# GOLDEN SUNLIGHT MINE, INC. PARTIAL PIT BACKFILL SUPPLEMENTAL EIS AND 5B OPTIMIZATION

## PURPOSE OF THE BRIEFING DOCUMENT:

Golden Sunlight Mine, Inc. (GSM) is a conventional truck and shovel mine which processes gold-bearing ore using facilities located on public and private lands near Whitehall, Mont. GSM has conducted mining and mineral processing activities under Operating Permit No. 00065 since 1975.

The BLM and Montana Department of Environmental Quality (DEQ) issued a decision in 1998 for expansion of the Golden Sunlight Mine. The associated environmental impact statement (EIS) analyzed a partial pit backfill alternative which was dismissed after DEQ concluded, in part, that it would not be economically feasible. Environmental groups filed suit against DEQ claiming that the partial pit backfill alternative was required by the Montana Metal Mine Reclamation Act.

A 2002 Montana State Court decision required that GSM submit a partial pit backfill plan. GSM submitted this plan to the agencies December 1, 2003. The BLM and DEQ completed a supplemental EIS which fully evaluated the impacts of the proposed partial pit backfill plan in 2007. All backfill alternatives would have resulted in ground and surface water quality degradation/violations. The selected alternative did not backfill the pit but was the most protective of ground and surface waters. The plaintiffs continue to pursue the case in spite of several adverse rulings.

In late 2007 GSM applied for a minor revision/plan amendment to deepen the pit to access deeper ore called the 5B Optimization. Although a small acreage of proposed disturbance is outside the existing disturbance area, this work is within the scope of previous NEPA/MEPA documents and generally improves environmental performance of the highwalls and waste rock dumps. This proposal would extend the mine life for an additional five to seven years to 2015.

#### **ISSUES:**

GSM mines about ten million tons of rock per year, of which 2.5 million tons are ore; the remainder is waste rock. About 300 million tons of wastes have been placed in waste rock dumps. The ore is milled and processed using a vat cyanide process, and tailings are pumped to lined impoundment II. Impoundment I has been reclaimed.

Because the rock at GSM has high potential for "acid rock drainage," effective reclamation is crucial. Extensive research and monitoring of several reclaimed waste dumps and highwalls has helped the GSM and agencies determine which reclamation practices are most effective. Surface water management is an important part of a successful reclamation plan. Managing mine dumps and surface water practices together is aimed at protecting water quality below the mine site. Long-term water treatment is an integral part of the mine plan. GSM has posted a total bond of nearly \$79 million to cover reclamation costs.

## MAIN DECISION OR MESSAGE:

The 5 B Optimization will extend the mine life for five to seven years and allow the mine to improve reclamation of several waste rock dumps and the west pit wall. The stripping operations for 5 B Optimization started in 2008 and mean the mill will not be processing ore for about two years.

## **BUREAU PERSPECTIVE:**

Public interest in the mine is high. Golden Sunlight employs more than 150 people and has been an important source of revenue for Jefferson County.

### **CONTACTS**:

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