. The new wells indicate that contamination in groundwater is more widespread than previously identified. The extent of the larger plume is depicted on Figure 1 using concentrations of vinylidene chloride (VDC) which is the most widespread contaminant. The flow arrows shown on this figure represent groundwater flow paths prior to the installation of the ARS. Depth to the water table for the major area of the plume is approximately 50 feet from ground surface with the exception of areas near Fort Pond Brook and the Assabet River where the water table is nearer to the ground surface. The depth to the water table, the contaminant plume, and bedrock are shown on Figure 2 which is a cross section of the northeast portion of the plume.

Plans for 2001

Additional information is needed to further understand the extent of contamination in the groundwater to the northeast of the Acton Water District property off Lawsbrook Road, the area along Fort Pond Brook from the former North Lagoon to the Acton Water District's Christofferson Well, and near the Assabet River on the Concord portion of the Grace owned property. Contractors hired by Grace to implement sampling plans approved by EPA and MADEP will perform

sampling in the Assabet River and Fort Pond Brook and select appropriate locations for additional monitoring wells to complete the delineation of the extent of the plume. Also, additional surface water and sediment sampling will be conducted near the former North Lagoon, south of Sinking Pond and in Fort Pond Brook (depending on where the plume is discharging). The planned sampling locations in the Assabet River and Fort Pond Brook and areas where additional wells will be required are shown on Figure 1.

The work to drill and install the monitoring wells will occur in stages beginning in August and continuing through October 2001. Before any work begins, EPA will notify area residents about work schedules and specific well locations. A groundwater sampling round to include these new wells is scheduled to be conducted in October. The sediment and surface water sampling will occur this summer and fall. It is anticipated that a report on this work will be submitted for EPA and MADEP in March 2002.

A human health and ecological risk assessment will be performed at the site to determine if there is any unacceptable risks to the public and wildlife.

The data collected will lead to a feasibility study of alternatives that are available for clean up of the remaining contamination in the groundwater. This process will establish cleanup goals for the contaminated groundwater and describe the extent that surface water, sediment and wetlands may be impacted due to the presence of contaminated groundwater from the site. Based upon these evaluations, and a full public involvement process, a Record of Decision (ROD) will be prepared by EPA with concurrence from the MADEP. The ROD will identify actions that are to be taken to cleanup contaminated groundwater beneath the Site.

EPA and MADEP encourage the public to be fully informed about the work at the W.R. Grace site. Information updates will continue to be published periodically to inform the community about the progress and milestones at the Grace Superfund site. A public information meeting will be scheduled in the fall to provide area citizens with an opportunity to ask questions about the ongoing work described in this update.

Mailing List Additions, Deletions & Changes

If you or someone you know would like to be added to (or deleted from) the W.R. Grace Superfund Site mailing list, please contact Jim Murphy of EPA.

If you have questions about the W.R. Grace Superfund site or would like more information, you may call or write to:

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Acton Water District

The Acton Water District continues to operate and maintain air strippers to remove volatile organic compounds from the Assabet 1, Assabet 2, Scribner, Lawsbrook, and Christofferson wells. Low levels of several volatile compounds, including VDC have historically been seen in samples of water from these wells prior to treatment. The Water District samples routinely for over 100 contaminants to assure the quality of water provided to its users.

