

**Monthly Status Report**  
**W. R. Grace Superfund Site**  
**Acton, Massachusetts**  
**June 29, 2009**

W. R. Grace (Grace) is conducting the Remedial Design/Remedial Action (RD/RA) for Operable Unit Three (OU-3) at the above referenced site. This Monthly Status Report is being transmitted to keep the Government Parties advised of the progress and schedule of ongoing activities. This report summarizes the activities completed in the past month, provides a schedule of activities planned for the coming month and describes any problems encountered. The exact date of scheduled activities may change due to resource availability and/or weather. Those interested in being kept advised of schedule changes of a particular activity are requested to contact the person listed for that activity.

**Groundwater Discharge Standards**

The Government Parties approved the groundwater discharge standards on December 20, 2006. Grace is expecting a supplemental effluent memorandum from the Government Parties.

**Evaluation of Interim Groundwater Cleanup Standards**

The Government Parties provided Grace with comments on the *Evaluation of Interim Groundwater Cleanup Standards* on February 1, 2007. Grace will resubmit the document in 2009.

**Sediment Pre-Design Work**

Grace submitted the *Sediment Concept Design Report* on June 26, 2009.

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**Annual Groundwater Monitoring**

The Monitoring Program Report for 2008 was submitted April 30, 2009. The annual report included several proposed changes to the monitoring program. Grace requests approval of or comments on the proposed changes by mid-July so that the 2009 annual sampling event can begin in August or September.

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## **Landfill Area Groundwater**

The Government Parties sent Grace comments regarding the *Landfill Area Groundwater Pre-Design Results Report* on June 9, 2009. Grace will submit a letter responding to the Government Party comments in July 2009. Grace is preparing the *Landfill Area Groundwater Concept Design*, which will be submitted by September 8, 2009.

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## **Northeast Area Groundwater**

The Government Parties accepted Grace's May 21, 2009 response to comments on the *Northeast Area Groundwater Pre-Design Results Report* and the *Construction Quality Assurance Project Plan* for the Northeast Area on June 11, 2009.

Grace submitted a QAPP addendum for VPH/EPH analysis of groundwater samples on June 4, 2009. Grace requests approval of or comments on the addendum by mid-July so that groundwater sampling can occur when needed.

Clearing and grading of the area shown on Figure 2-2 of the *Northeast Area Concept Design* was done at the beginning of June. Drilling for the reinjection pilot holes and installation of two monitoring wells was completed the week of June 15<sup>th</sup>. PID screening of soil samples collected during drilling of the reinjection well pilot holes had detections up to 50 ppm. During the week of June 22, 2009, in order to evaluate the source of the PID detections, one soil sample was collected using a hand auger from a depth of approximately 7 to 8 feet adjacent to RE-2OBS, where a PID reading of 30 ppm was observed during drilling, and groundwater samples were collected from the two new monitoring wells. The three samples were submitted for VOC, SVOC, 1,4-dioxane, EPH/VPH and inorganic compound analysis. Sample results are expected from the laboratory on or about July 1, 2009. Depending on the analytical results, drilling of the extraction and reinjection wells could resume at the beginning of July.

