

NEWS Letter

Former Nebraska Ordnance Plant ■ Mead, Nebraska

Open House Meeting

The U.S. Army Corps of Engineers will host the Winter Open House on Wednesday, January 18, 2012, at the Yutan VFW Country Club in Yutan, Nebraska. The Yutan VFW Country Club is located south of Highway 92 at 1581 Yutan Road. The open house meeting is from 4:00 p.m. to 8:00 p.m. with technical staff in attendance to answer specific questions regarding the former Nebraska Ordnance Plant. Representatives from the Environmental Protection Agency and Nebraska Department of Environmental Quality are expected to attend as well. A variety of handouts and displays will be available along with refreshments. Additionally, a brief informational presentation will be given on the Operable Unit 3 Remedial Investigation. The presentation will be given hourly at 5:00, 6:00, and 7:00 p.m. For further information regarding the meeting, contact the Corps of Engineers Project Manager, at (816) 389-3172.

Operations and Maintenance Summary

Operation of the Main, Load Line 1, Advanced Oxidation Process, and Load Line 4 Groundwater Treatment Plants have resulted in removal of the following amounts of contaminants of concern from groundwater as of December 31, 2011 since their respective startup:

TCE (Trichloroethene) total removed – 20,977 pounds

- Main Groundwater Treatment Plant – 371 pounds
- Load Line 1 Groundwater Treatment Plant - 197 pounds
- Advanced Oxidation Process Treatment Plant - 18,591 pounds
- Load Line 4 Groundwater Treatment Plant – 1,818 pounds

RDX (Hexahydro-1,3,5-trinitro-1,3,5-triazine) total removed from the Main Groundwater Treatment Plant – 219 pounds

Total gallons of water treated:

- Main Groundwater Treatment Plant - 10,880,318,000 gallons
- Load Line 1 Groundwater Treatment Plant - 919,179,000 gallons
- Advanced Oxidation Process Treatment Plant - 942,328,000 gallons
- Load Line 4 Groundwater Treatment Plant - 360,615,700 gallons

The treated water from the Advanced Oxidation Process Groundwater Treatment Plant is sent to the Main Groundwater Treatment Plant for further polishing; therefore the amount of contaminated groundwater treated from the Advanced Oxidation Process Groundwater Treatment Plant is included in the Main Groundwater Treatment Plant discharge quantity. Focused Extraction Wells 11 and 15, which pump groundwater to the Advanced Oxidation Process Groundwater Treatment Plant and Load Line 4 Groundwater Treatment Plant respectively, are installed in high contaminant concentration areas which result in high mass removal.



Advanced Oxidation Process Groundwater Treatment Plant Piping, Photo by ECC

January 2012

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

Project Manager
U.S. Army
Corps of Engineers
Kansas City District
601 E. 12th Street
Kansas City, Missouri 64106
Phone (816) 389-3172

or go to the project website at
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



**US Army Corps
of Engineers** ®

Extraction Well Cleaning

As part of the Operations and Maintenance at the former Nebraska Ordnance Plant, extraction wells are periodically cleaned. Evaluation of an extraction well's ability to pump groundwater is conducted annually for each well to help identify wells in need of chemical and physical cleaning. In August 2011 and November 2011 four extraction wells (EW-1, EW-7, EW-9, and EW-12) were cleaned using techniques that included scrubbing, bailing, surging, purging, jetting, and chemical acidification. Pumping tests and downhole video at each extraction well are used to determine the effectiveness of cleaning efforts. The photos below show an extraction well screen before and after cleaning.



Extraction Well Before Cleaning



Extraction Well After Cleaning

Groundwater Monitoring Program Optimization

The Corps of Engineers conducted a Groundwater Monitoring Program Optimization Investigation at the former Nebraska Ordnance Plant in November and December of 2011. The data collected from this investigation will be used to assist in ensuring the most efficient monitoring well network exists at the site.

Investigation activities included:

- Direct push groundwater sampling at each of the load lines for RDX and/or TCE
- Collection of geophysical survey data near the Load Line 1 Groundwater Treatment Plant to show features below the surface that may influence groundwater flow in that area
- Soil sampling using direct push equipment to verify the features observed from the geophysical survey

The investigation report will include the results of the field investigation which will be used to develop a follow-on work plan that will recommend locations for the installation of additional monitoring wells and removal of monitoring wells that are no longer necessary. The report and work plan will be developed in the spring of 2012, with the monitoring well installation taking place in the summer of 2012.



Direct Push Groundwater Sampling at Load Line 2, Photo by ECC