

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 18, 2012. 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 5:30 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.

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 presentation about the upcoming Helicopter Electromagnetic and Magnetic Geophysical Survey. We will then take the bus at 5:30 PM to the following locations: Main Groundwater Treatment Plant, Load Line 4 and Advanced Oxidation Process Groundwater Treatment Plants, Load Line 1 Groundwater Treatment Plant, Pilot Study Preliminary Treatment Areas 1 and 2, Focused Extraction Well FEW-15, and the Atlas Missile Area. The tour will end at 8:00 PM at the Main Groundwater Treatment Plant. See site tour map on the following page.

For further information regarding the meeting, contact the U.S. Army 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 June 30, 2012 since their respective startup:

TCE (trichloroethene) total removed – 23,275 pounds

- Main Groundwater Treatment Plant – 374 pounds
- Load Line 1 Groundwater Treatment Plant - 259 pounds
- Advanced Oxidation Process Treatment Plant - 20,473 pounds
- Load Line 4 Groundwater Treatment Plant – 2,269 pounds

RDX (hexahydro-1,3,5-trinitro-1,3,5-triazine) total removed from the Main Groundwater Treatment Plant – 245 pounds

Total gallons of water treated:

- Main Groundwater Treatment Plant - 11,495,361,000 gallons
- Load Line 1 Groundwater Treatment Plant - 1,000,757,000 gallons
- Advanced Oxidation Process Treatment Plant - 1,079,079,000 gallons
- Load Line 4 Groundwater Treatment Plant - 489,055,000 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

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

Information repository documents are available for review at:

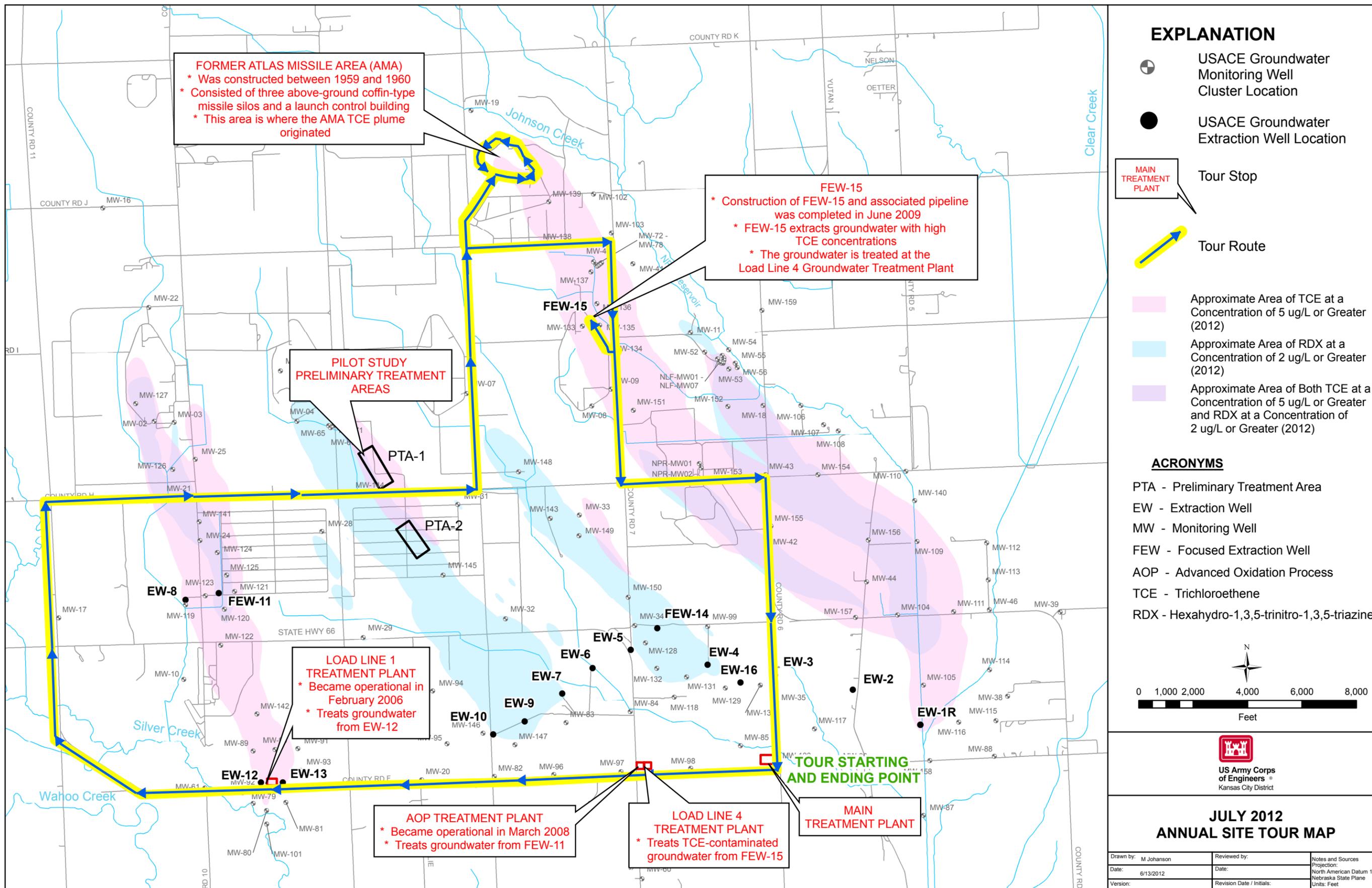
Mead Public Library
316 South Vine Street
Mead, Nebraska 68041
(402) 624-6605

