



November 14, 2012

ICMI INITIAL CERTIFICATION SUMMARY AUDIT REPORT

WHARF MINE SOUTH DAKOTA, USA

REPORT

Submitted to:

International Cyanide Management Institute
1400 I Street, NW, Suite 550,
Washington, DC 20005
UNITED STATES OF AMERICA

Goldcorp Wharf Mine
10928 Wharf Road
Lead, South Dakota 57754
UNITED STATES OF AMERICA

Project Number: 103-92593-01

Distribution:

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1.0 SUMMARY AUDIT REPORT FOR GOLD MINING OPERATIONS

Name of Mine: Wharf Mine
Name of Mine Owner: Goldcorp Inc.
Name of Mine Operator: Wharf Resources Inc.
Name of Responsible Manager: William Shand, Mine General Manager
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Lead, South Dakota 57754
Country: United States of America
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E-Mail: Bill.Shand@Goldcorp.com

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2.0 LOCATION DETAIL AND DESCRIPTION OF OPERATION

2.1 Mine Location

The Wharf Mine (Wharf) is located four miles west of Lead in the Black Hills, a heavily forested, small mountain range located in western South Dakota (Figure 1). Annual average precipitation in Lead is 27.8 inches, with most precipitation between April and September. Elevations in the Black Hills range from 3,500 feet to 7,242 feet above sea level at Harney Peak. Wharf's plant site is at an elevation of 6,140 feet above sea level.

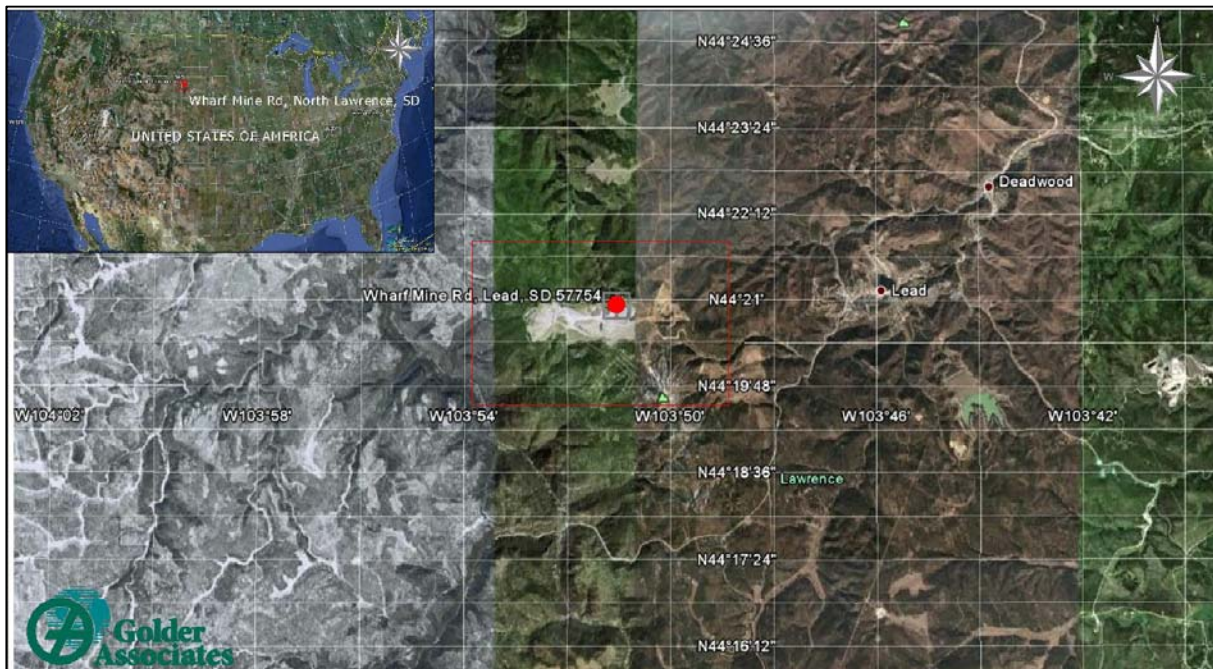


Figure 1: Regional Location Map

2.2 Background

Wharf was established in the Bald Mountain Mining District that includes both the Portland and Ruby Basin Districts of earlier mining activity. Production from the Bald Mountain Mining District is estimated at 1,412,900 ounces of gold and 4,327,900 ounces of silver between 1877 and 1959. During this time, gold ore was mined from extensive underground workings. Wharf Resources independently acquired a land position and initiated exploration in the Annie Creek area in 1979. This work resulted in the definition of a gold deposit which was developed in 1983 as an open pit mine and heap leach recovery operation. Subsequent exploration programs successfully delineated several ore bodies including Foley Ridge (including East Foley), Juno Cut, The American Eagle, Portland and Trojan. These ore bodies have been mined to completion except Trojan which is currently being mined and which contains the last of the known economic ore reserves.

The run-of-mine gold ore is transferred from 250-ton storage hopper via an apron feeder to a vibrating grizzly where all rock less than 6 inches is separated out. The larger material is sent through a jaw crusher. The jaw crusher product is further screened and crushed with five cone crushers and five screen decks until it reaches the 1-1/2 inch size. Granulated lime is added to the ore during crushing to provide control of the pH in the leach solution during processing.

