

Former Asarco Smelter, East Helena, Montana Model for Environmental Protection and Economic Development September 27, 2021

The Montana Environmental Trust Group, LLC (METG), Trustee of the Montana Environmental Custodial Trust, was established as part of the ASARCO bankruptcy settlement and is responsible for remediating and facilitating safe reuse of the former ASARCO Smelter and surrounding East Helena lands under the oversight of EPA and for the benefit of the United States and the State of Montana. For more information about the East Helena Project, contact Cindy Brooks, Managing Principal of METG at 617-448-9762 or cb@g-etg.com, or visit the METG website at www.mtenvironmentaltrust.org.



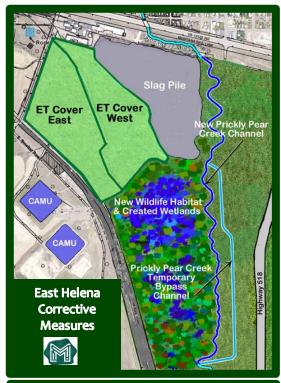
The Environmental Challenge

More than a century of lead smelting left extensive contamination in soil and groundwater at the former Asarco smelter in East Helena. Soils contaminated with lead, arsenic and other metals posed a threat to people, migratory birds and other receptors that could come into contact with the soil. Precipitation percolated through contaminated soils leaching contaminants into groundwater or contaminated stormwater runoff. Surface waters from Prickly Pear Creek (PPC) and two manmade lakes raised groundwater elevations under the former plant, driving groundwater through impacted soils and loading contaminants to groundwater that resulted in plumes of arsenic and selenium migrating off-site.

The Cleanup Solution

In the last ten years, contamination from more than one hundred years of lead smelting has been addressed. Evapotranspirative (ET) cover—the largest contiguous ET cover in the country—constructed over the entire former smelter area eliminates risk of exposure to contaminated soils by human and ecological receptors and prevents rainwater from leaching contaminants to groundwater. The natural, self-sustaining ET cover also stores and sheds clean stormwater. By moving PPC away from the smelter and draining the manmade lakes, groundwater elevations under the plant have been lowered, dramatically reducing the volume of groundwater flowing through soils that were loading contaminants contaminated groundwater. Groundwater contamination has been further reduced by removing select areas of highly contaminated soils that were a source of contamination to groundwater.

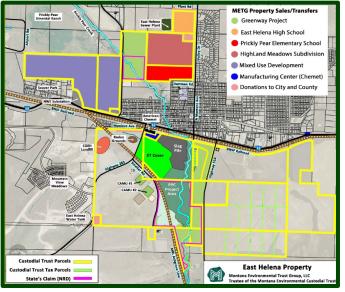
METG is currently completing remediation and restoration of an 80-acre parcel (east of Wylie Drive and north of Highway 12) to support migratory bird habitat and the future Greenway Trail. The last remaining cleanup measures include removing the PPC Temporary Bypass Channel and grading and capping the 16-million-ton Slag Pile after METG completes reprocessing and removal of the upper 2 million tons of unfumed slag.

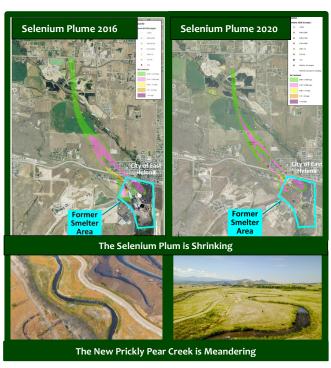




Cleanup Results

Contaminant concentrations in on- and off-site groundwater have measurably dropped. Dilapidated buildings and other remnants of the former smelter have been demolished and replaced with a graded, vegetated, self-sustaining ET Cover. Demolition debris, contaminated source area soils and other excavated materials have been safely stored under the ET Cover or in the CAMUs. Stormwater is now stored in or shed clean from the ET cover. PPC now flows in a natural, meandering 1-1/4-mile long channel. One hundred acres of new, previously non-existent floodplain now provide riparian habitat and flood storage capacity to mitigate flooding in the downstream flood-prone areas of East Helena. New, enhanced wetlands have replaced the manmade lakes. Smelter Dam, once used to store water in the manmade lakes, has been removed and, with it, the last impediment to fish passage from the PPC headwaters to Lake Helena.





Redevelopment Results

In partnership with the City of East Helena, East Helena Public Schools, Prickly Pear Land Trust (PPLT), and several private companies, METG has sold or donated 777 acres of former ASARCO lands, which have been transformed into a new elementary school, a new high school, a 300+ single family residential development and expanded manufacturing facilities. The centerpiece of METG's redevelopment is the 322-acre Greenway trail, wildlife habitat and recreational area located along the reconstructed, remediated and restored PPC. The Greenway Trail will connect Montana City to Lake Helena and provide public access to PPC. The Custodial Trust's land development results to date are summarized in Table 1.

Table 1 – Montana Environmental Trust Group East Helena Land Donations and Sales		
Purchaser/Grantee	Land Use	Acres
American Chemet	Sale for Expansion of Manufacturing Plant	4
City of East Helena and County	Donation for Search & Rescue, Water Tank, Roads Easements	12
East Helena Public Schools	Donation for Prickly Pear Elementary School	50
Town Pump	Sale for Mixed Use Development	254
East Helena Public Schools	Sale for East Helena High School	35
Oakland/Highland Meadows	Sale for 319 Home Highland Meadows Residential Subdivision	100
Prickly Pear Land Trust	Donation for Greenway Trail and Conservation Land	322
Total METG Land Sales or Transfers To Date:		7 77



Award Winning Results

METG received the
National Award for
Excellence in the
Environmental Category
from American Council of
Engineers, the 2019 EPA
Region 8 Award for
Excellence in Superfund
Redevelopment, the Merit
Award for Environmental
Projects from the
International Federation of
Consulting Engineers