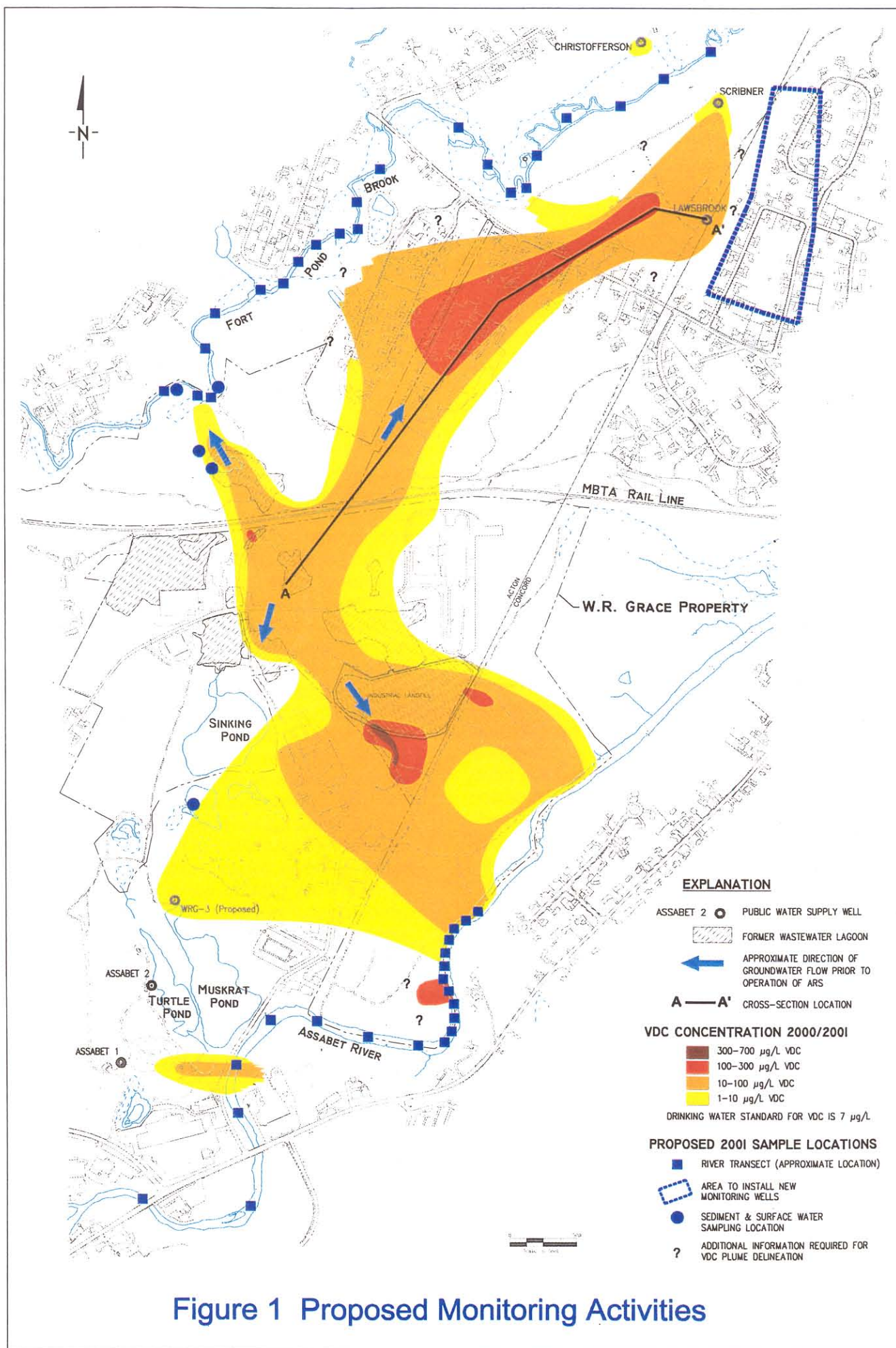
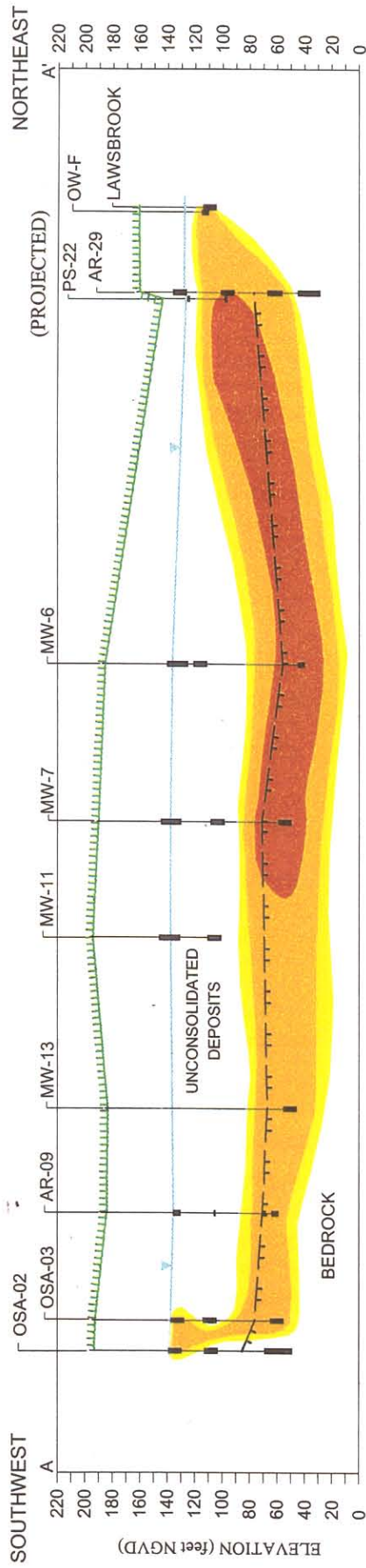
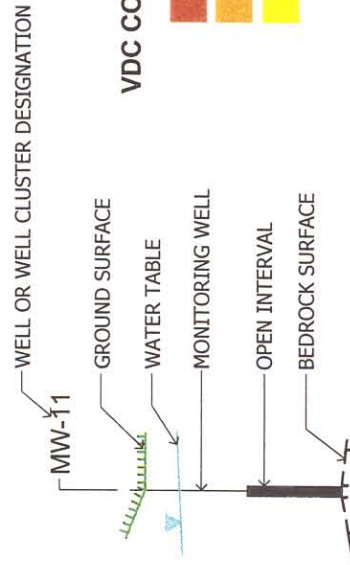


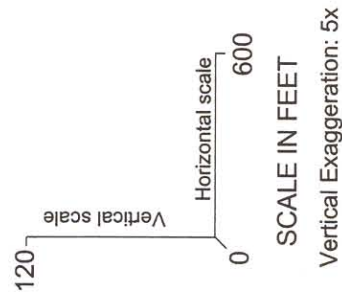
Figure 1 Proposed Monitoring Activities



EXPLANATION



VDC CONCENTRATION 2000/2001



NOTES:
 Water Table measured February 13-14, 2001
 NGVD - National Geodetic Vertical Datum

FIGURE 2 CROSS-SECTION A-A'