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The crushed ore is hauled by the pit operations equipment fleet to one of five on-off heap leach pads and placed in 20-foot lifts to a maximum height of 150 feet over the pad liner. The five leach pads used for ore processing cover approximately 70 acres with a capacity of 9 million tons. The pad design includes double synthetic liners on top of 8 inches of compacted clay, with a leak detection system located between the two synthetic liners. This system is closely monitored to ensure the integrity of the liners. A dilute alkaline cyanide solution is distributed through the crushed rock by drip emitters that are installed on the top of each lift. As the solution percolates down through the ore, the gold is leached from the ore and the gold-laden (pregnant) solution gravity flows through pipelines to the processing plant. The leaching process is usually complete approximately 12 to 18 months after the pad is completely full. The current average gold recovery rate is 74.5 percent.

Once the pad has been fully leached, the heap is rinsed with water and neutralized with hydrogen peroxide to oxidize residual cyanides. Following neutralization, the spent ore is hauled to the Foley spent ore disposal site, which has been specifically approved for depositing spent ore.

Through the addition of extra carbon columns the recovery plant has the capacity to treat 3,800 gallons/minute of pregnant solution. The adsorption circuit consists of 19 carbon columns holding a total of 39 tons of activated carbon where the gold is removed from the solution. The activated carbon (loaded with gold) is moved to the stripping plant where it enters a closed circuit under high pressure and temperature. Gold is electro plated from the circuit and the precious metal sludge is then shipped to a third party refinery for further processing.

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SUMMARY AUDIT REPORT

Auditors Findings

Wharf Mine is: [X] in full compliance with The International Cyanide Management Code
[] in substantial compliance with
[] not in compliance with
Audit Company: Golder Associates
Audit Team Leader: Kent Johnejack,, Lead Auditor and Technical Specialist
Email: kjohnejack@golder.com

Name of Other Auditors

Table with 2 columns: Name, Position and Signature. Row 1: Ivon Aguinaga, Gold Mining Technical Specialist; Ivon Aguinaga (handwritten signature)

Dates of Audit

The Certification Audit was undertaken between August 13 and 16, 2012.

I attest that I meet the criteria for knowledge, experience and conflict of interest for Code Verification Audit Team Leader, established by the International Cyanide Management Institute (ICMI) and that all members of the audit team meet the applicable criteria established by the ICMI for Code Verification Auditors.

I attest that this Summary Audit Report accurately describes the findings of the verification audit. I further attest that the verification audit was conducted in a professional manner in accordance with the International Cyanide Management Code (Code) Verification Protocol for Cyanide Gold Mine Operations and using standard and accepted practices for health, safety and environmental audits.

Wharf Mine [Signature] November 14, 2012
Name of Facility Signature of Lead Auditor Date

Wharf Mine [Signature] November 14, 2012
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PRINCIPLE 1 – PRODUCTION

Encourage Responsible Cyanide Manufacturing by Purchasing from Manufacturers that Operate in a Safe and Environmentally Protective Manner

Production Practice 1.1: Purchase cyanide from manufacturers employing appropriate practices and procedures to limit exposure of their workforce to cyanide, and to prevent releases of cyanide to the environment

in full compliance with

The operation is

in substantial compliance with

Production Practice 1.1

not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 1.1, requiring the operation to purchase cyanide from manufacturers employing appropriate practices and procedures to limit exposure of their workforce to cyanide and to prevent releases of cyanide to the environment.

Wharf purchases cyanide only from Cyanco Company LLC (Cyanco) of Winnemucca, Nevada. Wharf's contract with Cyanco requires that Cyanco comply with the Code. Cyanco was recertified by the ICMI in 2010.

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PRINCIPLE 2 – TRANSPORTATION

Protect Communities and the Environment during Cyanide Transport

Transport Practice 2.1: Establish clear lines of responsibility for safety, security, release prevention, training and emergency response in written agreements with producers, distributors and transporters.

[X] in full compliance with

The operation is

[] in substantial compliance with

Transport Practice 2.1

[] not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 2.1, requiring that the operation establish clear lines of responsibility for safety, security, release prevention, training and emergency response in written agreements with producers, distributors and transporters.

Wharf contracts with a certified producer (Cyanco), who in turn contracts with a certified transporter (TransWood Inc. [TransWood]). Both Cyanco and TransWood were recertified by the ICMI in 2010.

Transport Practice 2.2: Require that cyanide transporters implement appropriate emergency response plans and capabilities and employ adequate measures for cyanide management

[X] in full compliance with

The operation is

[] in substantial compliance with

Transport Practice 2.2

[] not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 2.2, requiring that cyanide transporters implement appropriate emergency response plans and capabilities and employ adequate measures for cyanide management.

Wharf's cyanide supplier, Cyanco, contracts the transporter, TransWood, who was recertified by the ICMI in January 2010. The Bills of Lading indicate that TransWood directly transports the cyanide to Wharf without use of subcontractors or interim storage facilities.



PRINCIPLE 3 – HANDLING AND STORAGE

Protect Workers and the Environment during Cyanide Handling and Storage

Handling and Storage

Practice 3.1:

Design and construct unloading, storage and mixing facilities consistent with sound, accepted engineering practices, quality control/quality assurance procedures, spill prevention and spill containment measures.

[X] in full compliance with

The operation is

[] in substantial compliance with

Handling and Storage Practice 3.1

[] not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Handling and Storage Practice 3.1, requiring that cyanide handling and storage facilities are designed and constructed consistent with sound, accepted engineering practices, quality assurance/quality control (QA/QC) procedures, spill prevention and spill containment measures.

