

# NEWS Letter

Former Nebraska Ordnance Plant ■ Mead, Nebraska

## Open House Meeting

The U.S. Army Corps of Engineers will be hosting the annual Site Tour and Open House on Wednesday July 21, 2010. Please come join us at the Main Groundwater Treatment Plant at the junction of County Road 6 and County Road F, in Ashland, Nebraska.

The open house will be from 4:00 PM to 6:00 PM with technical staff in attendance to answer specific questions regarding the former Nebraska Ordnance Plant. Representatives from the U.S. 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.

The Site Tour begins at 6 PM. Neighbors and local residents are welcome to join us for a guided bus tour that will introduce you to many parts of the groundwater clean-up project. The tour will begin at the Main Groundwater Treatment Plant with a demonstration involving a physical model of groundwater flow and a demonstration of a meteorological tower anemometer. We will then take



Anemometer

the bus to the following locations:  
Load Line 1 Groundwater Treatment

Plant, former underground storage tank locations, proposed location of the wind turbine and the new Load Line 4 Groundwater Treatment Plant

For further information regarding the meeting, contact Kristine Stein, Project Manager, at (816) 389-3172.

## Operations and Maintenance Summary

Operation of the Main Treatment Plant, Advanced Oxidation Process Treatment Plant, Load Line 4 Groundwater Treatment Plant, and Load Line 1 Groundwater Treatment Plant have resulted in removal of the following amounts of contaminants of concern from groundwater as of June 30, 2010 since their respective startup:

TCE (Trichloroethene) total removed – 13,772 pounds

- Main Treatment Plant – 359 pounds
- Load Line 1 Groundwater Treatment Plant - 106 pounds
- Advanced Oxidation Process Treatment Plant - 12,956 pounds
- Load Line 4 Groundwater Treatment Plant - 351 pounds

RDX (Hexahydro-1,3,5-trinitro-1,3,5-triazine) total removed from the Main Treatment Plant – 171 pounds

## July 2010

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

### Kristine Stein

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U.S. Army

Corps of Engineers  
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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: 2-8 PM  
Thursday: 9:30-11:30 AM,  
and 2-8 PM  
Saturday: 9-12 PM



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Total gallons of water treated:

- Main Treatment Plant - 9,167,621,000 gallons
- Load Line 1 Groundwater Treatment Plant - 700,425,000 gallons
- Advanced Oxidation Process Treatment Plant - 569,266,000 gallons
- Load Line 4 Groundwater Treatment Plant - 35,899,000 gallons

The treated water from the Advanced Oxidation Process Plant is sent to the Main Treatment Plant to ensure the water meets discharge requirements. The amount of contaminated groundwater treated from the Advanced Oxidation Process Plant is included in the Main Treatment Plant discharge quantity. The high mass removal generated by the Advanced Oxidation Process Plant is due to the fact that Focused Extraction Well 11 which pumps groundwater to the plant is installed in a high contaminant concentration area at the Load Line 1 plume.

## Passive Sampling Study

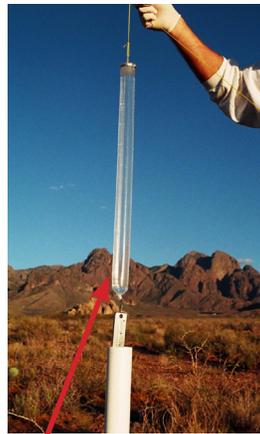
Recently the Corps of Engineers performed a study looking at the applicability of using passive sampling devices at the former Nebraska Ordnance Plant. The purpose of the study was to look at multiple passive sampling devices and see if any would reduce labor and supply cost while still receiving accurate results. The two front runners of the study were Passive Diffusion Bags and the Hydrasleeve™.

The Passive Diffusion Bags can be used to sample for chlorinated solvents and the Hydrasleeve™ for chlorinated solvents and explosives. Both use polyethylene type bags, but collect different sets of compounds. Once they are placed, the Passive Diffusion Bags needs to stabilize in the well for 2 weeks while the Hydrasleeve™ only needs 24 hours of stabilization.

The current method of sampling at the former Nebraska Ordnance Plant involves pumping volumes of water to purge a well prior to collecting a sample. The study discusses how passive sampling devices will require no heavy equipment such as pumps, compressors, or generators and requires just a few minutes at each well for sample collection. Again, multiple devices were

compared to the current method and Passive Diffusion Bags and Hydrasleeve™ gave the most comparable results while providing cost savings by fewer hours needed to sample and less sampling supplies to purchase or rent. Additionally, both devices can be left in the wells between sampling events; up to three months at a time.

The report is currently under review by the regulatory agencies. If approved, one or both of these methods will be utilized at the former Nebraska Ordnance Plant in the near future. Additionally, if the report is approved, it will be posted on the Corps of Engineers' web page at [www.nwk.usace.army.mil/projects/mead](http://www.nwk.usace.army.mil/projects/mead).



Hydrasleeve™



Passive Diffusion Bag

## Underground Storage Tank Removal Summary

The Corps of Engineers is pleased to announce the completion of the Underground Storage Tank removal that was performed by Kingston Environmental. The excavated soil was sampled and all results are below the Nebraska Department of Environmental Quality clean-up goals for industrial soils. Kingston Environmental then returned to the site to backfill the excavation during the week of May 31, 2010. In September 2010, the report will be finalized and posted on the project web site [www.nwk.usace.army.mil/projects/mead/](http://www.nwk.usace.army.mil/projects/mead/). The areas where the tanks were removed will also be a part of this year's annual site tour on Wednesday July 21, 2010.