

# FACT Sheet

Former Nebraska Ordnance Plant ■ Mead, Nebraska

June 2008

For more information or any questions concerning the Mead project, please contact:

**Natalae Tillman**  
U.S. Army  
Corps of Engineers  
Kansas City District  
601 E. 12th Street  
Kansas City, Missouri 64106  
Phone: (816) 389-3356  
email:  
natalae.c.tillman@  
USACE.army.mil

Information repository documents are available for review at:

**Mead Public Library**  
316 South Vine Street  
Mead, Nebraska 68041  
(402) 624-6605



US Army Corps  
Of Engineers  
Kansas City District

## Focused Extraction Begins In The Load Line 1 Plume

Construction of the Advanced Oxidation Process (AOP) treatment plant is complete and the plant became operational on March 24, 2008. The plant treats groundwater that is extracting from Extraction Well (EW)-11. Extraction well EW-11 is considered a focused extraction well and is positioned well to cut off the highest levels of trichloroethylene TCE contamination. In addition to cutting off the high levels of TCE, EW-11 will reduce the amount of time it takes to clean up the Load Line 1 plume. The plume downgradient is estimated to be remediated within 20 to 30 years.

Because the main treatment plant is not designed to treat the high levels of TCE contamination that is being extracted from

EW-11, a pretreatment system (AOP) has been constructed to reduce TCE levels in the water before it reaches the main treatment plant.

This pretreatment system uses an advanced oxidation process that destroys volatile organic compound (VOC) contamination in the pipeline before it reaches the main treatment plant. The flow rate for EW-11 in May 2008 was between 543 and 574 gallons per minute. The average influent concentrations to the AOP plant from March 25 through May 20 for total VOCs was between 4,500 and 5,800  $\mu\text{g/L}$  and the effluent has been between less than 7  $\mu\text{g/L}$ . The final system inspection for the plant was conducted on June 10, 2008 and the system is fully operational.



▲ Treatment Equipment in the Interior of the AOP Treatment Plant

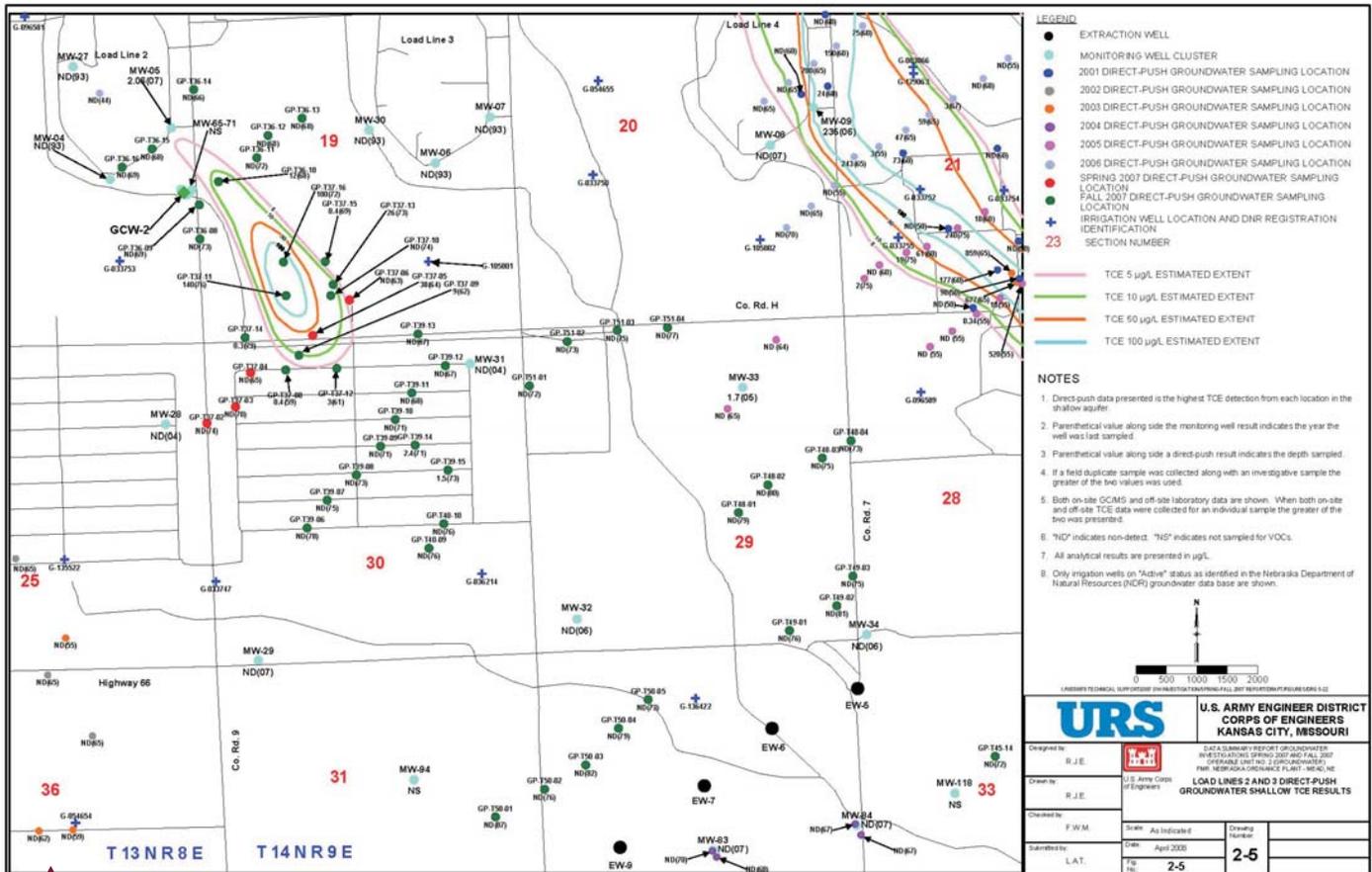
## Groundwater Investigations Spring 2007 And Fall 2007

