

December 31, 2008 Update

## Upper Tenmile Creek NPL Site

Lewis and Clark County, Montana

(Review Date: 7/30/08)

### *H*ighlights Since the 2008 Five-Year Review

- **Technical Assistance Grant funded liaison helps to resolve potable water supply issues.**
- **Work continues to remove contaminated soils and repair or replace waste water systems.**

**Brief Site History:** The Site includes 150 abandoned or inactive mine sites within or near the historic Rimini Mining District. Most historic mining activity took place within the Rimini Mining District and included hard rock mining for gold, lead, zinc, and copper. Active hard rock mining began in the 1870's and continued through the 1930's. Limited intermittent mining continued in the District until 1953. The Site also includes the properties of the now defunct Basin Creek Mine (BCM), an open pit gold mine that operated until the mid-1990s.

Mining within the Site has resulted in uncontrolled releases of metal contaminants to local streams from waste rock, tailings, and contaminated mine discharge water. The major threat posed by the abandoned mines is the release of potentially harmful concentrations of arsenic, copper, lead, zinc, and other metals from mine waste. These mine wastes contribute to the contamination of surface water, ground water, and stream sediments throughout the drainage basin of upper Tenmile Creek and its tributaries.

**Cleanup Activities Completed:** The EPA, US Forest Service and Montana Department of Environmental Quality have evaluated and conducted abandoned mine reclamation and cleanups at the Site since the late 1980's. In 1999 the Site was added to the NPL and in 2002 the Record of Decision (ROD) was released calling for continued mine land reclamation, establishment of a Sitewide waste repository, remediation of residential yards and Rimini Road, and measures to ensure safe drinking water for area residents.

Completion of all response actions is expected to occur not earlier than 2012. Therefore, this Five-Year Review examined the protectiveness of response actions completed to date, including remediation of residential yards and provision of safe drinking water. In addition, water quality trends were examined in Site surface water to determine if any beneficial effects were apparent.

**Current Status:** Conditions on several residential properties in Rimini and the Landmark subdivision continue to pose a human health risk above a level of concern due to access denial by the property owner. Other pending elements of the remedial design include remediation of Rimini Road, reclamation of the majority of the 70 high-priority mine sites within the watershed, improvements to Chessman Reservoir and Red Mountain Flume and construction of a permanent water supply for the community of Rimini.

**Summary of Protectiveness:** The implementation process called for in the June 2002 ROD makes it impossible to determine at this time whether the remedy is protective. However, in as much as the goals of the ROD are currently met, EPA believes the remedy will ultimately be protective when construction is complete.

**Issues Impacting Protectiveness:** Adverse ecological impacts remain throughout most of the Site. However, the ROD anticipated that such impacts might persist for some time after completion of remedial action as remedies stabilize.

**Upper Tenmile Creek NPL Site  
Five-Year Review Update Table  
(7/30/08)**

Issues	Recommendations/ Follow-up	Follow-up Actions (Status/ Due Date)	Status of Follow-up Actions 12/08	Responsible Party
<p><b>1) There is potential that Landmark or Rimini residential water supply(s) may contain contaminants above MCLs at homes where landowners have declined offers of either bottled water or point of use water treatment systems.</b></p>	<p>Continue to work with landowners to allow provision of alternative water supply. Continue outreach and education of residents about their exposure risks.</p>	<p>On-going</p>	<p>EPA has held ongoing discussions with the Rimini community with facilitation provided through a technical assistance grant (TAG). The TAG funded liaison has been working with the local Sewer and Water District to identify potable water sources and delivery infrastructure that best meets the community's needs. Construction of the potable water supply could not occur prior to the 2010 field season.</p> <p>EPA sent a letter to</p>	<p>EPA</p>

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			every landowner determined to have drinking water with contaminant concentrations above maximum contaminant levels (MCLs) for arsenic, cadmium or lead in drinking water and offered to provide bottled water until a permanent solution is implemented.	
<p><b>2) Remediation of some residential properties is under construction. However, for many of these properties, sufficient work has been done to create a condition that is protective of human health. The remaining partially remediated properties and properties that have not undergone any remediation (but were targeted for remedial action) are not protective of human health.</b></p>	<p>Continue to work with landowners and local government to secure property access for the purpose of completing remedial action, as necessary to protect human health. However, access limitations may preclude completion of all yards. Continue outreach and education of residents about their exposure risks.</p>	<p>On-going</p>	<p>EPA continues to work with individual landowners and Lewis and Clark County to allow EPA to remove contaminated soils and repair or replace waste water systems if they are disturbed during cleanup. The Lewis and Clark County Health Board will be meeting February 12, 2009 to address wastewater variances that may be needed to complete the cleanups.</p>	<p>EPA</p>
<p><b>3) Rimini Road remains unremediated. However, as a temporary measure to suppress fugitive dust, at least four-inches of road-base was applied during 2007.</b></p>	<p>Perform Response Action.</p>	<p>As soon as practicable</p>	<p>EPA is seeking funding to complete cleanup of Rimini Road during the 2009 field season.</p>	<p>EPA</p>

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<b>4) Institutional controls on future ground water wells have not been implemented.</b>	Implement institutional controls.	12/31/10		EPA
<b>5) OU9B Ground Water Institutional control to prevent disturbance of capped mine wastes at the Red Water Mine is not required by the ROD and have not been implemented.</b>	Prepare ESD and implement institutional control.	9/30/10		EPA
<b>6) Many of the remedy components intended to address surface and ground water quality have not been fully implemented. However, the ROD anticipated a minimum ten-year implementation period of which five years has elapsed.</b>	Continue Response Actions.	9/30/12		EPA
<b>7) Performance standards and points of compliance have not been formalized under a Compliance Monitoring Plan (CMP) for the Luttrell ground water monitoring network or treatment facility effluent discharge.</b>	Develop and implement CMP.	12/31/09		EPA