Wharf constructed a new cyanide offloading and storage facility for liquid cyanide in 2011 and 2012 using sound and accepted engineering practices. This facility was designed by TSP, Inc., whose staff include registered professional engineers in civil and mechanical engineering disciplines. The facility was cleared for use by Cyanco. The offload is located away from people near a typically unoccupied room of the plant. There is no public access in the vicinity of the plant and ponds; nonetheless, the storage tank is surrounded by chain link fence for security. The offload and storage tank area are located away from surface water and the ground slopes towards the adjacent Contingency Pond. The offload ramp and the storage tank area are constructed of reinforced concrete to collect leakage and prevent seepage to the subsurface. The storage tank is equipped with an ultrasonic level sensor with two high level set points that trigger an audio alarm inside the plant and a visual message on a screen in the control room. The storage tank is located outside of the plant and therefore is well ventilated. The storage tank is supported on rails above the concrete floor of the secondary containment. It is located inside the fenced secondary containment structure with a locked gate. The offloading area and storage tank are physically separated by the plant building from incompatible materials, such as acids, oxidizers, and explosives. The area is well away from where food and tobacco are consumed. The auditors observed all components of the offload and storage tank area to be in excellent condition at the time of the site visit.

Handling and Storage

Practice 3.2:

Operate unloading storage and mixing facilities using inspections, preventative maintenance and contingency plans to prevent or contain releases and control and respond to worker exposures.

[X] in full compliance with

The operation is

[] in substantial compliance with

Handling and Storage Practice 3.2

[] not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Handling and Storage Practice 3.2 requiring that cyanide handling and storage facilities are operated using inspections, preventive maintenance and contingency plans to prevent or contain releases and control and respond to worker exposures.

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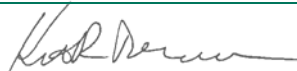




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Wharf uses only liquid cyanide, thereby eliminating the possible reuse of cyanide containers; the need to rinse drums, bags, or liners; and the need to dispose of empty drums or boxes. Before leaving the offload area, the cyanide lines on the truck are blown through with warm air to ensure that they are dry and that no residual cyanide solution is present. A Cyanco offload procedure details the operation of truck valves and couplings, while a Wharf procedure discusses the operation of their valves and caps. The Wharf Spill Contingency Plan describes the measures required to clean up spills during offloading. Both the Cyanco and Wharf offloading procedures specify the proper personal protective equipment for use during offloading. The Wharf procedure further requires the truck to be escorted from the main gate to the offload area and for an observer to watch the entire offload from a safe area, keeping the driver in view at all times. The auditors observed an offload to confirm the use of a checklist from the Wharf procedure, as well as the use of an escort and observer.

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PRINCIPLE 4 – OPERATIONS

Manage Cyanide Process Solutions and Waste Streams to Protect Human Health and the Environment

Operations Practice 4.1: Implement management and operating systems designed to protect human health and the environment including contingency planning and inspection and preventative maintenance procedures.

[X] in full compliance with

The operation is

[] in substantial compliance with

Operations Practice 4.1

[] not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 4.1, requiring that the operation implement management and operating systems designed to protect human health and the environment including contingency planning and inspection and preventive maintenance procedures.

The cyanide facilities at Wharf consist of the heap leach pad (Nos. 1-5), six process ponds, reagent-grade cyanide system, plant, hydrogen peroxide cyanide treatment system, and all the associated pumps, pipes, and appurtenances. The heap leach pad is an on/off pad with the spent ore being moved to disposal facilities when the weak acid dissociable (WAD) cyanide in the draindown solutions is less than 0.5 parts per million (ppm). The non-cyanide facilities consist of the open pit, spent ore disposal facilities, crusher, reverse osmosis water treatment plant, groundwater remediation system for nitrates, and six non-process ponds. Treated water with WAD cyanide less than 0.5 ppm is transferred in batches from the process ponds, specifically the Contingency and Neutralization Ponds, to the non-process ponds, specifically the Ponderosa Pond, which serves as a distribution point to the other non-process ponds. The batch transfer procedure includes an internal permit with approval required by both the environmental department and metallurgical department before a transfer may take place, thereby preventing the inadvertent transfer of solutions with WAD cyanide greater than 0.5 ppm and maintaining the non-process ponds as non-cyanide facilities. Given that the pad, ponds, and plant are located on a ridge that comprises the headwaters of several drainages, there are no surface water diversions to be considered as cyanide facilities.

Wharf has developed written plans, specifications, reports, manuals, and procedures for operation of its cyanide facilities. These documents cover all of the cyanide facilities and cyanide-related activities required in order to protect human health and the environment.

The assumptions and operational parameters for the heap leach facility, ponds, and plant are well understood at Wharf. The target of maintaining WAD cyanide at less than 50 ppm in open water is defined in a written procedure. The target rate for cyanide addition is also described in a written procedure. The process water balance identifies the critical pond levels and flows, and includes the state-mandated requirement to maintain available capacity for a 19.6-inch storm. Freeboard in the process ponds is established at 3 feet. The auditors observed that the key operating parameters are displayed on the whiteboard in the plant control room, including the cyanide addition rate and the target pH). Regulatory requirements are defined in the permits and submittals with the Department of Environment and Natural Resources. The concentration of cyanide for discharge to surface water and groundwater are 0.20 ppm free cyanide and 0.75 ppm WAD cyanide.

Wharf has developed procedures for the standard practices to comply with the Code. They have a written procedure that describes how to manage water in the process ponds to prevent unauthorized discharges to the environment. As part of this procedure, the water balance is updated daily with precipitation data and pond levels. Wharf conducts shift, daily, monthly, and annual inspections, with a written procedure

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specifically listing the items to be inspected for compliance with the Code. Preventative maintenance is described in a written procedure and is managed with software that generates and tracks work orders.

Wharf has a written procedure for change management. It includes a form with sign off by various supervisors up to the mine general manager, depending on the level of change. The auditors observed completed examples of the change form with sign off by the environmental manager as required by the procedure.

