

**EARTHWORKS FACTSHEET** 

A number of Canadian mining companies with U.S. subsidiaries have filed for bankruptcy in recent years. They've left substantial environmental impacts at their U.S. based mining operations, and significant clean-up costs to U.S. taxpayers. The following examples illustrate the long-term environmental and financial liabilities associated with such bankruptcies in five western states.

## PEGASUS GOLD CORP.

#### MINE NAME: Beal Mountain Mine U.S. SUBSIDIARY: Beal Mountain Mining Inc. LOCATION & TYPE: Montana, open pit gold mine FINANCIAL LIABILITY: \$5 million spent; estimated \$13 million needed.

The Beal Mountain Mine operated from 1989 until 1998, when the parent company Pegasus Gold filed for bankruptcy. When the mine was permitted, the mine's operating permit stated that the operation of the mine would have no impacts to water quality, because "there will be no discharge of mine or process water to surface waters."<sup>1</sup> The predictions were wrong. It has polluted neighboring streams with cyanide, selenium and copper.<sup>2</sup> Scientists have also determined that trout in water downstream of the mine are contaminated with harmful amounts of selenium caused by mining activities.<sup>3</sup> The State has determined that contaminated runoff from the mine will likely be treated in perpetuity. Warren McCullough, who is responsible for enforcing state mine permit laws for Montana, told the *Montana Standard* in July 2002 that the aftermath of the closed Beal Mountain Mine is "*not going to be*"

something that we're ever going to be able to walk away from." Over \$5 million in public funds have already been spent to construct a water treatment system.<sup>4</sup> In 2003 the Forest Service pulled the mine into a federal "time critical" cleanup program because conditions at the mine present a "substantial endangerment to human health and the environment." The Forest Service estimates that an another \$13 million is needed for additional reclamation and long-term water treatment.<sup>5</sup>



Water treatment facility at Beal Mountain Mine.

# MINE NAME: Basin Creek Mine U.S. SUBSIDIARY: Pegasus Gold Montana Mining Inc. LOCATION & TYPE: Montana, open pit gold mine FINANCIAL LIABILITY: \$7 million spent; \$1 million more needed.

The Basin Creek Mine, located near Helena, Montana, operated from 1989 to 1991. After the Pegasus bankruptcy in 1998, responsibility for the mine fell to the State of Montana and the U.S. Forest Service. After spending the \$6.5 million reclamation bond, reclamation work was still needed and water pollution problems persisted. The Forest Service has spent \$2 million, and the State of Montana has spent over \$5 million in public funds, with another \$1 million to be spent in 2007. <sup>6&7</sup>

#### MINE NAME: Zortman/Landusky Mine U.S. SUBSIDIARY: Zortman Mining Inc. LOCATION & TYPE: Montana, open pit gold mine FINANCIAL LIABILITY: At least \$30 million will be spent.



Acid mine drainage. Photo by the Indian Law Resource Center

Federal and State agencies predicted no adverse impacts to water quality at the Zortman-Landusky mine, located adjacent to the Fort Belknap Indian Reservation in north-central Montana. Yet, the mine has contaminated ground and surface water with metals and acids. In 1993, the State of Montana and the EPA filed suit against the company charging that its waste discharges "present human health risks" and that "the acidity of the discharges would kill fish and aquatic life."<sup>8</sup> In 1998, the company abandoned the site and filed for bankruptcy, leaving the State with significant reclamation and water treatment costs.<sup>9</sup> In 2003, the Assiniboine and Gros Ventre Tribes at the Fort Belknap Reservation adjacent to the mine, filed suit for ongoing water quality violations. State and federal authorities have determined that acid runoff from the mine will have to be collected and treated in perpetuity. Since 1999, over a billion gallons of acid runoff have been intercepted.<sup>10</sup> Over \$30 million in public funds are to be spent to address long-term water pollution problems at the mine.<sup>11&12</sup>

#### **DAKOTA MINING**

## MINE NAME: Brohm Mine (or Gilt Edge Mine) U.S. SUBSIDIARY: Brohm Mining Inc. LOCATION & TYPE: South Dakota, open pit gold mine FINANCIAL LIABILITY: \$30 million spent; \$2 million needed each year for water treatment; long-term reclamation costs still to be determined.