Hours

Tuesday: 9 - 11 AM and 2-7 PM
Wednesday 3-5 PM
Thursday: 9-11 AM, and 2-7 PM
Saturday: 9-1 PM



US Army Corps
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FORMER ATLAS MISSILE AREA (AMA)
 * Was constructed between 1959 and 1960
 * Consisted of three above-ground coffin-type missile silos and a launch control building
 * This area is where the AMA TCE plume originated

FEW-15
 * Construction of FEW-15 and associated pipeline was completed in June 2009
 * FEW-15 extracts groundwater with high TCE concentrations
 * The groundwater is treated at the Load Line 4 Groundwater Treatment Plant

PILOT STUDY PRELIMINARY TREATMENT AREAS

LOAD LINE 1 TREATMENT PLANT
 * Became operational in February 2006
 * Treats groundwater from EW-12

AOP TREATMENT PLANT
 * Became operational in March 2008
 * Treats groundwater from FEW-11

LOAD LINE 4 TREATMENT PLANT
 * Treats TCE-contaminated groundwater from FEW-15

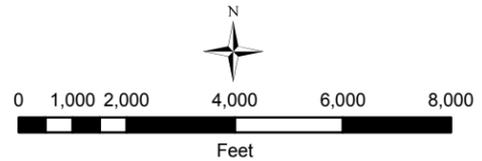
MAIN TREATMENT PLANT

EXPLANATION

- USACE Groundwater Monitoring Well Cluster Location
- USACE Groundwater Extraction Well Location
- MAIN TREATMENT PLANT** Tour Stop
- Tour Route
- Approximate Area of TCE at a Concentration of 5 ug/L or Greater (2012)
- Approximate Area of RDX at a Concentration of 2 ug/L or Greater (2012)
- Approximate Area of Both TCE at a Concentration of 5 ug/L or Greater and RDX at a Concentration of 2 ug/L or Greater (2012)

ACRONYMS

- PTA - Preliminary Treatment Area
- EW - Extraction Well
- MW - Monitoring Well
- FEW - Focused Extraction Well
- AOP - Advanced Oxidation Process
- TCE - Trichloroethene
- RDX - Hexahydro-1,3,5-trinitro-1,3,5-triazine



JULY 2012 ANNUAL SITE TOUR MAP

Drawn by: M Johanson	Reviewed by:	Notes and Sources
Date: 6/13/2012	Date:	Projection: North American Datum 1983
Version:	Revision Date / Initials:	Units: Feet

Operations and Maintenance Summary (continued)

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.



Load Line 1 Process Equipment Photo by ECC

Helicopter Electromagnetic and Magnetic Geophysical Survey

A Helicopter Electromagnetic and Magnetic Geophysical Survey will be conducted at the former Nebraska Ordnance Plant beginning in October 2012. The purpose of the survey is to map the subsurface properties in an area that covers the existing groundwater plumes. The survey data will provide a three-dimensional picture of subsurface resistivity variations which can be related to geology. The data gathered during the survey will be interpreted and results will be used to further define existing geologic conditions of the plume areas. The survey will be used to provide more details on the bedrock geology, determine the presence and thickness of clay layers, and develop three dimensional pictures of the resistivity of the subsurface. The three dimensional pictures may provide information about subsurface geologic features which influence surface and groundwater interactions.

The Helicopter Electromagnetic and Magnetic Geophysical Survey is a state-of-the-art method capable of quickly mapping subsurface geology over a large area. The survey will be conducted using a helicopter outfitted with an electromagnetic system supplemented by a magnetometer. During the survey, instruments

which transmit electromagnetic signals are suspended beneath a helicopter in a horizontal tube. The helicopter will fly at an altitude of approximately 200 feet and follow a preplanned route using a global positioning system to provide optimal coverage of the area.

The helicopter will not fly directly over cities or towns and avoid flying directly over corralled livestock. A presentation will be given at the July Open House at 5:00 P.M. with further information. If you have any questions about the pending study, please contact the U.S. Army Corps of Engineers Project Manager at (816) 389-3172.



Electromagnetic system, Photo by Fugro