1195760 - R8 SDMS

Silver Bow Creek / Butte Area

Butte Reclamation Evaluation System—BRES

Bulletin #6 **August 25, 2010**

The Butte Reclamation Evaluation System (BRES) provides a practical way to evaluate the stability, integrity, and continued protectiveness of completed reclamation projects. A BRES inspection identifies problems that need to be corrected, ensuring that caps on sources of contamination remain protective over time.

The BRES relies on routine focused inspections using a site-specific checklist to assess the:

- Condition and diversity of vegetative cover;
- Presence of large or small-scale erosion;
- Condition of site edges;
- Presence of exposed waste material;
- Potential for mass instability; and
- Presence of barren areas or gullies created by water runoff.

Contaminant Source Areas in Butte

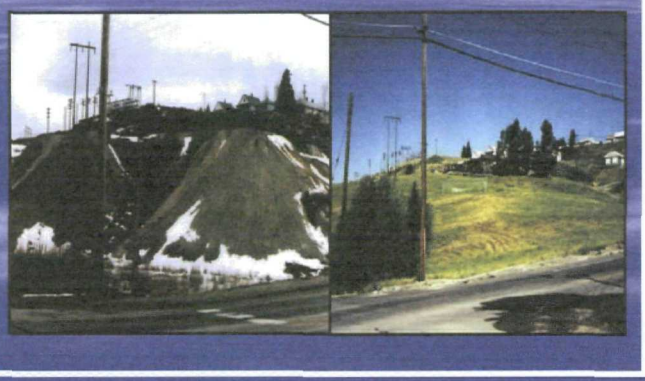
Contaminated soil mixed with waste in the Butte Priority Soils Operable Unit (BPSOU) includes waste rock piles, milling wastes and smelter wastes. These areas are known as source areas. Reclamation and capping of source areas has been, and will continue to be, a vital component of Superfund response actions implemented at BPSOU source areas. Response actions may also involve a variety of other engineering techniques including storm water controls, lined caps over mine waste, and waste removals.

The BRES (see the box to the left) is designed to guide the collection of precise (repeatable) information by persons with experience and knowledge in ecological and soil erosion assessment. The system enables assessors to collect reliable information that describes post-reclamation conditions with a minimal amount of field equipment. The BRES includes a field training program and a field manual with example photographs to guide the field crew. The system also incorporates historic site-specific data into decision-making.

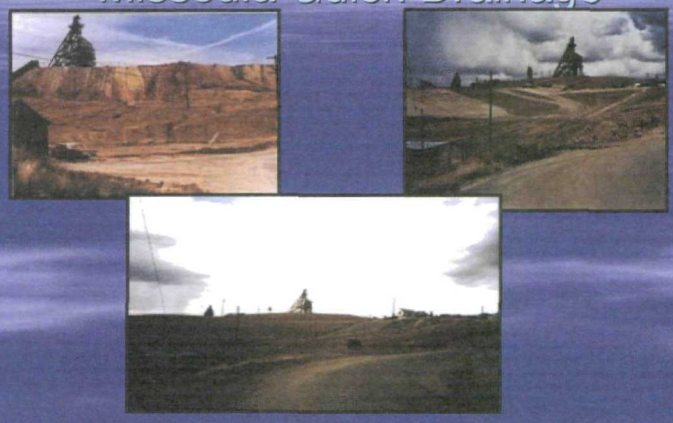
Reclaimed areas, including cover-soil caps, must meet clear performance standards as set forth in the Butte Reclamation Evaluation System (BRES). The BRES provides a site-specific method to evaluate the reclamation against the performance standards. Periodic evaluation of reclaimed sites against the BRES performance standards will direct the appropriate level of corrective action work that may be needed at each site.

BRES-directed corrective action work may simply be typical Operation and Maintenance activities, such as weed spraying, mending fences or debris removal. However, corrective action may also involve addressing repair of site storm water gullies or vegetation improvements.

Buffalo Dump
Before and After Reclamation



Lexington Dump and Missoula Gulch Drainage



Missoula Gulch

Do you Need More Information?

- **U.S. Environmental Protection Agency:** Sara Sparks, Remedial Project Manager, 782-7415 or Wendy Thomi, Community Involvement Coordinator, 406-457-5037
- **Montana Department of Environmental Quality:** Joe Griffin, Project Officer, 560-6060
- **Butte Silver Bow County Planning Department:** Tom Malloy, 497-6257
- **Butte Silver Bow County Health Department:** Eric Hassler, 497-5042
- **Citizens Technical Environmental Committee:** Janice Hogan, TAG Administrator, 723-6247
- **Atlantic Richfield Company:** Marci Sheehan, 723-1831, Trey Harbert, 723-1816

Documents Can Be Found At These Butte Locations

Citizens Technical Environmental Committee
27 West Park Street
Monday - Thursday from 10 am to 3 pm

www.buttectec.org

U.S. EPA Butte Office
155 W. Granite (basement of the Courthouse)
Monday - Friday 9 am to 4 pm

www.epa.gov/region8/superfund/mt/sbcbutte