ADDENDUM TO THE EXPANDED ENGINEERING EVALUATION/COST ANALYSIS
FOR THE
GREAT DIVIDE SAND TAILINGS SITE
Lewis and Clark County, Montana

The Draft Final Expanded Engineering Evaluation/Cost Analysis (EEE/CA) for the Great Divide Sand Tailings site (Great Divide) was completed in November 2007 for the U.S. Department of Interior Bureau of Land Management (BLM). At the time the EEE/CA was completed a suitable repository location had not been determined. However, as stated in the EEE/CA, the preferred alternative (Alternative 6) would place mine waste materials from Great Divide site into a jointly constructed repository with other mining waste materials from the Montana Department of Environmental Quality/Mine Waste Cleanup Bureau (DEQ) Bald Butte Millsite and Devon/Sterling and Albion Mine Sites (Bald Butte) reclamation project.

The proposed repository is located approximately two miles south of the Great Divide project site in Township 11 North, Range 6 West, Southwest ¼ of Section 3, on the south side of the Continental Divide on land administered by the BLM. The repository would occupy approximately 8.3 acres and contain approximately 180,300 cubic yards of combined mine waste materials from Bald Butte and Great Divide. In the fall of 2008 Olympus Technical Services, Inc. (Olympus) completed a repository investigation at 3 potential locations on BLM land. The results of this investigation are reported in the *Addendum to Expanded Engineering Evaluation/Cost Analysis for the Bald Butte Millsite and Devon/Sterling and Albion Mine Sites Lewis and Clark County, Montana* Olympus, December 2008.

In order to meet the human health and ecological cleanup objectives of the Bald Butte and Great Divide reclamation projects, the repository would be designed and constructed with a geosynthetic clay bottom liner (without a leachate collection and removal system) and a multi-layered cap. The multi-layered cap would consist of a geotextile filter fabric, geosynthetic clay liner, and Geonet drainage layer followed by the placement of two-feet of amended cover soil and seeded.

Based on the conclusions of the detailed analysis and comparative analysis of alternatives in the Great Divide Sand Tailings EEECA, *Alternative 6: Consolidation in the Bald Butte DEQ Repository* is projected to reduce **ecological risk by 88% at the Great Divide site.** This alternative would comply with all action-specific and location-specific Applicable or Relevant and Appropriate Requirement (ARARs). Alternative 6 is expected to provide sufficient risk reduction over the long term to meet the requirements of the risk assessment. Placement of the tailings materials in the DEQ repository would reduce the erosion and disturbance problems currently found at the site while allowing for long-term monitoring and protection programs at a centrally located engineered structure to ensure continued effectiveness.