Wharf has developed written contingency procedures for managing upset conditions, deviations from designs and/or standard procedures, and temporary shutdown. The procedure for heavy rainfall management describes the steps to be taken in six different scenarios in order to maintain capacity. This procedure also describes when and how to start and stop the backup generator in the case of a power failure. The response plans for leakage from the pads and ponds, respectively, describe the steps to be taken in multiple scenarios of flow into the Leak Detection, Collection, and Recovery System (LDCRS). The procedure for care and maintenance idle down describes the steps to temporarily manage high (reagent-grade) and low strength cyanide solutions.

Wharf conducts multiple types of inspections on a shift, daily, monthly, and annual basis. The auditors reviewed completed examples of all inspection forms and observed that the cyanide facilities were generally in good condition, supporting that the inspection program is effective. The inspections include tanks and columns; secondary containments; LDCRS for the pads and ponds; pipelines, pumps, and valves; and pond water levels. Wharf contracted a qualified company to perform non-destructive testing on the tanks and columns, followed by an assessment of structural integrity and corrosion. The external evaluation concluded that all cyanide-related tanks were suitable for continued service as defined in Steel Tank Institute guidance. The forms include the date of inspection; name of inspector(s); problems, deficiencies, comments; and corrective actions.

Wharf has implemented a preventative maintenance program that includes proactive (scheduled) and reactive (inspection deficiencies) preventative maintenance. The program includes all cyanide facilities from the plant, ponds, and pads to the fencing around these facilities. Wharf uses software to generate and track work orders. Wharf also has developed a list of critical equipment that identifies redundant pumps, extra pumps, and spare parts.

Wharf has a diesel generator with 1.5 days of fuel that provides backup power for critical functions at the plant (e.g., the control room). Start-up tests are conducted twice monthly. Preventative maintenance is scheduled every 2,000 hours of run time or annually, whichever is less. The auditors observed examples of the start-up test forms, as well as the log book and software printouts for preventative maintenance.

Operations Practice 4.2: Introduce management and operating systems to minimise cyanide use, thereby limiting concentrations of cyanide in mill tailings.

in full compliance with

The operation is

in substantial compliance with

Operations Practice 4.2

not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 4.2, requiring that the operation limit the use of cyanide to that optimal for economic recovery of gold so that the waste tailings material has as low a cyanide concentration as practical.

Not applicable at Wharf because the site is a heap leach operation and there is no milling or tailings disposal.

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Operations Practice 4.3: Implement a comprehensive water management programme to protect against unintentional releases.

in full compliance with

The operation is

in substantial compliance with

Operations Practice 4.3

not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 4.3, requiring the operation to implement a comprehensive water management programme to protect against unintentional releases.

Wharf has developed a comprehensive and probabilistic water balance accompanied by procedures and a training manual. The water balance is site-wide, including both cyanide and non-cyanide facilities. It is comprehensive in that it includes different application rates separately for each of the five pads for active leaching, treatment (neutralization), and offloading/reloading; precipitation (rain and snow); evaporation; freezing and thawing (rain-on-snow event); draindown from a 24-hour power outage; and transfer of neutralized solutions from the process ponds to the non-process ponds. Seepage losses are not included, but this reasonable given that the pad and ponds are double-line with leak detection. The pad, ponds, and plant are located on a ridge top and there are no upgradient watersheds to be diverted. The model is probabilistic in that it includes the 100-year, 24-hour storm and a major storm of 19.6 inches (nearly the probable maximum flood). The model includes a 10-year wet cycle based on an evaluation of 100 years of regional precipitation data. The model includes reasonable values for the application rates, precipitation, and evaporation.

The Wharf water balance, as well as the accompanying procedure for heavy rainfall management, is designed to ensure ponds do not overtop. The model expresses capacity in terms of the size of rainfall event that can be accommodated in the system. The target available capacity is 19.6 inches (nearly the size of the 6-hour probable maximum flood), as required by the Department of Environment and Natural Resources. The procedure for heavy rainfall management provides actions to prevent overtopping in six scenarios, including a rain-on-snow event. At the time of the site visit, the process ponds had available capacity for a 21-inch event.

Wharf maintains one weather station with a rain gage and three snow depth monitoring stations. Wharf measures both precipitation and pond levels daily for entry into the water balance, providing continual comparison of results to design and operation. The auditors observed examples of plant reports that confirm daily use of the water balance. Given that the process ponds are designed and operated for nearly the probable maximum flood, there is little need to continuously evaluate precipitation distributions.

Operations Practice 4.4: Implement measures to protect birds, other wildlife and livestock from adverse effects of cyanide process solutions.

in full compliance with

The operation is

in substantial compliance with

Operations Practice 4.4

not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 4.4, requiring the operation implement measures to protect birds, other wildlife and livestock from adverse effects of cyanide process solutions.

Wharf has implemented measures to restrict wildlife access to the heap leach pad and process ponds, as well as to maintain WAD cyanide concentrations in open water at less than 50 ppm. The entire perimeter of

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the heap leach pad and process ponds is fenced to prevent access by deer and other wildlife. Wharf presented four months of analytical data that demonstrate that concentrations of WAD cyanide in open water do not exceed 50 ppm. Wharf had few wildlife mortalities at the process ponds and heap leach pad in the year prior to the site visit; none were conclusively related to cyanide exposure. All were reported to the South Dakota Department of Natural Resources and no investigations were required. Wharf applies cyanide to the top surface of the heap leach pad with buried drip emitters, thereby greatly reducing the potential for ponding. The auditors did not observe any ponding at the time of the site visit. If ponding were to occur, Wharf has developed a written procedure to manage it. Leach solutions are applied to the pad side slopes with wobblers. The auditors did not observe any overspray at the time of the site visit.