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8/30/2006	Final RD/RA Sow	
<b>Initial Remedial Steps Phase</b>		
9/12/2006	Groundwater Monitoring Plan	
9/30/2006	Monthly Progress Reports	
8/29/2007	EPA Approval of Groundwater Monitoring Plan	
12/14/2006	Submit Final Landfill Area Groundwater Discharge Standards	
11/29/2006	Evaluation of Interim Groundwater Clean-up Levels	
12/20/2006	EPA Approval of Landfill Area Groundwater Discharge Standards	
<b>Landfill Area Groundwater Design</b>		
2/1/2007	Landfill Area Groundwater Pre-Design Work Plan	
8/30/2007	EPA Approval of Landfill Area Groundwater Pre-Design Work Plan	
10/16/2007	Begin Landfill Area Groundwater Pre-Design Work	
3/31/2008	Submit Proposed Extraction Well Designs	
4/15/2008	EPA Approval of Extraction Well Designs	
12/2/2008	Complete Extraction Well Installation, and Hydraulic and Treatability Testing	
4/1/2009	Landfill Area Groundwater Pre-Design Results Report	
6/9/2009	EPA Approval of Groundwater Pre-Design Results Report	
9/8/2009	Landfill Area Groundwater Concept Design	90 days after EPA approval of Landfill Area Pre-Design Results Report
9/23/2009	Landfill Area Groundwater Concept Design Meeting	within 15 days of submission of Landfill Area Groundwater Concept Design
11/7/2009	EPA Comments on Landfill Area Groundwater Concept Design	assume 60 days
5/6/2010	Draft Final Landfill Area Groundwater Design	within 180 days of EPA comments on Landfill Area Groundwater Concept Design
5/21/2010	Draft Final Landfill Area Groundwater Design Meeting	within 15 days of submission of Draft Final Landfill Area Groundwater Design
6/5/2010	Groundwater Institutional Controls Plan	within 30 days of submission of Draft Final Landfill Area Groundwater Design
7/5/2010	EPA Comments on Draft Final Landfill Area Groundwater Design	assume 60 days
8/4/2010	EPA Approval of Groundwater Institutional Controls Plan	assume 60 days
8/19/2010	Final Landfill Area Groundwater Design	within 45 days of EPA comments on Draft Final Landfill Area Groundwater Design
9/3/2010	Landfill Area Groundwater Design - Community Update	assume 60 days after EPA comments on Draft Final Landfill Area Groundwater Design
10/18/2010	EPA Approval of Landfill Area Final Groundwater Design	assume 60 days
<b>Landfill Area Groundwater Remedial Action</b>		
11/3/2010	Pre-Construction Conference	Assume 5 days prior to start of construction
11/8/2010	Landfill Area Groundwater Remedy Construction Begins	After EPA approval of Final Landfill Area Groundwater Design (assume 21 days)
11/8/2010	Begin Implementation of Groundwater Institutional Controls	Assume implementation begins with start of construction
11/18/2010	Landfill Area Construction Meetings	Biweekly beginning within 10 days after construction begins
2/23/2011	Groundwater Operation and Maintenance Plan & Monitoring Plan	within 30 days before 75% construction complete
4/24/2011	EPA Approval of Groundwater Operation and Maintenance Plan & Monitoring	assume 60 days
5/10/2011	Landfill Area Groundwater Remedy Construction Complete	Assume 6 months
5/10/2011	Complete Implementation of Groundwater Institutional Controls	Assume 6 months
6/9/2011	Start-up Landfill Area Groundwater Remedy	within 30 days after EPA approval of Groundwater O&M Plan, Monitoring Plan, and completion of Landfill Area groundwater remedy construction
8/8/2011	Complete shake-down of Landfill Area Groundwater Remedy	assume 60 days
9/7/2011	Landfill Area Groundwater Pre-Final Certification Inspection*	within 30 days after completion of construction, start-up and shake-down of Landfill Area groundwater remedy
9/22/2011	EPA comments on Landfill Area Groundwater Pre-Final Certification Inspection*	within 15 days of Landfill Area Groundwater Pre-Final Certification Inspection
10/22/2011	Proposal to address issues beyond minor "punch list" items*	within 30 days of EPA comments on Landfill Area Groundwater Pre-Final Certification Inspection
12/21/2011	Landfill Area Corrective Action(s) Report*	After deficiencies are addressed (assume 60 days)
1/5/2012	Landfill Area Groundwater Final Certification Inspection	within 15 days of submittal of Landfill Area Groundwater Remedial Action Report
3/5/2012	EPA determines that construction is complete and Remedial Action is Operational and Functional	Assume 60 days
6/3/2012	Interim Landfill Area Groundwater Remedial Action Report	within 90 days of EPA providing an Operation and Functional Determination (after either pre-final or final certification inspection)
		* Note: all activities listed after Prefinal Certification Inspection will be dependent upon the results of the Prefinal Certification Inspection

