



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 7**

11201 Renner Boulevard  
Lenexa, Kansas 66219

**MEMORANDUM**

**SUBJECT:** Request for Removal evaluation of elevated heavy metals in private domestic drinking water wells at the Oronogo-Duenweg Mining Belt Superfund Site Operable Unit 4 (OU4)

**FROM:** Creenen McGuire, Remedial Project Manager  
Special Emphasis Section

**THRU:** Elizabeth Hagenmaier, Supervisor  
Special Emphasis Section

Preston Law, Manager  
Lead Mining and Special Emphasis Branch

**TO:** Adam Ruiz, Manager  
Assessment Emergency Response and Removal Branch

*Background:*

The Oronogo-Duenweg Mining Belt Superfund site (Site) is part of the Tri-State Mining District in Jasper and Newton Counties, Missouri. Historical mining and processing of ore for lead and zinc has led to dispersion of heavy metals contamination across the Site. The Site was listed on the NPL in 1990. The Site was divided into five operable units (OUs) to facilitate investigation and cleanup activities. The subject of this memorandum is OU4 – Groundwater.

*Current Remedial Actions:*

No current remedial action is taking place for OU4. A ROD was signed on July 29, 1998. Remedial action ceased in 2007 with the signature of the remedial action report when the identified contaminated private domestic drinking water wells were addressed. Additional remedial actions will need approval by EPA Headquarters due to the significant gap in time since the last remedial action.

*Past Remedial Actions:*

The EPA and the PRPs provided bottled water to homes where private domestic drinking water wells exceeded health-based standards for lead, cadmium, and zinc from 1994 to 2002. The EPA issued a ROD for remedial action for impacted private domestic drinking water wells in July 1998. Installation of alternative public water supply systems to replace impacted domestic wells began in June 2001. The EPA funded extension of PWSD #1, in Webb City and the community of Duenweg, to ensure clean water supply in areas of known groundwater contamination within Webb City and Duenweg. The extension of PWSD #1 covers approximately 25 square miles. A new PWSD, PWSD #3, was also created, receiving its water from Carterville, and, as demand requires from Duenweg, to provide clean



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drinking water. During the design phase, the EPA was able to expand the extent of public water supply to include all but two of the homes identified in the ROD to receive treatment units. For these two homes, MoDNR installed new drinking water wells into the deep Ozark Aquifer to eliminate the maintenance requirements of treatment units.

The U.S. Environmental Protection Agency's remedial program is in the process of drafting an ESD and procuring a contract for a new remedial action to address properties with drinking water wells that exceed Site COCs. That contract is currently expected in Q1FY25. During assessment of properties, seven properties were identified with drinking water in private wells with elevated lead above the action level of 15 µg/L and/or cadmium above the MCL of 5 µg/L. These properties are within Jasper County. Currently, more than 20 additional properties are planned to be sampled which may increase the current number of private wells above an action level/MCL.

**List of Properties:**

1. 4689 West Junge Boulevard, Joplin, Missouri 64801
2. 385 South Black Cat Drive, Joplin, Missouri 64801
3. 730 Summit Lane, Joplin, Missouri 64801
4. 5280 East 14<sup>th</sup> Street, Joplin, Missouri 64801
5. 6447 Cedar Road, Reeds, Missouri 64859
6. 1125 County Lane 119, Carthage, Missouri 64836
7. 1870 East Bailey Drive, Carthage, Missouri 64839

*Request for Removal Program support:*

The remedial program is requesting the removal program evaluate the seven aforementioned properties, and if warranted, proceed with a Removal Action. The remedial program currently projects to have a contract vehicle in place during Q1FY25 to address drinking water impacts. This request for removal program support is meant to address drinking water impacts in the interim. The remedial program will continue to assess private domestic drinking water wells. If additional drinking water exceedances are identified prior to the remedial contract award, those properties will be referred to the removal program for similar evaluation.

Approved:

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for Adam Ruiz, Manager  
Assessment Emergency Response and Removal Branch