Operations Practice 4.5: Implement measures to protect fish and wildlife from direct or indirect discharges of cyanide process solutions to surface water.

in full compliance with

The operation is

in substantial compliance with

Operations Practice 4.5

not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 4.5, requiring the operation implement measures to protect fish and wildlife from direct or indirect discharges of cyanide process solutions to surface water.

Wharf is allowed by permit to discharge to surface water at two points (006A and 006B). The auditors reviewed data submitted to the South Dakota Department of Environment and Natural Resources that show either no flow or concentrations of WAD cyanide less than 0.010 ppm for the five months prior to the site visit. Wharf also monitors surface water at eight stations downstream of the facility and data show either no flow or concentrations of WAD cyanide less than 0.010 ppm for the five months prior to the site visit. The state does not require analysis of free cyanide, but it is highly unlikely that free cyanide is greater than 0.022 ppm when WAD cyanide is less than 0.010 ppm. There are several springs downgradient of mine facilities, but the surface water monitoring stations are located to represent their flow, and therefore the WAD cyanide data less than 0.010 ppm confirm that there are no indirect discharges of cyanide to surface water. As such, Wharf does not need to remediate any discharges of cyanide to surface water.

Operations Practice 4.6: Implement measures designed to manage seepage from cyanide facilities to protect the beneficial uses of groundwater.

in full compliance with

The operation is

in substantial compliance with

Operations Practice 4.6

not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 4.6, requiring the operation implement measures designed to manage seepage from cyanide facilities to protect the beneficial uses of groundwater.

Wharf has implemented measures to manage seepage and protect beneficial uses of groundwater, which is defined as drinking water for the Madison Aquifer where the mine is located. These measures include physical and operating measures. The heap leach pad, ditches, and plant process ponds are underlain by an integral system consisting of double high-density polyethylene (HDPE) liner and LDCRS. The LDCRS is operated according to state-approved action plans based on the allowable flow rate to the LDCRS. All pipelines with cyanide solution are contained within the HDPE lined ditches that are in turn underlain by the LDCRS. The process plant has concrete floors and secondary containment in good condition to manage

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seepage, and the containment drains to the process ponds as tertiary containment. Wharf has five point of compliance wells in accordance with state-issued permits. The standards of 0.75 ppm WAD cyanide and 0.2 ppm free cyanide have not been exceeded in these wells over the 8-month period of record examined by the auditors. Wharf has neither mill tailings nor underground workings, but the auditors considered offloading of spent ore from the pad as analogous to a backfilling operation for the purposes of the Code. Wharf is required by its state-issued groundwater discharge permits to neutralize the spent ore by freshwater rinsing and/or hydrogen peroxide treatment. Once the criterion of 0.5 ppm WAD cyanide is achieved in the draindown water, the state approves offloading of the spent ore to surface disposal facilities. The auditors reviewed state approval letters for offloading of Pad 4 in 2011 and Pad 3 in 2012 to confirm the efficacy of the approach. Seepage from the cyanide facilities have not caused concentrations of cyanide in groundwater to exceed standards, and therefore Wharf is not engaged in remediation of cyanide in groundwater.

Operations Practice 4.7: Provide spill prevention or containment measures for process tanks and pipelines.

in full compliance with

The operation is

in substantial compliance with

Operations Practice 4.7

not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 4.7 requiring that the operation provide spill prevention or containment measures for process tanks and pipelines.

The cyanide storage tank, as well as all process tanks and columns inside the plant, are provided with secondary containment; there are no tanks or columns without secondary containment. The cyanide storage tank is installed on steel rails within a concrete secondary containment structure that drains by gravity to the adjacent Overflow Pond, which provides tertiary containment. The volume of the secondary containment exceeds 125 percent of the tank volume. The auditors observed the concrete to be in excellent condition. The process tanks and columns inside the plant drain by gravity on a sloped concrete floor to pump boxes on the lower level of the plant, which in the event of an overflow would drain by gravity via a concrete ramp to the adjacent Overflow Pond. The Overflow Pond has more than enough capacity for the largest tank or column in the plant. The auditors observed that the concrete in plant was in good condition with joints and cracks properly sealed. Procedures to discharge secondary containment solutions to the environment are not needed because all solutions and precipitation ultimately flow by gravity to the Overflow Pond or are reincorporated into the process circuit. The auditors observed that all reagent-grade cyanide pipelines are either located over concrete containment or constructed as pipe-in-pipe when over natural ground. All leach solution pipelines are constructed within HDPE-lined ditches that report back to the Pregnant Pond. There are no areas where cyanide pipelines present a risk to surface water where special measures are required. The cyanide tanks and pipelines are made from mild steel, stainless steel, HDPE and polyvinyl chloride, all of which are compatible with cyanide and high pH conditions.

Operations Practice 4.8: Implement quality control/quality assurance procedures to confirm that cyanide facilities are constructed according to accepted engineering standards and specifications.

in full compliance with


The operation is

in substantial compliance with

Operations Practice 4.8

not in compliance with

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Summarize the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 4.8 requiring that operations implement QA/QC procedures to confirm that cyanide facilities are constructed according to accepted engineering standards and specifications.

Wharf has implemented a combination of internal (in-house) construction quality assurance/control assurance (QA/QC) and external (consultant) QA/QC. The available records indicate that the QA/QC program extends back to 1988; records were not provided for the initial construction of the cyanide facilities starting in 1985. The existing records consist of pre-construction construction quality assurance (CQA) plans and manuals; reports from construction observation and testing; and letters from consultants. The overall conclusion is that a CQA program was implemented. Wharf has retained the documents that it found. Even though Wharf made good faith efforts to find all of the documents, an alternative demonstration is needed to establish full compliance.

