

NEWS Letter

Former Nebraska Ordnance Plant ■ Mead, Nebraska

January 2009

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

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Information repository documents are available for review at:

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



US Army Corps
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Public Meetings

A Public Availability Session will be held January 21, 2009. The local residents and members of the community are invited to come by and discuss their concerns with the Corps of Engineers. The session will be at the VFW building at 102 South 24th Street, in Ashland, Nebraska between 4:00 pm and 8:00 pm. Refreshments will be served. For further information regarding the meeting contact Joe Donovan at 816-389-3587.

Former NOP Website

The Corps of Engineers has launched an improved website for the Former Nebraska Ordnance Plant (NOP) cleanup project. We welcome you to visit it at <http://www.nwk.usace.army.mil/projects/mead/projectindex.html>. There you will find maps, information on sampling, containment, meetings, newsletters, fact sheets, site documents, contact information and Frequently Asked Questions. Feel free to use the "Comment" link to offer suggestions, concerns or to obtain information regarding the former NOP.



2008 3rd Quarter Sampling Results

The 2008 3rd Quarter Data Summary Report and Quality Control Summary Report have been added to the website. The results from the 2008 3rd Quarter groundwater monitoring program (GMP) have also been entered into the interactive spreadsheet and are available for viewing on our website.

Activities Currently in Progress

Direct-push Groundwater Sampling

Groundwater samples, for volatile organic compounds (VOCs) and explosives, were collected using direct-push sampling

techniques in the Load Line 1 TCE plume, in the vicinity of extraction well EW-10 and EW-9 and on the eastern portion of the site in November and December 2008.

Groundwater samples were collected from several different depths at 62 locations. The direct-push groundwater sampling was done in accordance with the 2008 Groundwater Investigation Work Plan (December, 2008). The results of the direct-push sampling will be presented in a data summary report available in spring 2009.

In addition to direct-push groundwater sampling, installation of monitoring wells is taking place north of planned extraction well EW-15 and north and south of current extraction well EW-11. The new monitoring wells, located in the high concentration areas of the plumes, will provide long-term monitoring data of the northern portions of the Load Line 1 TCE plume and the Atlas Missile Area TCE plume. The new wells will be sampled following installation completion which is estimated to be in early spring 2009.

Test Holes for Planned Extraction Wells

Preliminary construction activities have begun for the installation of extraction wells EW-14 and EW-16 (containment wells) and extraction well EW-15 (focused extraction). As part of those preliminary construction activities, test holes have been completed for EW-14, EW-15, EW-16. The test holes allowed for the collection of both geologic and hydraulic data so that the design of the extraction wells could be finalized. Installation of the extraction wells will begin in late winter and continue into early spring 2009.

Activities Planned for 2009

The 2009 plans not only include operation and maintenance of the containment wells and the focused extraction well (EW-11) as well as sampling the entire system, but also some new

See other side

additions. To improve the performance, two new containment wells (EW-14 and EW-16) will be installed. A focused extraction well (EW-15) will be installed this year to target the high concentration of TCE in the Load Line 4 plume. In June, work will begin on the new treatment plant that will treat the water from EW-15.

Iron Reducing Bacteria

The orange substance seen on the surface of the pond below the Natural Resource District (NRD) Reservoir was investigated and found to be iron reducing bacteria. This bacterium is common for ponded water that contains higher levels of iron. A more in depth discussion will be provided as part of an upcoming website update.



▲ Iron Reducing Bacteria seen in the outlet of the NRD Reservoir (Looking Southeast). (Photo by Bruce Haley)

O&M Summary

As of October 2008, operation of the Main Treatment Plant, Advanced Oxidation Process Plant and Load Line 1 Treatment Plant have resulted in an estimated mass removal and/or treatment of:

TCE – 2,105 pounds

- 350 pounds from the Main Treatment Plant (February 2002 – October 2008)
- 55 pounds for the Load Line 1 Treatment Plant (February 2006 – October 2008),
- 1,700 pounds for the Advanced Oxidation Process Treatment Plant (March 2008 – October 2008)

RDX – 120 pounds

- 120 pounds from the Main Treatment Plant (February 2002 – October 2008)

More than 7 billion gallons have been treated by the three plants since startup of the Main Treatment Plant in 2002. Both the Main Treatment Plant and Load Line 1 Treatment Plant process water from the containment wells. The high mass removal generated by the Advanced Oxidation Process Plant is due to the nature of the well supplying water to the plant. The Advanced Oxidation Process Plant treats water from the EW-11, a focused extraction well installed in a portion of the Load Line 1 plume with high concentration of TCE.

New Project Manager

The Corps of Engineers has announced that Kristine Stein will be the new Army Co-Chairperson for the Nebraska Ordnance Plant Restoration Advisory Board (RAB), as well as project manager for the site. Kristine will be replacing Garth Anderson (and interim project manager, Natalee Tillman).



▲ Kristine Stein

As a middle child, of a large family in the rural Midwest, Kristine shares a similar upbringing as the local community in Saunders County, near the former NOP. It was also there where she developed her enthusiasm for her hobbies of gardening and quilting.

A true environmentalist, she graduated the University of Washington with a Bachelors of Science in Geology and Oceanography, then going on to Old Dominion University where she earned her Masters in Environmental Engineering.

She comes to the Corps of Engineers from Lake City Army Ammunition Plant in Independence, Missouri, where for 3 of her 15 years of environmental experience, she served as a Remedial Project Manager. There she was the Army's co-chairperson for a very active RAB. Kristine's goal with the Former Nebraska Ordnance Plant is to obtain the same noted success she had at Lake City Army Ammunition Plant.