Water Supply and Milltown Reservoir Sediments Operable Units of the Milltown Reservoir Sediments/Clark Fork River Superfund Site Missoula County, Montana

FIRST FIVE-YEAR REVIEW REPORT

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For
EPA Region 8

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EXECUTIVE SUMMARY

EPA Region 8 has conducted the first five-year review (FYR) of the remedial actions implemented at the Milltown Reservoir Sediments Operable Unit (MRSOU) of the Milltown Reservoir/Clark Fork River Superfund Site, located in the vicinity of Milltown, Missoula County Montana. The review was conducted from January through August, 2011. This review also addresses the related Water Supply Operable Unit (OU1).

For the purposes of remedial investigation and remedy development, EPA designated three operable units (OU) for the Milltown Reservoir/Clark Fork River Superfund Site. Operable Unit 1 (OU1) was focused on providing a safe water supply to Milltown area residents through the establishment of a public water supply system for the town of Milltown. The MRSOU is Operable Unit 2 (OU2) and includes approximately 540 acres in the Clark Fork River and Blackfoot River floodplain (Figure 1). The MRSOU consists of the area encompassed by the former Milltown Dam and Reservoir and the area where arsenic contamination exists in groundwater.

The Clark Fork River Operable Unit (OU3) is the area upstream of the MRSOU and downstream of the Silver Bow Creek/Butte Area Superfund Site and Anaconda Smelter Superfund Site. The 2004 Record of Decision for the Clark Fork River Operable Unit requires wholly separate remedial action that begins over fifty miles upstream of the MRSOU. A separate Five Year Review will be conducted for this operable unit, the timing of which will be based on the initiation of remedial action there.

The Selected Remedy in the Record of Decision (ROD) (EPA 2004) for the MRSOU consisted primarily of three components: 1) reservoir drawdown and dam removal; 2) contaminated sediment removal; and 3) realignment, re-grading and revegetation of the Clark Fork River Channel. The ROD also established surface water, groundwater, and vegetation standards that are to be achieved during and after completion of remedial action and restoration activities. The primary contaminants of concern are arsenic, copper, lead, cadmium and zinc in both groundwater and surface water.

The remedy at the MRSOU is expected to be protective of human health and the environment upon completion, and in the interim, exposure pathways that could result in unacceptable risks are being controlled.

The following actions need to be taken to ensure future protectiveness:

- Although temporary institutional controls are in place for RA activities, long term institutional controls should be identified and documented in an institutional control plan.
- Although temporary O&M plans are in place for monitoring, and management of some areas where contamination has been left in place, a long term O&M Plan should be finalized to manage contaminated sediments left in place as well as long term groundwater and surface water monitoring.
- Additional groundwater data should be collected to provide information on whether the ROD contaminants of concern other than arsenic are meeting or will meet the ROD standards.