Contaminated water at Brohm Mine. Photo by U.S. Environmental Protection Agency

The Brohm mine, which operated from 1986-1998, is located near Deadwood, South Dakota at the headwaters of municipal water supplies for the northern Black Hills. When the mine was permitted, acid mine drainage was not considered an issue.<sup>13</sup> In late 1992, however, the mine began draining acid. Acid drainage left area streams unable to support a viable fish population. In May, 1998 the Brohm Mining Company threatened to abruptly abandon costly water treatment at the Gilt Edge Mine after the parent company, Dakota Mining, declared bankruptcy. Within 72 hours, pollution would have overtopped holding ponds and entered local streams and drinking water. South Dakota Governor Bill Janklow went to

PAGE 2 OF 5

court, seeking to force the company to continue to treat the water to acceptable levels.<sup>14</sup> After touring the mine, Senator Tim Johnson stated:

"It is very troubling to me that we have foreign corporations come in, sometime with American subsidiaries that have no assets, then wind up going bankrupt, having left a mess behind that is almost irremedial (without a fix)." "The area will never, ever be quite the same as it was before." - Black Hills Pioneer, May 22, 2000

In February 2000, the Governor of South Dakota requested that the site be designated a Superfund site to provide emergency response, as well as long-term remedial cleanup.<sup>15</sup> In a 2002 interview with the Federal Gazette, South Dakota state engineer Mike Cepak stated, "With this type of acid mine drainage, the main problem is it's a reaction that could last for centuries, so you have to plan for forever, almost."

Well over \$30 million in public funds has been spent on the mine thus far, with approximately \$2 million needed each year to treat 75 million gallons of contaminated water.<sup>16</sup> Ultimate cleanup costs for the site are unknown. A final cleanup plan is expected in 2008.

#### MINE NAME: Stibnite Mine U.S. SUBSIDIARY: Stibnite Mine Inc. (SMI) LOCATION & TYPE: Idaho, open pit gold mine FINANCIAL LIABILITY: \$7 million spent

The Stibnite Mine is located in the Payette National Forest on Idaho's South Fork of the Salmon River. Although there were a number of earlier operators, Dakota Mining Co., through its subsidiary Stibnite Mine Inc. (SMI), was the last company to mine the site, operating from 1991 to 1997.<sup>17</sup> In 1993, SMI, under a consent order from the EPA, submitted a site investigation to the State of Idaho which documented the fact that the process ponds and heap leach pads were leaking cyanide and chlorine into soils and groundwater.<sup>18</sup>

The Forest Service also conducted sampling at the site. Surface water and sediment samples in Meadow Creek and the East Fork of the South Fork of Salmon River documented the release of metals, including antimony, arsenic, cadmium, lead, and mercury.<sup>19</sup> The EFSF of the Salmon River is habitat for the Snake River spring/summer Chinook salmon, a federally designated threatened species. The U.S. Fish and Wildlife found elevated levels of arsenic in steelhead trout downstream of the mining area.<sup>20</sup> In 1995, the company entered into an Administrative Order on Consent (AOC) with the EPA to stabilize the tailings area and improve water quality in Meadow Creek. Yet, SMI ceased operations in 1997, and filed for bankruptcy in 1999, failing to complete the AOC requirements.<sup>21</sup>

SMI, along with two previous mine operators (Hecla, and Mobil) performed a site characterization of the mine.<sup>22</sup> The results indicated the presence of elevated concentrations of antimony, arsenic, copper, cyanide, lead, and mercury in surface waters, ground water, tailings, waste rock, stream sediments, and fish. The State of Idaho petitioned the EPA to designate the mine a Superfund site in September 2001, but it has not been approved. According to the Forest Service, approximately \$7 million has been spent in the Stibnite area by all government agencies since 1997.<sup>23</sup> Money for the project has come from public funds earmarked for abandoned mines that pose a threat to human health and the environment.

#### MINE NAME: Illinois Creek Mine U.S. SUBSIDIARY: USMX LOCATION & TYPE: Alaska, open pit gold mine FINANCIAL LIABILITY: None

The Illinois Creek Mine is an open pit cyanide leach mine located about 50 miles southwest of Galena, Alaska. The mine was originally leased and operated by USMX a wholly owned subsidiary of Dakota Mining Corp. The mine began gold production early in 1997, but USMX declared bankruptcy in May 1998.<sup>24</sup> In 1999, the State called in the reclamation bond, and formally took control of the leases and the mine.

"I believe I'll live two years less because of this mine." Bob Loeffler, DNR Director, in reference to Illinois Creek financial problems. Nov. 4, 2004 Anchorage Daily News.

The bond of \$1,618,209 was insufficient to reclaim the mine. The bankruptcy reorganization failed and attempts by a bank to take over and operate Illinois Creek also dead-ended.<sup>25</sup> Finally, the State initiated a plan of mining the deposit to produce additional revenue to fully fund reclamation and closure.

# GALACTIC RESOURCES LTD.

#### MINE NAME: Summitville Mine U.S. SUBSIDIARY: Summitville Consolidated Mining Company LOCATION & TYPE: Colorado, open pit gold mine FINANCIAL LIABILITY: \$210 million spent. Additional funds needed.