The Army conducted groundwater and soil gas investigations in three areas (Load Line 2, Load Line 3, and the former Atlas Missile Area) in spring 2007 and fall 2007. Data collected during these investigations were used to supplement results obtained from previous direct-push investigations and the annual Groundwater Monitoring Program monitoring well sampling results. The results and the

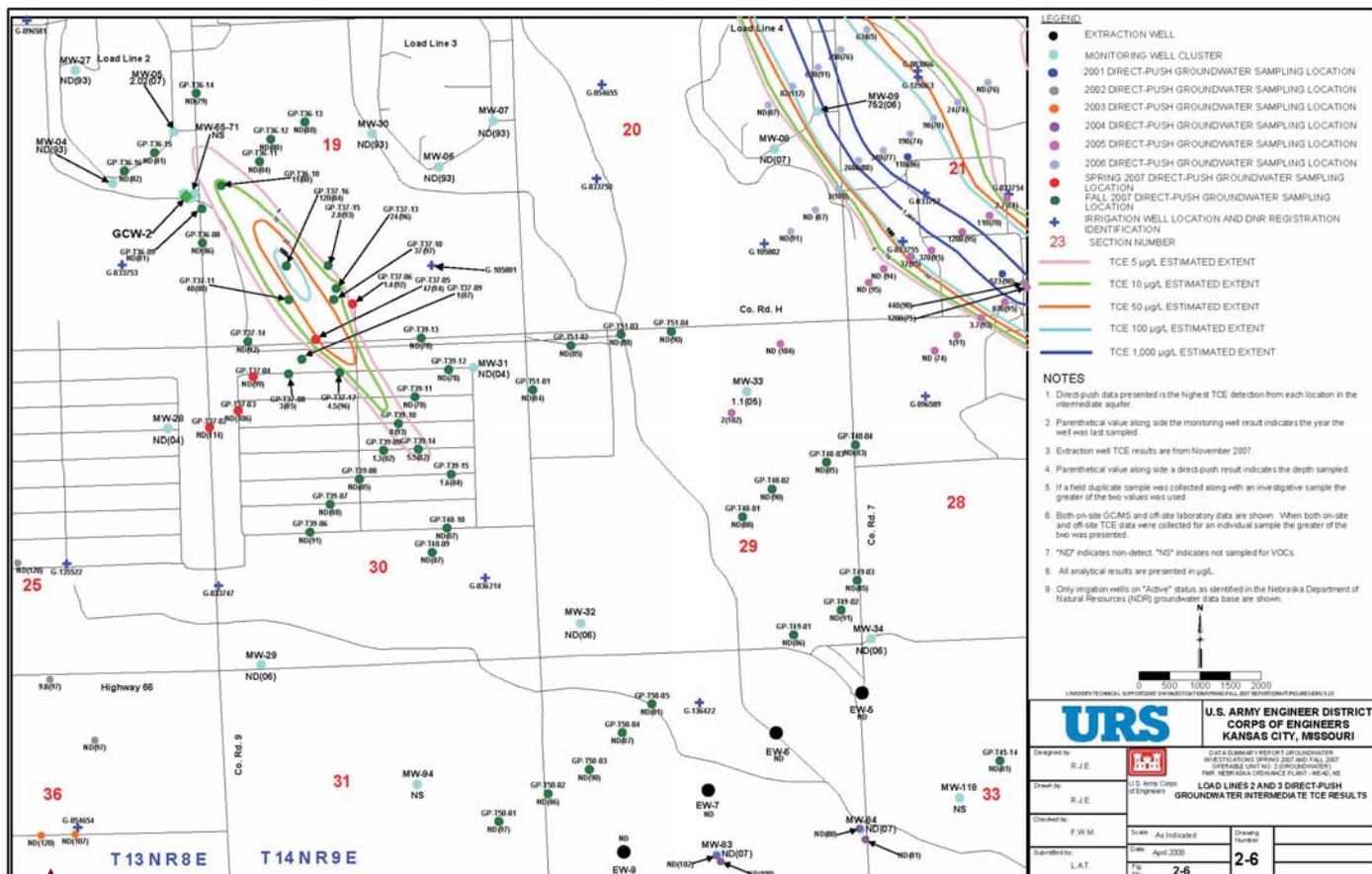
plume extent maps from the spring and fall 2007 investigations can be found in the *Draft Final Data Summary Report, Groundwater Investigations, Spring 2007 and Fall 2007*, dated June 2008. The report is available in the information repository.

