

FACTSheet

Former Nebraska Ordnance Plant ■ Mead, Nebraska

Summary of the 2009 Containment Evaluation

The U.S. Army Corps of Engineers annually conducts an assessment of the Operable Unit 2 hydraulic containment system. This assessment is used by the Corps, Nebraska Department of Environmental Quality, and the Environmental Protection Agency to determine whether the hydraulic containment system is containing Operable Unit 2 Record of Decision contaminants of concern that are above Final Target Groundwater Cleanup Goals. Additionally, this assessment is used to evaluate the effectiveness of the current groundwater extraction system. The Final Target Groundwater Cleanup Goals are listed below.

Contaminants of Concern	Final Groundwater Cleanup Goals (micrograms per liter)
Methylene chloride	5
1,2-Dichloropropane	5
Trichloroethene (TCE)	5
1,3,5-Trinitrobenzene (TNB)	0.778
2,4-Dinitrotoluene (2,4-DNT)	1.24
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	2
2,4,6-Trinitrotoluene (TNT)	2

The 2009 Containment Evaluation is complete and can be found in the information repository at the Mead Library. It is also posted online at the Corps of Engineers former Nebraska Ordnance Plant website. Based upon the groundwater chemical data collected in 2009 and the system effectiveness review, the hydraulic containment system is operating successfully at the Site.

Hydraulic containment is evaluated based on chemical data collected from a network of compliance wells located downgradient and sidegradient outside of the capture zone of the groundwater extraction system. These compliance wells are sampled every six months.

The Containment Evaluation also includes a review of the general performance of

the hydraulic containment system. The system consists of a series of extraction wells that function together to contain groundwater contaminant plumes at levels greater than the Final Target Groundwater Cleanup Goals. An evaluation of how these extraction wells function both alone and together is an important tool in measuring the continuing effectiveness of the system. A groundwater model is also used for this evaluation and uses various types of information including the 2009 sampling data from monitoring wells located throughout the Site and regional water level data measured from wells. This information, in conjunction with site-specific chemical data, is used to predict how the extraction wells contain contaminants in the groundwater and the effectiveness of the extraction well capture of groundwater in surrounding areas. Based on the 2009 Containment Evaluation report, the hydraulic containment system is operating successfully through the establishment of a sufficient capture zone for the groundwater and associated contamination.

Although the evaluation of the hydraulic containment system is an annual review, the compliance wells, along with a significant number of monitoring wells located throughout the Site and residential water supply wells within one mile of the contaminant plumes, are sampled throughout the year. This monitoring data is reviewed and evaluated following each sampling event. If an Operable Unit 2, Record of Decision contaminant of concern is detected above Final Target Groundwater Cleanup Goals in a residential water supply well or compliance well, immediate action by the Corps will be undertaken to evaluate and address the issue.

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For more information or any questions concerning the former Nebraska Ordnance Plant project, please contact:

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or go to the project website at

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

Information repository documents are available for review at:

Mead Public Library

316 South Vine Street

Mead, Nebraska 68041

(402) 624-6605

Hours

Monday: 2-7 PM

Thursday: 9:30-11:30 AM, and 2-7 PM

Saturday: 9-12 PM



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Compliance and Perimeter Monitoring Well Network