The QA/QC documents reviewed indicate that the overall program included suitability of materials, earthworks compaction, concrete testing, and liner installation. Observation included installation of geomembrane, geosynthetic clay liner, geonet, piping, drain gravel, and cushion layers. Materials suitability consisted of manufacturer's certifications and laboratory testing. Earthworks compaction was tested with a nuclear density gage. The auditors reviewed both construction quality assurance plans and QA/QC results to verify the nature of the program.

Wharf used a combination of external consultants and internal staff for QA/QC. For the external consultants, the documents reviewed were stamped by registered civil engineers, thus verifying that appropriately qualified staff signed off on the completed project. For the internal staff, Wharf submitted a letter to the Department of Environment and Natural Resources in 2010 that details the qualifications of the in-house staff to perform QA/QC activities. The auditors reviewed this letter and found the qualifications acceptable.


The plant was built in 1987. Wharf contracted with Roberts & Schaefer Company for engineering, procurement, construction management, and installation services. Mr Raymond Bierman, project manager, provided his statement regarding the QA/QC program for the plant, which concludes "Wharf Resources and R&S were diligent in making sure the system was sound". The auditors accept this statement as an alternative demonstration of QA/QC for the plant. An alternative demonstration is inapplicable for the new cyanide offload and storage tank at the plant, as Wharf provided complete QA/QC documentation.

The pads, process ponds, and ditches were constructed starting in 1985 and Wharf provided QA/QC evidence for some facilities. A professional engineer from the Department of Environment and Natural Resources provided a letter that verifies that a CQA program existed for the other facilities and that the state signed off on the CQA results. The letter from the state closes as follows, which the auditors accept as an alternative demonstration:

"All of these facilities did have CQA plans, and Wharf personnel that completed CQA were verified and approved by the South Dakota Department of Environment and Natural Resources. Wharf did follow and meet CQA standards set by Department of Environment and Natural Resources. During construction, Department of Environment and Natural Resource inspectors also monitored the construction to ensure facilities were built according to approved plans".

In the end, a conclusive alternative demonstration for the plant, pads, process ponds, and ditches is provided by the groundwater monitoring data that the auditors evaluated for Standard of Practice 4.6, and the leak detection, collection, and recovery data evaluated for Standard of Practice 4.7. The pads, process ponds, and ditches are an integral system. The LDCRS data show that leakage rates are within permit requirements, supporting that the liner system was properly installed over the years. The groundwater data show no exceedances of groundwater standards for cyanide, again supporting that the liner system is functioning properly.

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Operations Practice 4.9: Implement monitoring programs to evaluate the effects of cyanide use on wildlife, surface and groundwater quality.

in full compliance with

The operation is

in substantial compliance with

Operations Practice 4.9


not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 4.9 requiring that operations implement monitoring programs to evaluate the effects of cyanide use on wildlife, surface and groundwater quality.

Wharf has developed written procedures for collection of groundwater and surface water samples, as well as for preservation, storage, handling, and documentation. Wharf has also developed procedures for wildlife mortality monitoring, retrieval, and reporting. These procedures were developed in-house by staff with appropriate education, training, and experience. The sampling procedures describe when, where, and how to collect the samples, including containerization, preservation, handling, shipping, and chain-of-custody documentation. Wharf's environmental technician records sampling conditions that may affect sample quality in a groundwater field notebook and surface water field forms. Wharf monitors for cyanide downgradient of both cyanide and non-cyanide facilities at eight surface water stations and 65 wells, springs, and seeps. Wharf inspects for wildlife mortalities daily and records the inspections on field forms. Groundwater point of compliance wells are sampled in January, April, May, and August, while other wells are sampled monthly. Surface water points of compliance are sampled every other week, and all other surface water locations are sampled in January, April, May, and August.

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PRINCIPLE 5 – DECOMMISSIONING

Protect Communities and the Environment from Cyanide through Development and Implementation of Decommissioning Plans for Cyanide Facilities.

Decommissioning

Practice 5.1: Plan and implement procedures for effective decommissioning of cyanide facilities to protect human health, wildlife and livestock.

[X] in full compliance with

The operation is [] in substantial compliance with Decommissioning Practice 5.1 [] not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 5.1 requiring that the site plan and implement procedures for effective decommissioning of cyanide facilities to protect human health, wildlife and livestock.

Wharf has prepared a written plan specifically for decommissioning the cyanide facilities. This plan describes measures to decontaminate cyanide-related equipment by power washing and rinsing until WAD cyanide concentrations are less than 0.5 ppm. It also describes measures for disposition of residual cyanide solutions and management of heap leach draindown solutions by treatment in the Neutralization Pond with the existing hydrogen peroxide system. Measures to manage cyanide in groundwater and surface water after cessation of mining are not anticipated. The plan contains a section with a general implementation schedule of six years after the cessation of ore processing. The plan also contains requirement that it be reviewed and revised (if needed) annually. The title page of the plan shows that it has been reviewed and revised twice since it was issued in 2011.

Decommissioning

Practice 5.2: Establish an assurance mechanism capable of fully funding cyanide related decommissioning activities.

[X] in full compliance with

The operation is [] in substantial compliance with Decommissioning Practice 5.2 [] not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with the Standard of Practice 5.2 requiring that the site establish an assurance mechanism capable of fully funding cyanide related decommissioning activities.