Sign along the Alamosa River. Photo by the Environmental Protection Agency

The Summitville mine, which is located at the headwaters of the Alamosa River, was permitted as a "zero-discharge" mine.<sup>26</sup> The company and governmental agencies did not predict or authorize discharges into rivers or streams. Due to poor mine design and other problems, the heap leach system overflowed in 1992, destroying all biological life in a 17-mile stretch of the Alamosa River.<sup>27</sup> The company filed for bankruptcy, leaving cleanup costs to the public. According to the EPA, about \$210 million in public funds have been spent so far.<sup>28</sup> Almost 300 million gallons of contaminated water were captured for treatment in 2005.<sup>29</sup> However, according to a 2005 EPA Summitville update, the mine continues to discharge contaminated water due to limited storage and treatment capacity. An estimated 65 million gallons of untreated water were released into the Wrightman Fork in 2005. And, flows of contaminated water to the Alamosa River cause water standards to continue to be exceeded on a regular basis.<sup>30</sup> A final remediation plan was completed in 2001, but due to inadequate funds, it has not yet been fully implemented.

# **References:**

<sup>1</sup>Montana Dept. of State Lands, MMRA Permit, Beal Mountain mine.1988.

<sup>2</sup>Beaverhead-Deerlodge National Forest, <u>Action Memorandum for Beal Mountain Mine Time Critical Removal</u>. July 2003.

<sup>3</sup>La Marr, Tim, Reviewed by Dennis Lemly. <u>Aquatic Hazard Assessment for Selenium in the German Gulch</u> <u>Subwatershed: Based on 2001 and 2002 Data</u>. January 2003.

<sup>4</sup>Mitchell, Larry, "Metal Mine Bonding in Montana" A report of the Montana Environmental Quality Council, May 2004.

<sup>5</sup>Backus, Perry. "Mine Still Causing Trouble" Missoulian, January 2, 2006.

<sup>6</sup>Mitchell, Larry. "Metal Mine Bonding in Montana" A report of the Montana Environmental Quality Council, May 2004.

<sup>7</sup>Vic Anderson, Montana Dept. of Env. Quality, personal communication Aug. 25, 2006.

<sup>8</sup>Final Supplemental EIS for the Zortman and Landusky mines, Phillips County, Montana, MDEQ and BLM, December 2001.

<sup>9</sup>U.S. BLM, <u>Action Memorandum for Zortman and Landusky Mines Time Critical Removal</u>. June 2004. <sup>10</sup>Ibid.

<sup>11</sup>Mitchell, Larry, "Metal Mine Bonding in Montana" A report of the Montana Environmental Quality Council, May 2004.

<sup>12</sup>House Bill 379: <u>http://data.opi.state.mt.us/bills/2005/billhtml/HB0379.htm</u>

<sup>13</sup>http://www.state.sd.us/denr/des/ground/superfund/SUPERFUNDPAGE.htm#Gilt\_Edge\_Mine

<sup>14</sup>Ibid.

<sup>15</sup>Ibid.

<sup>16</sup>Personal Communication, Ken Wangenrud, EPA, August 28, 2006.

<sup>17</sup>U.S. EPA. Stibnite Yellowpine Mining Area, CERCLIS Documents, August 2001

http://www.epa.gov/superfund/sites/docrec/pdoc1659.pdf#search=%22URS%20Corporation%2C%20Stibnite%2 0Mine%22

<sup>18</sup>U.S. Agency of Toxic Substances and Disease Registry (ATSDR), Public Health Assessment,

Stibnite/YellowPine Mine. http://www.atsdr.cdc.gov/hac/PHA/stibnite/sti p1.html

<sup>19</sup>Ibid.

<sup>20</sup>Ibid.

<sup>21</sup>Ibid.

<sup>22</sup>U.S. Agency of Toxic Substances and Disease Registry (ATSDR), Public Health Assessment,

Stibnite/YellowPine Mine. http://www.atsdr.cdc.gov/hac/PHA/stibnite/sti\_p1.html

<sup>23</sup>USDA Payette National Forest, Press Release, October 11, 2005.

<sup>24</sup>Form 8-K, Dakota Mining Corporation, SEC filing, May 1998.

<sup>25</sup>Dobbyn, Paula, "Gold mine teaches lessons on cleanup," Anchorage Daily News, November 4, 2005.

<sup>26</sup>Mineral Policy Center, "Golden Dreams, Poisoned Streams"

<sup>27</sup>U.S. EPA, Site Status and Update: <u>http://www.epa.gov/region8/superfund/co/summitville/</u>

<sup>28</sup>U.S. EPA, Summitville Fact Sheet

(<u>http://www.epa.gov/region8/superfund/co/summitville/SummitvilleFactSheetUpdateDec05.pdf</u>)<sup>29</sup>Ibid.

<sup>30</sup>Ibid.