

## environment

### CLEAN WATER

#### \$100-Million Agreement Settles Milltown Dam's Fate

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By Mark Matthews

Under a \$100-million agreement reached this month, a century-old timber-crib dam near Missoula, Mont., will be demolished starting late next year to allow removal of more than 2.5 million cu yd of mining sediment that has produced an arsenic-laden plume now contaminating groundwater and area wells.

Sediment from copper mines 100 miles upriver has collected behind the Milltown Dam, at the confluence of the Clark Fork and Blackfoot rivers, making it part of a 120-mile-long Superfund site. The Environmental Protection Agency and other major parties agreed on the project to draw down the reservoir and remove the powerhouse and dam.

In the early 1980s health officials discovered the arsenic plume migrating from the reservoir into the ground water and poisoning wells. In 1996, an ice floe scoured sediment, sending the toxic metals downstream. An initial decision to remove the dam was made by EPA, with state support, in January 2003 (ENR 2/3/03 p. 14).

Los Angeles-based Atlantic Richfield Co., which owns the mines, will pay most of the project's cost. NorthWestern Corp., Sioux Falls, S.D., which owns the dam and five-unit, 3.2-MW powerplant, will pay \$11.4 million. The state's natural resource restoration fund will add \$7.6 million.

Envirocon, Inc., Missoula, will oversee most of the work. Matthew Fein, senior project director, declines to name the contract value. Engineering cost will run about \$8 million. The project will consist mostly of earthmoving, he says. EMC2, Bozeman, Mont., is performing early design work.

Envirocon will do most of the excavation and transport the sediment upriver by rail to Opportunity, Mont. The soil supports vegetation growth and will be used to cap a repository of more poisonous mine tailings already at the site near Anaconda, Mont. "The sediment itself is not a health threat to humans," Fein says. Engineers expect the arsenic plume near the dam to quickly flush from the wells. Fein says demolition could be completed in three years.

*(Photo courtesy of Envirocon Inc.)*



**Last Look.** Milltown powerhouse and dam will be removed in the dry.

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