

Fiscal Year 2017 Unfunded New Construction Project



Brewer Gold Mine Superfund Site Jefferson, South Carolina

Site Description

The [Brewer Gold Mine Superfund site](#) is located approximately one mile west of Jefferson, South Carolina. The contamination associated with the site originated from mining operations beginning in 1882 through 1995.

When the company abandoned the site in 1999, EPA took over water treatment to contain acid mine drainage that posed harm Little Fork Creek and the Lynches River. EPA placed the site on the National Priorities List (NPL) in 2005.

The site, which is in a rural area, includes acid-mine drainage in the former Brewer Pit, the waste rock dump area, and contaminated groundwater.

Site Status and Cleanup Actions to Date

- Under its Superfund removal authority, EPA took over treatment of the acid mine drainage when the previous owner abandoned the site in 1999.
- Once the site was listed on the NPL in 2005, EPA transitioned this activity to its remedial authority. Acid mine drainage treatment through the existing treatment plant continues to this day.
- In 2005, EPA issued an interim cleanup plan for the site that included:
 - Collecting contaminated seepage from several springs downgradient of the backfilled pits;
 - Pumping contaminated water out of the on-site pit and the sediment pond;
 - Storing contaminated water in a lined storage pond; and
 - Monitoring discharges into and water quality of Little Fork Creek.
- EPA signed a record of decision on Sept. 30, 2014, for the permanent remedy for operable unit 1, which covers surface water protection by capturing and treating mine-impacted groundwater. The main components of the selected remedy include:
 - Revegetating the former waste rock hill slope to minimize degradation of precipitation runoff from contact with acid-producing material;
 - Installing a new extraction well within the former Brewer pit;
 - Collecting impacted water from the B-6 pit;
 - Capturing the upper and lower seeps;
 - Constructing a new lime treatment plant with an annual capacity of 56 million gallons;
 - Constructing a new passive zero valent iron (ZVI) treatment system and aerobic wetland to polish the lime treatment effluent and reduce selenium concentrations in treated water prior to discharge.
- EPA completed the remedial design report in October 2016.

Unfunded Action

The FY 2017 unfunded remedial action for this site primarily consists of revegetating the waste rock slope, installing a new extraction well in the backfilled Brewer Pit, and constructing a new wastewater treatment plant to treat water contaminated by acid mine drainage.

Funding Status

To date, the EPA has spent approximately \$15 million treating wastewater at the site.