



## Former Weldon Spring Ordnance Works

### Fact Sheet

The U.S. Army Corps of Engineers (USACE) has been conducting a cleanup program for the Former Weldon Spring Ordnance Works Site (WSOW) on behalf of the Department of Defense (DOD). 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 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.

On June 11, 2004, the USACE issued a *Proposed Plan* detailing, Monitored Natural Attenuation (Alternative 3

of 5), as the preferred cleanup alternative for addressing the groundwater contamination at the WSOW. Public comments on the *Proposed Plan* and consultation with the United States Environmental Protection Agency (EPA) and the Missouri Department of Natural Resources (MDNR) aided in development of the WSOW *Record of Decision* for Operable Unit 2: Groundwater.

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The Department of Defense, with concurrence from EPA and MDNR, has released a *Record of Decision* addressing groundwater contamination at the WSOW (See location map below). The Record of Decision includes a *Responsiveness Summary* that addresses the comments submitted on the *Proposed Plan*.

This fact sheet summarizes the Final Cleanup Decision for the Former Weldon Spring Ordnance Works. It is intended to provide general information about the full Record of Decision for Operable Unit 2: Groundwater, and does not take the place of the full Record of Decision. Copies of the complete Record of Decision and this fact sheet are available on the internet at: <http://www.nwk.usace.army.mil/projects/weldon/newsletters.htm> and at the Middendorf-Kredell Library in O'Fallon, Missouri.

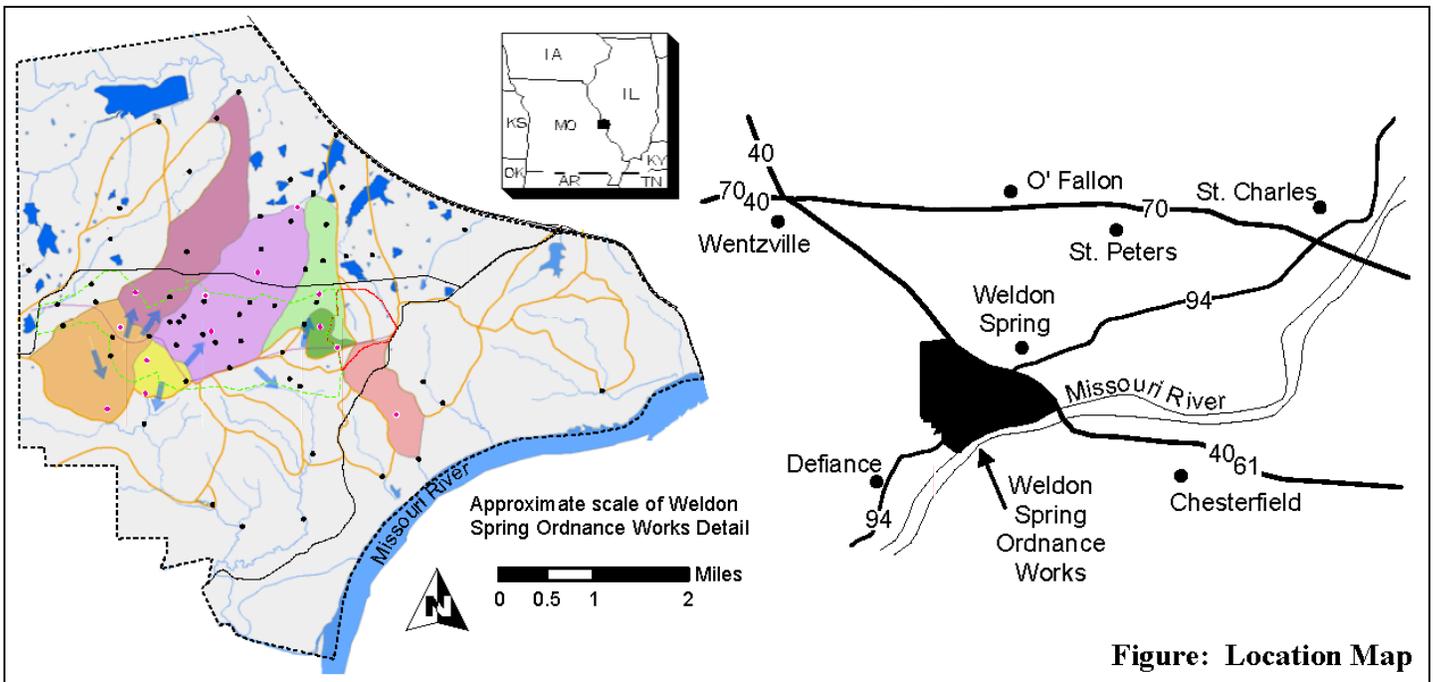


Figure: Location Map



## Former Weldon Spring Ordnance Works

### 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.

### Description of the Selected Remedy

In accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 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 rationale for the Army's preferred remedy for cleaning up the groundwater. The plan also outlines the public's role in the final decision-making.