Wharf has estimated costs for fully funding third party implementation of the decommissioning activities using a cost model developed by the State of South Dakota. The activities covered include heap leach draindown neutralization and offload, pond neutralization, process facilities decontamination and dismantlement, and foundation demolition and reclamation. The basis for the third party costs are quotes for a local equipment vendor. Wharf estimates that approximately \$18.3 million is needed to fund decommissioning activities. The Wharf decommissioning plan contains a requirement that closure costs be updated annually, in keeping with the corporate Asset Retirement Obligation policy. The Department of Environment and Natural Resources has approved two irrevocable letters of credit of approximately \$63 million for mine closure, which exceeds the estimated \$18 million needed for cyanide decommissioning alone.

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PRINCIPLE 6 – WORKER SAFETY

Protect Workers’ Health and Safety from Exposure to Cyanide

Worker Safety

Practice 6.1: Identify potential cyanide exposure scenarios and take measures as necessary to eliminated, reduce and control them.

in full compliance with

The operation is in substantial compliance with Worker Safety Practice 6.1

not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 6.1 requiring that the site identify potential cyanide exposure scenarios and take measures as necessary to eliminate, reduce and control them.

Wharf has developed written Standard Operating Procedures (SOPs) that describe the management and operation of the cyanide facilities. The SOPs have been developed to eliminate, reduce and control exposure to cyanide. Individual task specific SOPs provide details for safe operation of the cyanide facilities, personal protection equipment (PPE) requirements, and inspection requirements.

Pre-work inspections prior to a cyanide unload event are completed by process personnel. Inspections of the cyanide facilities are conducted on a regular basis. Inspections include cyanide tanks, pipes, pumps, secondary containments, signage, safety devices (e.g. safety showers, eyewash stations, cyanide kits and fire extinguishers), liners, ponding, and wildlife, and cover the cyanide offload and storage areas, the plant (carbon columns), the booster pad area, the process ponds and leach pad areas.

Wharf has developed procedures to be used when a facility or operational/maintenance change/modification is proposed. The procedures consider the involvement of process, environmental and safety personnel in the assessment of the proposed changes. All changes are communicated to the workforce and training requirements updated. Wharf has safety meetings to provide information and training to employees as well as to solicit input from employees on worker safety issues.

Worker Safety

Practice 6.2: Operate and monitor cyanide facilities to protect worker health and safety and periodically evaluate the effectiveness of health and safety measures.

in full compliance with

The operation is in substantial compliance with Worker Safety Practice 6.2

not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 6.2 requiring that the site operate and monitor cyanide facilities to protect worker health and safety and periodically evaluate the effectiveness of health and safety measures.

The pH is monitored and maintained to prevent the formation of HCN as recommended in the SOPs. Fixed hydrogen cyanide (HCN) gas monitors are installed in areas of potential exposure to cyanide. In addition, operators use portable HCN meters to conduct maintenance work and other cyanide tasks. HCN sensors are set at 4.7 ppm low level alarm and 10 ppm high level alarm. HCN monitors are maintained, calibrated and inspected as recommended by the manufacturer. Warning signs are posted in areas where cyanide is

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used to alert workers that cyanide is present and that smoking, eating and drinking are not allowed. Pipes carrying cyanide are marked and the direction of flow is indicated with arrows on the pipe.

Showers, low-pressure eye wash stations, and dry powder fire extinguishers are located at strategic locations throughout the operation and are maintained, inspected and tested on a regular basis. Safety showers and eyewash stations were operational. Material Safety Data Sheets (MSDSs) are available in each cyanide first aid kit (including the operator room) and are located in the cyanide storage tank area. The instructions are in English, the language of the workforce. Wharf implemented procedures that require all incidents and accidents involving cyanide exposure be investigated and evaluated to determine if its programs and procedures to protect worker health and safety and to respond to cyanide exposures are adequate or if changes are necessary.

Practice 6.3: Develop and implement emergency response plans and procedures to respond to worker exposure to cyanide.

in full compliance with

The operation is in substantial compliance with **Worker Safety Practice 6.3**

not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 6.3 which requires that the site develop and implement emergency response plans and procedures to respond to worker exposure to cyanide.

Cyanide antidote kits are located in the operator room, inside the CCIX building by the cyanide unloading facility and above the barren sump at the process plant. In addition, cyanide antidote kits are located in the Safety Coordinator’s office and the onsite emergency truck. Cyanide antidote kits include amyl nitrite and oxygen. Wharf also has some cyanokits (hydroxocobalamin) to be transported with the exposed worker to a local hospital, if needed. In addition, automated external defibrillators are located in the emergency truck and in the administration building. The cyanide antidote is stored at the manufacture’s recommended temperature and is within expiration dates. First aid equipment is inspected regularly.

Wharf has developed an Emergency Response Plan with the most recent version dated July 2012. The plan includes response procedures for cyanide exposures and releases. The plan addresses spills, leaks, fire involving cyanide, cyanide first aid, rescue procedures, amyl nitrite administration procedures, emergency transportation, recovery, decontamination, process pump failures, and cyanide spill sampling. In addition, the plan describes evacuation procedures, emergency contact information, reporting requirements and others.

Wharf has its own onsite capability to provide first aid assistance to workers exposed to cyanide. Wharf has cyanide antidote kits and emergency responders and cyanide first aid trained personnel per shift. Wharf has developed procedures to transport workers exposed to cyanide to locally available qualified off-site medical facilities for further treatment, if needed. Wharf has made formalized arrangements with two local hospitals, the Rapid City Regional Hospital and the Lead/Deadwood Regional Hospital. Wharf conducts cyanide exposure mock drills and tests the relevant emergency procedures on a regular basis.

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PRINCIPLE 7 – EMERGENCY RESPONSE

Protect Communities and the Environment through the Development of Emergency Response Strategies and Capabilities

Emergency Response

Practice 7.1: Prepare detailed emergency response plans for potential cyanide releases.