8/30/2006	Final RD/RA Sow	
<b>Northeast Area Groundwater Design</b>		
1/3/2007	Northeast Area Groundwater Pre-Design Work Plan	
8/30/2007	EPA Approval of Northeast Area Groundwater Pre-Design Work Plan	
10/23/2007	Begin Northeast Area Groundwater Pre-Design Work	
1/7/2008	Complete Northeast Area Groundwater Pre-Design Work	
5/5/2008	Northeast Area Groundwater Pre-Design Results Report	
11/26/2008	EPA Approval of Northeast Area Groundwater Pre-Design Results Report	
3/19/2009	Northeast Area Groundwater Concept Design	
4/24/2009	EPA Comments on Northeast Area Groundwater Concept Design	
6/11/2009	EPA Approval of Northeast Area Final Groundwater Design	
mid July 2009	Community Update	EPA responsible for mailing update to mailing list
<b>Northeast Area Groundwater Remedial Action</b>		
6/11/2009	Northeast Area Construction Meetings	
6/15/2009	Northeast Area Groundwater Remedy Construction Begins	
6/18/2009	Pre-Construction Conference	
10/19/2009	Groundwater Operation and Maintenance Plan, P&IDs, etc.	within 45 days after delivery of treatment system building to Site
11/17/2009	Northeast Area Groundwater Remedy Construction Complete	Assume 5 months
11/18/2009	EPA Approval of Groundwater Operation and Maintenance Plan & Monitoring Plan	assume 30 days
12/18/2009	Start-up Northeast Area Groundwater Remedy	within 30 days after EPA approval of Groundwater O&M Plan and completion of Northeast Area groundwater remedy construction
2/16/2010	Complete shake-down of Northeast Area Groundwater Remedy	assume 60 days
3/18/2010	Northeast Area Groundwater Pre-Final Certification Inspection	within 30 days after completion of construction, start-up and shake-down of Northeast Area groundwater remedy
4/2/2010	EPA comments on Northeast Area Groundwater Pre-Final Certification	within 15 days of Northeast Area Groundwater Pre-Final Certification Inspection
5/2/2010	Proposal to address issues beyond minor "punch list" items*	within 30 days of EPA comments on Northeast Area Groundwater Pre-Final Certification
7/1/2010	Northeast Area Corrective Action(s) Report*	After deficiencies are addressed (assume 60 days)
7/16/2010	Northeast Area Groundwater Final Certification Inspection*	within 15 days of submittal of Northeast Area Groundwater Corrective Actions Report
9/14/2010	EPA determines that construction is complete and Remedial Action is Operational and Functional	Assume 60 days
12/13/2010	Interim Northeast Area Groundwater Remedial Action Report	within 90 days of EPA providing an Operation and Functional Determination (after either pre-final or final certification inspection)
	* Note: all activities listed after Prefinal Certification Inspection will be dependent upon the results of the Prefinal Certification Inspection	

8/30/2006	Final RD/RA Sow	
<b>Sediment Design</b>		
12/28/2006	Sediment Pre-Design Work Plan	
7/24/2007	EPA Approval of Sediment Pre-Design Work Plan	
4/17/2007	Begin Sediment Pre-Design Work	
8/30/2007	Complete Sediment Pre-Design Work (Phase 1)	
1/9/2008	Complete Sediment Pre-Design Work (Phase 2)	
4/11/2008	Sediment Pre-Design Results Report	
7/15/2008	Sediment Pre-Design Results Meeting	
2/26/2009	EPA Approval of Sediment Pre-Design Results Report	
6/26/2009	Sediment Concept Design	
7/11/2009	Sediment Concept Design Meeting	within 15 days of submission of Sediment Concept Design
8/25/2009	EPA Comments on Sediment Concept Design	assume 60 days
12/23/2009	Draft Final Sediment Design	within 120 days of EPA comments on Sediment Concept Design
1/7/2010	Draft Final Sediment Design Meeting	within 15 days of submission of Draft Final Sediment Design
2/21/2010	EPA Comments on Draft Final Sediment Design	assume 60 days
4/7/2010	Final Sediment Design	within 45 days of EPA comments on Draft Final Sediment Design
4/22/2010	Sediment Design - Community Update and/or Public Meeting	assume 60 days after EPA comments on Draft Final Sediment Design
6/6/2010	EPA Approval of Final Sediment Design	assume 60 days
<b>Sediment Remedial Action</b>		
8/8/2011	Changes to ARS discharge to Sinking Pond implemented	Based on Landfill Area Groundwater Remedial Action Schedule
8/23/2011	Pre-Construction Conference	Assume 5 days prior to start of construction
8/28/2011	Sediment Remedy Construction Begins	Within 20 days of EPA approval of Final Sediment Design and new Sinking Pond discharge in
9/7/2011	Sediment Construction Meetings	Biweekly beginning within 10 days after construction begins
12/13/2011	Sediment Monitoring and Maintenance Plan	within 30 days before 75% construction complete
2/11/2012	EPA Approval of Monitoring and Maintenance Plan	assume 60 days
2/27/2012	Sediment Remedy Construction Complete	Assume 6 months
3/28/2012	Sediment Pre-Final Certification Inspection	within 30 days after completion of construction of sediment remedy
4/12/2012	EPA comments on Sediment Pre-Final Certification Inspection	within 15 days of Sediment Pre-Final Certification Inspection
5/12/2012	Proposal to address issues beyond minor "punch list" items	within 30 days of EPA comments on Sediment Pre-Final Certification Inspection
7/11/2012	Sediment Corrective Action(s) Report	After deficiencies are addressed (assume 60 days)
7/26/2012	Sediment Final Certification Inspection	within 15 days of submittal of Sediment Remedial Action Report
9/24/2012	EPA determines that construction is complete and Remedial Action is Operational and Functional	Assume 60 days
12/23/2012	Sediment Construction Summary Report	within 90 days of EPA providing an Operation and Functional Determination (after either pre-final or final certification inspection)
	Date dependent on completion of Sediment Design and ARS discharge modifications	