



Summary of Activities at the

Former Weldon Spring Ordnance Works



The U.S. Army Corps of Engineers (USACE) is conducting a cleanup program for the Former Weldon Spring Ordnance Works Site (WSOW) on behalf of the Department of Defense. This site previously contained soil and process pipeline contaminated with explosives (trinitrotoluene (TNT) and dinitrotoluene (DNT)), lead, polyaromatic hydrocarbons, and polychlorinated biphenyls (PCBs). Cleanup of the soil and pipeline is nearly complete. Cleanup efforts are now directed toward the groundwater beneath the WSOW. Contamination of the groundwater at the WSOW occurred as a result of activities performed under contract with the Army during World War II as part of the production of explosives such as TNT and DNT (referred to in general as nitroaromatics). Groundwater that is directly beneath the WSOW is contaminated with nitroaromatics.

The USACE issued a Proposed Plan detailing its preferred alternative for cleaning up the contaminated groundwater at the WSOW on June 11, 2004. The Plan identifies **Alternative 3, Monitored Natural Attenuation**, as the preferred alternative for the WSOW. Public comment and regulatory review will help determine the alternative that will be used as the remedy to clean up the groundwater at the site. The USACE will respond to all relevant comments in the WSOW Record of Decision. The Record of Decision will identify the final clean up remedy for the site based in part upon public comments received during the 30-day review period that began June 11, 2004 and ends July 12, 2004.

The USACE encourages private citizens to participate fully in the cleanup program.

To learn more about the Weldon Spring Ordnance Works Site, or to inquire about public involvement opportunities, contact

U.S. Army Corps of Engineers
CENWK-PM-E
601 E. 12th Street
Kansas City, Missouri 64106

(816)-983-3486

Or visit the project website at:
http://www.nwk.usace.army.mil/projects/weldon/weldon_home.htm

BACKGROUND

The Weldon Spring Ordnance Works (WSOW) was operated under an Army contract with the Atlas Powder Company from 1941 to 1945 as an explosives production facility to support war efforts during World War II. The WSOW produced trinitrotoluene (TNT) and dinitrotoluene (DNT) explosives. The original property of the WSOW consisted of 17,323 acres. Following 1945, the property was divided with the majority of the parcels transferred to the State of Missouri and the University of Missouri. Approximately 2,000 acres remain under Federal ownership. These areas include the current Weldon Spring Training Area and the U.S. Atomic Energy Commission's former Uranium Feed Material Plant site,

On February 2, 1990, the WSOW was listed on the U.S. Environmental Protection Agency (EPA) National Priorities List (NPL).

The USACE is currently conducting clean up activities at the WSOW on behalf of the Army and the Department of Defense as part of the Defense Environmental Restoration Program.

In accordance with the Comprehensive Environmental Response, Compensation, and Liability Act, the USACE issued a Proposed Plan (PP) describing the preferred alternative for clean up of the groundwater at the WSOW. The PP provides background information on the WSOW, summarizes five alternatives under consideration, and presents the USACE's rational for the Army's preferred remedy for cleaning up the groundwater. The plan also outlines the public's role in the final decision-making.

THE PREFERRED ALTERNATIVE

Previous cleanup activities of soil and pipeline at the site has reduced and/or eliminated known nitroaromatic sources of groundwater contamination. The next step in the process is a remedy that will clean up the remaining contamination in the groundwater. Based on the results of investigations completed at the WSOW, five alternatives for cleaning up the groundwater have been developed and evaluated in an effort to identify the preferred alternative. The five alternatives are discussed at length in the supplemental Feasibility Study (FS) for the WSOW. The Proposed Plan provides a summary of each alternative, identifies the preferred alternative, and provides the rationale for the selection of the preferred alternative.

USACE and EPA, in consultation with the Missouri Department of Natural Resources (MDNR), have proposed **Alternative 3, Monitored Natural Attenuation** as the final remedial alternative. Based on currently available information,

Summary of the Five Alternatives:

Alternative 1

No Action

No institutional controls to prevent exposure to contamination. No monitoring of contamination at the Weldon Spring Ordnance Works (WSOW). Includes well abandonment and five-year reviews.

Cost: \$140,000

Alternative 2

Long Term Monitoring

Monitor nitroaromatic contamination in the WSOW and provide institutional controls to prevent exposure to contaminated groundwater. Five-year reviews are included.

Cost: \$610,000

Alternative 3

Monitored Natural Attenuation

More extensive monitoring than Alternative 2. Natural processes that are reducing concentrations and preventing migration of contamination will also be monitored. Institutional controls will be provided to prevent exposure to contaminated groundwater. Five-year reviews are included.

Cost: \$990,000

Alternative 4

Groundwater Extraction

Remedy is the same as Alternative 3, but with additional targeted groundwater extraction in areas of the WSOW with more concentrated nitroaromatic concentrations.

Cost: \$8,830,000

Alternative 5

Enhanced Monitored Natural Attenuation

Remedy is the same as Alternative 3, but with enhancement by injection of products to stimulate the process of contaminant breakdown in targeted areas of the WSOW with more concentrated nitroaromatic concentrations.

Cost: \$2,080,000

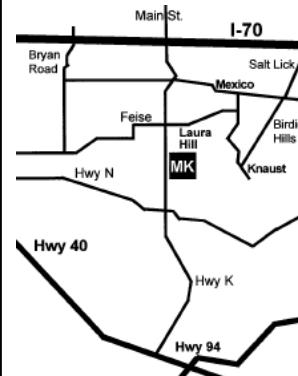
Alternative 3 is the preferred remedy for groundwater clean up. USACE and EPA believe that the preferred alternative will be protective of human health and the environment, comply with Applicable or Relevant and Appropriate Requirements, will be cost effective, and will use permanent solutions and alternative treatment technologies to the extent practicable.

Alternative 3, Monitored Natural Attenuation, monitors the groundwater for contamination and the natural processes that are preventing the contamination from spreading and are to some extent, breaking down the contamination. The remedy also includes institutional controls that will minimize the potential for exposure to contaminated groundwater until concentrations are reduced to acceptable risk based levels or standards set in federal or state environmental law that are considered to be protective.

PUBLIC PARTICIPATION

The purpose of the public comment period is to offer members of the public an opportunity to provide their views on the Proposed Plan and the preferred alternative to USACE, EPA, and MDNR. These agencies encourage public comment to ensure the remedy selected for the WSOW meets the needs of the local community and is an effective solution to the problem. The public comment period began June 11, 2004, and ends July 12, 2004. A final decision on an alternative for clean up of the groundwater will be made following review of the relevant comments received during the public comment period. Comments provided by mail must be postmarked no later than July 12, 2004.

Written comments may be submitted to the USACE at any time during the 30-day public comment period. Oral comments will be recorded during the June 24, 2004 public meeting. The USACE will respond to all relevant comments and will consider these comments when working with the EPA to select a final remedy. The final remedy will be outlined in the Record of Decision, which will be submitted to EPA later in 2004. Based upon public comments or new information, USACE and EPA may decide to modify the preferred alternative or to select another alternative from the supplemental Feasibility Study or Proposed Plan. A copy of these documents and other supporting information is provided in the Administrative Record File.



The Administrative Record File is located at the Middendorf-Kredell branch of the St. Charles City-County Library District 2.5 miles south of Interstate 70 on Highway K.

