

US Department of Energy Groundwater Database Groundwater Master Report

Installation Name, State: Shiprock
Responsible DOE Office: Office of Environmental Management

Plume Name: Shiprock
Remediation Contractor: S. M. Stoller Corporation

Report Last Updated: 2009

Contaminants

Halogenated VOCs/SVOCs Present? **No**

Fuel Present? **No**

Metals Present? **Yes**

Metal Name	Metal Concentration (ppb)	Regulatory Driver	Cleanup Requirement
Mn	8300	No	
Se	530	Yes	0.05
U	2600	Yes	0.044

Isotopes Present? **Yes**

Isotope Name	Isotope Activity (pCi/l)	Regulatory Driver	Cleanup Requirement
Sr	11000	No	

Explosives Present? **Yes**

Other Contaminants? **Yes**

Contaminant Name	Contaminant Concentration (ppb)	Regulatory Driver	Cleanup Requirement
Ammonium	41000	No	

Tritium Present? **No**

Nitrates Present? **Yes** Concentration: **610000** (ppb) Regulatory Driver: **Yes** Cleanup Requirement: **10** (pCi/l)

Sulfates Present? **Yes** Concentration: **150000000** (ppb)

Hydrogeology

Conduit Flow? **No**

Multiple Units Affected? **No**

Depth (feet): **15**

Avg Velocity (feet/year): **474**

Plume Information (no source)

Source **Controlled**

Plume Status **Contaminants Offsite**

Area of Plume (acres): **530**

Remedial Approach

Remedy Name	Status	Start Date	End Date
natural flushing	Proposed	2003	
other (provide names)	Proposed	2003	

Groundwater Use / Exit Strategy

Potable? **No**
Sole Source Aquifer? **No**

Does an Exit Strategy Exist? **No**
Basis for Exit Strategy: **No Response**

Environmental Indicators (EIs)

Groundwater Migration Under Control? **Yes**
Confirmed by Lead Regulator? **No**

Current Human Exposure Acceptable? **Yes**
Confirmed by Lead Regulator? **No**

Regulatory

Decision Document? **Remedial Approach Proposed**
Date Approved

Lead Regulatory Agency: **Federal**
Regulatory Driver: **Other**

Regulatory Position on Groundwater Use Same as Site?
Yes

Comments

The contaminant and hydrogeology information provided above is for the portion of the site where a Natural Flushing compliance strategy has been selected. For the remainder of the site concentration-driven performance standards do not apply because meeting compliance objectives is based on hydrologic control. There are three separate compliance strategies that have been selected for three different areas of the site: the floodplain, east terrace and west terrace. The compliance strategy for the floodplain is Natural Flushing with Active Remediation (pumping and evaporation). The compliance strategy for the eastern portion of the terrace is Active Remediation (pumping and evaporation). The compliance strategy for the western portion of the terrace is Supplemental Standards based on widespread ambient contamination.