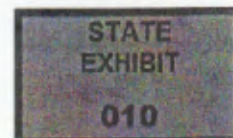


## WHARF RESOURCES VIOLATION HISTORY

NOTE: The following violation history is a summary of enforcement actions taken by the Department of Environment and Natural Resources (DENR) against Wharf Resources (Mine Permit Nos. 356, 434, 435, 450, and 464). This includes enforcement actions taken against Golden Reward Mining Company (Mine Permit No. 450).

1. Notice of Violation issued May 24, 1984.  
Reason: Wharf failed to install a Hypalon liner in the Overflow Pond prior to use, failed to allow a minimum of 2 feet of freeboard in ponds, and had sandbagged the overflow structures of the ponds thus preventing the release of excess water. Wharf also failed to report possible release of cyanide into the environment within 24 hours as required.  
Order: Wharf was to allow no additional surface areas drain to the ponds, stop flow of process solution to the Overflow and Contingency Ponds until construction was complete, repair any damage to lining systems, dry soil liner of Overflow Pond, maintain minimum of 2 foot of freeboard in the ponds, and haul excess liquid to a disposal area (Grizzly Gulch tailings impoundment).
2. Cease and Desist Order issued June 12, 1984.  
Reason: Failed to comply with May 24, 1984 Notice of Violation and Order.  
Order: Wharf to stop adding cyanide to process solutions, dewater the Overflow Pond (haul water to Homestake's Grizzly Gulch impoundment), remove contaminated soil liner in the Overflow Pond, and dewater the Barren Pond and repair tears in liner.  
Settlement: Wharf paid \$9,200 and performed Nevada Gulch Reclamation Project (reclaimed several acres of relic mine tailings from the Mogul Mine).
3. Notice of Violation and Order issued October 7, 1988.  
Reason: Golden Reward began construction of their process plant lining system prior to department approval of plans and specifications.  
Order: Golden Reward was to cease construction until plans and specifications are approved, and repair or reconstruct any areas that were not up to the approved specifications.  
Settlement: Paid \$1,000.
4. Amended Notice of Violation and Order issued October 17, 1995.  
Reason: From August 21 to 28, 1995, discharged inadequately treated cyanide solution into Ross Valley and subsequently into Annie Creek. Approximately 300 fish were killed as result of the discharge. The discharge caused several violations of mining and water pollution control laws. Two Notices of Violation were issued, one under mining, and one under the water pollution control laws.





Settlement: Settlement Agreement was signed October 16, 1995. Wharf agreed to pay the Department \$150,000. In an Order attached to the Settlement Agreement, Wharf agreed to operate in compliance with all permits, line the Contingency and Ross Valley Ponds, submit a standard operating procedure regarding its water treatment system, update its Spill Contingency Plan, and to meet additional monitoring and sampling requirements for its wastewater discharge.

5. Notice of Violation and Order issued December 12, 1997.

Reason: Surface water compliance points below Wharf's Reliance waste rock depository in the headwaters of Annie Creek (Compliance Point 001), and below Wharf's spent ore depository in Ross Valley (Compliance Point 002), and the instream sampling point in Annie Creek (Compliance Point 005), has exceeded the daily maximum total cyanide limit of 0.02 mg/L numerous times since March 1, 1994. From June 1995 to December 1997 ground water samples in monitoring well HDH-12 below Wharf's contingency pond in McKinley Gulch indicated nitrate concentration over ground water standard directly attributable to the discharge of process solution. The surface water discharges containing nitrates, though not out compliance with surface water quality standards, entered ground water in the alluvium along Annie Creek. Monitoring well GWAC-6 is in the alluvium of Annie Creek approximately 450 feet upstream of its confluence with Spearfish Creek exceeded the 10 ppm ground water for nitrate during 1996 and 1997. Also on a few occasions, Wharf exceeded selenium and copper at Compliance Point 001. These discharges caused numerous violations of mining and water pollution control laws. One Notice of Violation was issued, covering mining laws, water pollution control laws, surface water quality standards, and ground water quality standards.

Order: Wharf Resources was to meet an interim permit limit of 0.022 mg/L as weak acid dissociable (WAD) cyanide at Compliance Point 001, Compliance Point 002, and Compliance Point 003B. Wharf was to continue to operate a pumpback system at monitoring well HDH-12 until nitrate concentrations are below 10 ppm. Wharf was to conduct an investigation of the extent of contamination around monitoring well GWAC-6. Wharf to submit a plan for nitrate reduction.

