

## US Department of Energy Groundwater Database Groundwater Master Report

**Installation Name, State:** Weldon Spring Site Remedial Action Project

**Responsible DOE Office:** Office of Environmental Management

**Plume Name:** Chemical Plant (West Plume)

**Remediation Contractor:** SM Stoller Corp

**Report Last Updated:** 2009

### Contaminants

Halogenated VOCs/SVOCs Present? **Yes**

VOC Name	Concentration (ppb)	Regulatory Driver	Cleanup Requirement
TCE	763	Yes	5

Fuel Present? **No**

Metals Present? **Yes**

Metal Name	Metal Concentration (ppb)	Regulatory Driver	Cleanup Requirement
U	264	Yes	20

Isotopes Present? **No**

Explosives Present? **Yes**

Explosive Name	Explosive Concentration (ppb)	Regulatory Driver	Cleanup Requirement
DNT (dinitrotoluene)		Yes	0.11

Other Contaminants? **No**

Tritium Present? **No**

Nitrates Present? **Yes**    Concentration: **683** (ppb)    Regulatory Driver: **Yes**    Cleanup Requirement: **10** (pCi/l)

Sulfates Present? **No**

### Hydrogeology

Conduit Flow? **Yes**

Depth (feet): **30**

Multiple Units Affected? **No**

Avg Velocity (feet/year): **800**

### Plume Information (no source)

Source **Not Present**

Area of Plume (acres): **200**

Plume Status **Contaminants Offsite**

### Remedial Approach

Remedy Name	Status	Start Date	End Date
monitored natural attenuation	Completed	2004	

### Groundwater Use / Exit Strategy

Potable? **Yes**

Does an Exit Strategy Exist? **Yes**

Sole Source Aquifer? **No**

Basis for Exit Strategy: **Target Concentration**

### Environmental Indicators (EIs)

Groundwater Migration Under Control? **Yes**  
Confirmed by Lead Regulator? **Yes**

Current Human Exposure Acceptable? **Yes**  
Confirmed by Lead Regulator? **Yes**

### Regulatory

Decision Document? **Decision Document in Place**  
Date Approved **Jan 2004**

Lead Regulatory Agency: **Federal**  
Regulatory Driver: **CERCLA**

Regulatory Position on Groundwater Use Same as Site?  
**Yes**

### Comments

Monitoring is designed to show that either natural attenuation processes are acting as predicted or to trigger the implementation of contingencies. Movement of contaminated groundwater primarily occurs via conduit flow in the bedrock aquifer. Limited lateral movement downgradient is anticipated. Nitrate defines the maximum extent of the contaminated groundwater plume. The areas of impact for uranium, TCE, and nitroaromatic compounds are considerably smaller and discrete.