DOD's selected remedy for the Former Weldon Spring Ordnance Works (WSOW) Groundwater Operable Unit, Operable Unit 2,

addresses the contamination in groundwater that resulted from historic activities at the WSOW associated with the production of TNT and DNT.

The figure on the previous page shows the general location of the WSOW. The orange lines on this figure represent the approximate extent of spring recharge basins as determined by an MDNR dye trace study completed in 1991. Spring recharge basins identified with additional color shading represent the areas with nitroaromatic impacted groundwater.

The following is a description of the major components of Alternative 3: Monitored Natural Attenuation (MNA), the Selected Remedy for the impacted groundwater:

- Wells and springs from the existing monitoring network (and additional future points as deemed necessary to support ongoing evaluations) will be sampled to provide data to support the evaluation of progress toward the Remedial Action Objective. Sampling locations and frequency will be identified in the Remedial Design.
- Sampling data will be used for the evaluation of the continued effectiveness of various natural physical and biological processes in reducing contaminant concentrations.
- Institutional Controls will be identified and enforced to limit exposure to contaminated groundwater and restrict activities that may negatively impact the remediation process.

### Consideration of Significant Public Comments

DOD reviewed public comments received on the *Proposed Plan*. Significant comments were addressed in the Responsiveness Summary of the *Record of Decision*.

A majority of the comments received during the public comment period for the *Proposed Plan* pertained to the CERCLA process. A number of comments were also received that dealt with the amount of detail provided in the *Proposed Plan*. The issues expressed in the comments included concern that the DOD had not followed the CERCLA process, had not presented enough support for MNA, and had proposed a remedy that did not maximally protect the public health and the environment. The Responsiveness Summary (Section 3.0) of the ROD addresses these concerns. The selected remedy represents the best balance of the CERCLA criteria, which includes the threshold criterion of protection of human health and the environment.



## Record of Decision Fact Sheet

# Former Weldon Spring Ordnance Works

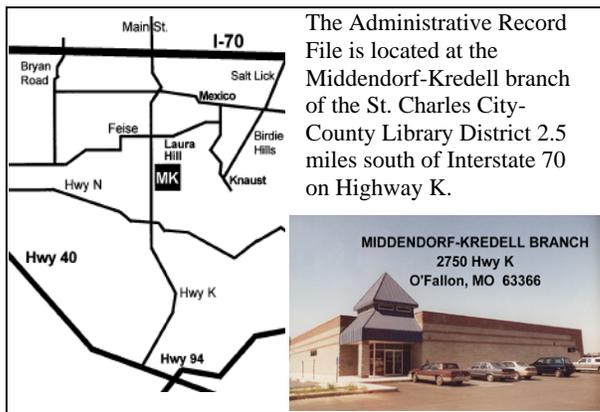


Comments pertaining to supporting the identification of the preferred alternative were addressed by noting that the CERCLA and National Contingency Plan (NCP) requirements were met at the WSOW. A *Remedial Investigation, Baseline Risk Assessment, Feasibility Study*, an updated assessment of groundwater monitoring data (as a *Groundwater Monitoring Assessment Report, GMAR*), and a *Supplemental Feasibility Study*, were provided as support for the *Proposed Plan*.

Based on the analysis provided in the *GMAR*, a formal conclusion has been made that the intrinsic natural mechanisms at the WSOW support the feasibility of natural attenuation of groundwater contamination.

### How to Find Documents

The Administrative Record for the WSOW contains documents that have been used to make decisions on how to clean up the site. The Administrative Record can be reviewed at:



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.



#### Library Hours:

Monday - Thursday 9:00 a.m. - 9:00 p.m.  
Friday & Saturday 9:00 a.m. - 6:00 p.m.  
Sunday 1:00 - 5:00 p.m.

The Proposed Plan, Proposed Plan Fact Sheet, Record of Decision, Record of Decision Fact Sheet, and various newsletters are available for download from the project website.

The USACE and Department of Defense encourage 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. 12<sup>th</sup> 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](http://www.nwk.usace.army.mil/projects/weldon/weldon_home.htm)