Settlement: Settlement Agreement was signed December 18, 1997. Wharf agreed to pay a \$40,000 penalty to the Department in yearly \$10,000 installments for deposit in the Regulated Substance Response Fund. Wharf agreed to fund supplemental environmental projects totaling \$160,000. These projects must be directed towards improving the water quality of streams or ground water in the northern Black Hills or enhancing the beneficial uses of those waters. This money will be paid to the SD Department of Game, Fish and Parks in yearly \$40,000 installments. Wharf agreed to comply with the Order. The Department agrees to process a modification to Wharf's Surface Water Discharge Permit to reflect the current water quality standard for cyanide





based on the weak acid dissociable method (note: this is no guarantee that the modification will be approved).

6. Notice of Violation and Order issued May 7, 2000.

Reason: Surface water compliance point below Wharf's Reliance waste rock depository in the headwaters of Annie Creek (Compliance Point 001) exceeded daily maximum selenium during a period from August 1998 to July 1999. The 30 day average was exceeded for selenium at 001 for July 1999. Surface water compliance point below Wharf's spent ore depository in Ross Valley (Compliance Point 002) failed a WET test for the January to March 1999 quarter. Surface water compliance point Outfall 006 exceeded the daily maximum ammonia and 30 day average for ammonia during the months of November and December 1999.

Settlement: Settlement Agreement was signed June 8, 2000. Wharf agreed to pay a \$9,120 penalty to the Department.

7. Notice of Violation and Order issued August 7, 2001.

Reason: After a release of process solution from a leak in the Pregnant Pond, the department reviewed of Wharf's Action Leakage Rate (ALR) schedule and Response Action Plan (RAP). For leakage rates about 2000 gallons per acre per day (gpad), Wharf failed to immediately lower the pond level below the leakage point, Wharf also failed to submit repair plans in a timely manner. In addition to the pond leakage response and reporting violations, Wharf violated its Surface Water Discharge Permit for selenium at Compliance Point 001 and 005.

Order: Wharf Resources was to come into full compliance of its mine permit conditions. In addition to data required in Wharf's leak detection collection and recovery reports, Wharf was also required to give detailed updates on liner repairs. Wharf was required to submit an updated ground water monitoring program for the process area that included the drilling of another well. For the selenium violations, Wharf was required to submit a report regarding the source of selenium. Wharf was required to install a back-up system for selenium treatment by September 1, 2001, and install a new selenium treatment system by December 31, 2001.

Settlement: Settlement Agreement was signed August 16, 2001. Wharf agreed to pay a \$31,382 penalty to the Department plus a stipulated penalty of \$2,144 for each new violation of the 30-day average limit selenium and \$500 for each violation of the daily maximum selenium limit. Wharf was required to comply with the Order.

8. Amended Stipulated Order issued August 7, 2001

Reason: Amended the December 12, 1997 Order. The December 12, 1997 Order required Wharf to continue to operate a pumpback system at monitoring well HDH-12 until nitrate concentrations are below 10 ppm. The pumpback of well HDH-12 did not reduce nitrate concentrations as planned.





Amended  
Order:

Wharf Resources was to submit a mitigation plan for the process area ground water by October 31, 2001. Nitrate concentrations in HDH-12 and any other well within or downgradient of the process area were to meet the 10 mg/l nitrate standard by January 1, 2003, or otherwise the Stipulated Amended Order would be vacated.

9. 2001 Amended Stipulated Order issued October 23, 2002

Reason: Amended the August 7, 2001 Order (i.e., pond leak reporting). Wharf was submitting weekly reports regarding pond leakage; however, Wharf was not making timely repairs to the leaking ponds. This was of concern to the department, as Wharf did not perform repairs in the warm weather months of July, August or September, and winter was approaching.

Amended  
Order:

Wharf Resources was to complete liner repairs to the Contingency and Pregnant Ponds by November 30, 2002. Wharf was to come into full compliance with all of the conditions of the December 3, 1990 and September 25, 1997 technical revisions, and was to comply with all the requirements of the August 7, 2001 NOV and Order.

