
To: Ms. Mary Beth Marks – On Scene Coordinator/COR, Custer Gallatin National Forest

From: Shane Matolyak – Environmental Scientist/Project Manager, Tetra Tech

Date: March 10, 2016

Subject: 2015/2016 Annual Activities Report

Introduction

The New World Mining District Response and Restoration Project entered into a long-term (20-year) operations and maintenance phase in 2012. Activities that will occur during this phase of the project are described in detail in the Long-Term Operations and Maintenance Plan (Tetra Tech, 2012) and are summarized below;

- Annual high flow (June) surface water monitoring,
- Annual low flow (September) surface water monitoring,
- Annual groundwater monitoring (July),
- Aquatics / biological monitoring (2013, 2014, and 2015),
- Area-wide reclamation / revegetation monitoring (5-year intervals beginning in 2016),
- Maintenance and erosion control (as needed),
- Preparation of an annual water resources monitoring report, and
- Preparation of an annual activities report.

Operations and maintenance activities for the 2015/2016 project year are complete. This Annual Activities Report summarizes project activities completed during the year and activities that will occur during the 2016/2017 project year.

Water Resources Monitoring

Surface water and groundwater monitoring activities were completed at the same locations and schedule described in the Long-Term Operations and Maintenance Plan. Water resource monitoring will continue in 2016. Total recoverable and dissolved arsenic were added to the list of analyses for 2014 surface water samples in order to evaluate whether changing redox and pH conditions mobilize arsenic in area streams based on discussion with the Board of Environmental Review. Arsenic analysis may continue in 2016.

Aquatics / Biological Monitoring

The third and final of three annual aquatic macroinvertebrate and periphyton monitoring events was completed. Results of this monitoring events were provided in a summary memo prepared by Confluence Consulting (2016) and attached to this memo (Attachment 1).

No additional aquatic macroinvertebrate and periphyton monitoring are planned.

Reclamation / Revegetation Monitoring

Formal monitoring of revegetated areas is scheduled to occur until 2016. No areas of erosion or failed plant establishment on reclaimed / revegetated areas were observed during site activities in 2015.

Maintenance and Erosion Control

No erosion or major maintenance issues were observed in 2015. Minor maintenance was performed and consisted of replacing wooden poles marking some surface water monitoring locations and groundwater wells, replacing damaged locks on a small number of monitoring well protectors, and cleaning and lubricating the sealing mechanism on the hydraulic packer installed in monitoring well FCGW-100. Erosion issues and other maintenance concerns will be reported to USFS if they are observed during future monitoring events.

Water Resources Monitoring Report

The final water resources monitoring report was submitted to USFS in March 2016 (Tetra Tech, 2016). Data presented in the report show that 2015 monitoring results are similar to previous post-response action results and that water quality improvements have been maintained post-response. 2015 marked the first year that no water quality exceedances were measured at SBC-2, downstream of the McLaren Tailings reclamation site. These data are discussed in greater detail in the annual water resources monitoring report.

Repository Sump Treatment Alternatives

Previously, Tetra Tech prepared preliminary cost estimates for construction of different passive treatment alternatives that could eliminate the need to pump and transport the fluid. Montana DEQ completed a non-degradation analysis to verify whether resulting changes to receiving groundwater and surface water would be considered “non-significant” under the MPDES system. DEQ determined that some constituents would not meet the criteria for non-significant changes and would require a permit to degrade if the New World Project were not being conducted under CERCLA. Tetra Tech and USFS continue to work with DEQ to ensure that the substantive requirements of a MPDES permit would be fulfilled if a passive treatment system is constructed.

References

Confluence Consulting. 2016. New World Mine: 2015 Macroinvertebrate and Periphyton Sampling. Data Summary Memo. February.

Tetra Tech. 2012. Long-Term Operations and Maintenance Plan. New World Mining District Response and Restoration Project. June.

Tetra Tech. 2016. 2015 Surface Water and Groundwater Monitoring Report. New World Mining District Response and Restoration Project. March.

Attachment 1

2015 Aquatic Macroinvertebrate and Periphyton Monitoring Report (Report and Electronic Data Files Provided on CD)