



Overview

The State of California owns the Leviathan Mine property, which is on the federal list of the most polluted sites in the nation (National Priorities List). The purpose of the Water Board's Leviathan Mine program:

- Abate discharges of acid mine drainage (AMD) to Leviathan Creek from areas of the Leviathan Mine Superfund Site that the Water Board manages.
- Maintain the Water Board's pollution abatement infrastructure at the Site.
- Comply with USEPA orders regarding the Site.
- Provide review and comment on cleanup activities and Remedial Investigation / Feasibility Study (RI/FS) activities proposed and carried out by Atlantic Richfield (AR) to comply with USEPA orders.
- Develop and implement a final remedy for the Site that is protective of human health and the environment.

The Water Board implements the program with an allocation for seven positions.

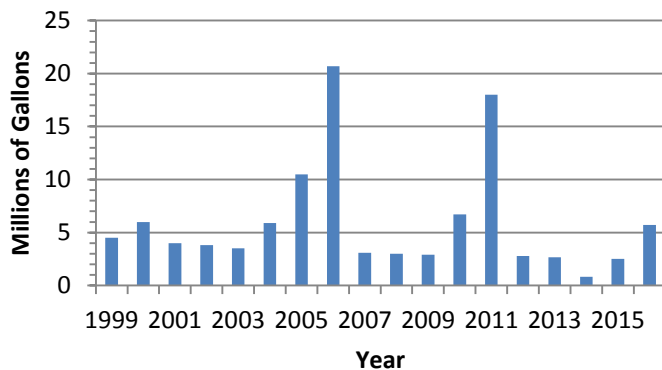
Goals

- Prevent overflow of untreated AMD from storage ponds by treating stored AMD during summer treatment campaigns and, if needed, with spring treatment.
- Achieve USEPA discharge criteria for discharges of treated AMD.
- Ensure RI/FS adequately describes the nature and extent of mine waste deposited at and from the Site, evaluate the risk to human health and the environment from that waste, and evaluate reasonable alternatives for reducing the risk to acceptable levels.
- Design and implement a remedy that restores and protects water quality and the environment to the extent feasible.

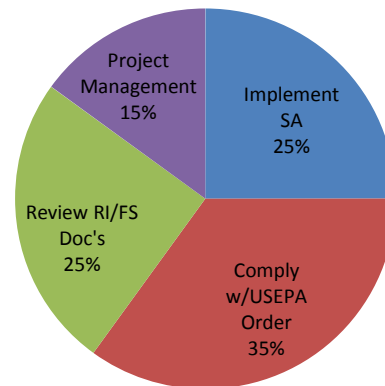
Challenges

- The site is remote, fully accessible only in the summer, and has no permanent power or communications.
- The amount of needed treatment is highly variable, depending on the previous winter's precipitation; amount of needed treatment may vary by a factor of 10.
- Storage pond volume is not sufficient for wet year storage of AMD and accumulated precipitation. To prevent overflow in wet years, spring treatment must be done during time of limited access and freezing conditions.

Treatment Volume



Staff Activities



Accomplishments

- Successfully treated AMD stored in the ponds, making maximum volume available.
- Continued stream flow monitoring program.
- Removed accumulated sediment from storm water control ditches.
- Reviewed and commented on several RI/FS workplans and reports.

Progress to date (2016)

- Removed and disposed sludge generated by AMD treatment process during 2015.
- Treated AMD to create storage capacity for subsequent winter and spring months.
- Conducted storm drain maintenance.
- Reported to EPA on year's activities – January 2016.
- Prepared road use plan for US Forest Service – April 2016.
- Reviewed and commented on numerous RI/FS work plans and reports prepared by AR.
- Coordinated with AR on site activities – ongoing.

Performance targets for next year (2017)

- Remove and dispose sludge generated by AMD treatment process in 2016.
- Treat stored AMD to create storage capacity for subsequent winter and spring months.
- Conduct site maintenance – scope to be determined.
- Report to EPA on year's activities – scheduled for completion February 2017.
- Prepare Work Plan for 2017 field season – scheduled for completion March 2017.
- Prepare road use plan for US Forest Service – scheduled for completion April 2017.
- Review and comment on RI/FS work plans and reports prepared by AR – ongoing.
- Coordinate with AR on site activities – ongoing.
- Oversee construction of AMD conveyance systems and Interim Combined Treatment demonstration by AR – summer 2017.