10. Notice of Violation and Amended Order issued January 8, 2003.

Reason: Wharf violated its Ground Water Discharge limits for nitrate, when the nitrate concentration at a compliance monitoring well downgradient of the spent ore pile exceeded Wharf's ground water discharge permit limit of 10 parts per million.

Wharf also violated its Surface Water Discharge limits for ammonia. Wharf added a process to its treatment system to remove selenium. When that modification occurred, Wharf's consultant recommended using a bacteria food source that contained ammonia. With the addition of the selenium treatment and the ammonia-rich food source, ammonia levels began to increase in the treated water.

In addition, Wharf violated drinking water standards. Wharf had a private well that provided water to the company's restrooms, showers, and other facilities at the mine. Because this water supply system is regulated as a drinking water system, the water system had to meet certain drinking water standards. Routine monitoring showed that the levels of nitrate and bacteria violated those standards.

Amended  
Order:

Wharf was to comply with conditions of its Surface Water Discharge Permit. By February 1, 2003, Wharf was to submit a plan outlining steps to comply with the surface Water Discharge permit's limits for ammonia. By April 1, 2003, Wharf was to ensure current selenium and nitrate treatment is fully operational. By February 1, 2003, Wharf was to submit a plan of steps to comply with its Ground Water Discharge Permit limit for nitrate. By





March 1, 2003, Wharf was to submit a plan for correcting drinking water standards for nitrate.

Settlement: Settlement Agreement was signed May 21, 2003. Wharf agreed to pay a \$162,000 penalty to the Department, in yearly installments of \$60,000, \$50,000 and \$50,000, into the Regulated Substance Response Fund. In addition, for surface water violations Wharf was to pay a stipulated penalty of \$2,144 for each new violation of the 30-day average limit ammonia and \$500 for each violation of the daily maximum ammonia limit, and a stipulated penalty of \$2,144 for failure to comply with each date specified in the Order. In addition, for drinking water violations Wharf was to pay a stipulated penalty of \$500 for each violation of drinking water MCL for total coliform and \$250 for each violation of the nitrate limit of 20 mg/L for its drinking water. Wharf was required to comply with the Order.

11. Notice of Violation and Amended Order issued April 8, 2008.

Reason: Wharf violated its Surface Water Discharge (SWD) Permit with the release of biomass from its water treatment plant during the summer of 2007. The discharge affected fish populations in Annie Creek. The biomass discharge was inspected in November 2007 and evidence of a biomass spill in Ross Valley was also found. Wharf also violated its SWD Permit limits for ammonia two times, limits for weak acid dissociable cyanide six times, limits for five-day biochemical oxygen demand 11 times, the limit for recoverable arsenic one time, the limit for pH one time, the limit for dissolved oxygen two times, and the acute whole effluent toxicity limit was violated one time. In addition, Wharf failed to complete required testing for selenite and selenate in a sample.

Amended Order:

Wharf to hire a professional engineer to evaluate Wharf's wastewater treatment systems. The engineer is to submit findings by July 15, 2008. By August 15, 2008, Wharf was to submit plans and specifications for a new and improved water treatment facility, with construction to begin by September 15, 2008. By July 1, 2009, Wharf is to complete construction of the wastewater treatment system. Wharf is to meet all effluent limits at all of its Outfalls and Compliance Points, with meet a new sampling schedule. By July 15, 2008, Wharf is to submit a plan for the cleanup of biomass accumulations along Ross Valley and Annie Creek. Also by July 15, 2008 Wharf is to complete an aquatic assessment of Annie Creek. By August 15, 2008, Wharf is to submit a detailed map identifying each pipeline on Wharf's property.

Settlement: Settlement Agreement was signed April 28, 2008. Wharf agreed to pay a \$214,930 penalty to the Department, with \$65,000 to be suspended pending compliance of terms of the Order (\$149,930 was paid on May 1, 2008). Wharf to pay a stipulated penalty of \$2,500 for failure to comply with each date in the Order. In addition, Wharf is to pay a \$100 for each day Wharf is late meeting the required dates and schedules. Wharf is required to pay



these stipulated penalties for violations until January 1, 2010 or until the full amount of the suspended penalty of \$65,000 is paid. Wharf agrees to comply with the Order.