During the spring 2007 groundwater/soil gas investigation, 262 groundwater samples and

See other side



▲ TCE Extent in Shallow Groundwater - Load Line 2



▲ TCE Extent in Intermediate Groundwater - Load Line 2

## Groundwater Investigations Spring 2007 and Fall 2007 (Continued)

18 soil gas samples were collected. Groundwater data identified a small TCE plume in the shallow groundwater trending to the southeast and extending approximately three quarters of a mile from Load Line 2.

Sampling results in the former Atlas Missile Area indicated that relatively low concentrations of TCE were present in soil gas (above the water table) at only two locations, and at relatively low concentrations in groundwater in the vicinity of these soil gas sample locations. From these results, the Army determined that there is very little TCE in the Atlas Missile Area in the presumed source area.

During the fall 2007 investigation, 291 groundwater samples were collected from shallow and intermediate intervals in the Todd Valley alluvium. Groundwater data confirmed the small TCE plume in groundwater trending southeast from Load Line 2.

## Operable Unit 3 Removal Action Update

The excavation of approximately 1,060 cubic yards of soil contaminated with antimony (a metal associated with painting operations) was completed in May. Soil was excavated from Load Line 2 and Load Line 4 former paint operation areas as well as the potential landfill area, located on the west side of the NRD Reservoir. While excavating the antimony contaminated soil at the potential landfill area, approximately 3 cubic yards of soil with asbestos containing material (ACM) was uncovered. The soil with ACM was properly handled and disposed of separately under the supervision of a Nebraska licensed asbestos inspector. The antimony contaminated soil was transported to a landfill permitted to accept this material and approved by NDEQ and EPA. The walls and floors of the excavation were sampled to ensure all of the contaminated soil had been removed. Clean soil was used to fill the excavated areas. A report is currently being prepared to document the soil removal.

## Visit The Project Web Site

Please visit our project web page to find site background information, documents of public interest, maps, fact sheets, Restoration Advisory Board updates, and quarterly water sampling results. One of the newest features is an interactive spreadsheet that contains historic well sampling data for TCE and RDX in monitoring wells, water supply wells, and surface water. Users can choose a specific well or contaminant to find the data they need. The web page address is:

<http://www.nwk.usace.army.mil/projects/mead/projectindex.html>



Information repository documents are available for review at the Mead Public Library.

The Mead Library also has a dedicated computer that has electronic versions of the documents in the Repository. Users are free to download documents onto their own electronic media (CD or flash drive).