[X] in full compliance with

The operation is [] in substantial compliance with Emergency Response Practice 7.1 [] not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 7.1 which requires that the site prepare detailed emergency response plans for potential cyanide releases.

Wharf has developed plans and SOPs that address emergency response to potential accidental releases of cyanide. Wharf plans contain procedures for potential scenarios such as: 1) cyanide intoxication; 2) accidents during cyanide transportation; 3) releases during unloading; 4) release of cyanide during fires and explosions; 5) pipe, valve or tank ruptures; 6) overtopping of ponds; 7) power outages and pump failures; 8) uncontrolled seepage; 9) failure of the heap leach facility; 10) cyanide spill control and clean-up; and 11) decontamination and emergency evacuation.

Emergency Response

Practice 7.2: Involve site personnel and stakeholders in the planning process.

[X] in full compliance with

The operation is [] in substantial compliance with Emergency Response Practice 7.2 [] not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 7.2 which requires that the site involve site personnel and stakeholders in the planning process.

Wharf involves site personnel and stakeholders in the planning process and keeps their emergency response plans current. Wharf solicits the input of its workforce and local response agencies in the emergency response planning through safety meetings, training sessions and mock drills.

Worker input in developing and evaluating health and safety procedures is via direct communication between supervisors and operators and during weekly safety meetings. In addition, process personnel and Emergency Response Team (ERT) members participated in the cyanide related mock drills conducted in 2012.

Wharf has submitted a copy of its Emergency Response Plan to the Lead Fire Department, City of Deadwood, Lead/Deadwood Regional Hospital, City of Lead Fire Chief, Rapid City Fire Department Emergency Management System, Rapid City Fire Department HazMat Team, and Lawrence County Emergency Management for their review and comment. Wharf and the representatives of these external entities met to review the plan together on June 14, 2012. Wharf has provided training (through Cyanco) in cyanide awareness for emergency responders to Spearfish, Lead and Deadwood Fire Departments, Deadwood Ambulance and Lawrence County Emergency Management personnel on March 15, 2012. In

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addition, the Lead/Deadwood Ambulance Service and a representative of the Lawrence County Emergency Management participated in the April 2012 mock drill. Auditors reviewed meeting and training records.

Wharf keeps a stakeholder contact information list in its Emergency Response Plan including the cyanide supplier (Cyanco), outside responders, regulatory agencies, outside medical facilities and other stakeholders.

Emergency Response

Practice 7.3: Designate appropriate personnel and commit necessary equipment and resources for emergency response.

in full compliance with

The operation is in substantial compliance with **Emergency Response Practice 7.3**

not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 7.3 which requires that the site designate appropriate personnel and commit necessary equipment and resources for emergency response.

Wharf has committed in their emergency response plans and procedures the necessary emergency response equipment and first aid to manage most cyanide incidents at the operation and to coordinate transportation to local hospitals for further treatment if needed. The Emergency Response Plan defines the responsibilities of the emergency response coordinators and the ERT for different site emergency scenarios.

Wharf has identified its ERT and emergency coordinators and has an updated list of them including their name and 24-hour contact information.

Wharf has emergency responders to respond to a cyanide emergency. Emergency responders are trained in cardiopulmonary resuscitation, rescue, confined space, cyanide first aid and decontamination, and spill control including the use of the self-contained breathing apparatus (SCBA). All emergency equipment is inspected weekly.

Wharf has engaged in consultation with outside entities (i.e. Rapid City Hazardous Team, Lawrence County Emergency Management, Lawrence County Sheriff's Department, Lead Fire Department, Lead/Deadwood Regional Hospital and ambulance, and Rapid City Regional Hospital through meetings and training sessions.

Emergency Response

Practice 7.4: Develop procedures for internal and external emergency notification and reporting.

in full compliance with

The operation is in substantial compliance with **Emergency Response Practice 7.4**

not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 7.4 which requires that the site develop procedures for internal and external emergency notification and reporting.

The Emergency Response Plan details the procedures (including current contact telephone numbers) for internal and external emergency notification and reporting.

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Emergency Response

Practice 7.5:

Incorporate in response plans and remediation measures monitoring elements that account for the additional hazards of using cyanide treatment chemicals.

in full compliance with

The operation is

in substantial compliance with

Emergency Response Practice 7.5

not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 7.5 which requires that the site incorporate in response plans and remediation measures monitoring elements that account for the additional hazards of using cyanide treatment chemicals.

Wharf has prepared cyanide response and remediation procedures for potential cyanide releases. The Spill Contingency Plan and the Emergency Response Plan both include emergency response procedures to address the management of contaminated soils and describe what final cyanide concentration will be allowed in residual soil as evidence that the release has been completely cleaned up. Soils samples would be taken following clean-up to confirm complete removal of all cyanide contaminated materials. Wharf has developed procedures to sample and monitor soils and water in the event of a cyanide spill.

Wharf does not consider the use of chemicals to treat cyanide that has been released into surface waters or dry drainages. In case the mine's drinking water supply or any local water supply is affected by a cyanide spill, Wharf will immediately prohibit usage of that water supply and provide bottled water. Wharf maintains a five day supply of bottled water on site at all times.

Emergency Response

Practice 7.6:

Periodically evaluate response procedures and capabilities and revise them as needed.

in full compliance with

The operation is

in substantial compliance with

Emergency Response Practice 7.6

not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 7.6, which requires that the site periodically evaluate response procedures and capabilities and revise them as needed.

Wharf evaluates and updates its Emergency Response Plan and Spill Contingency Plan annually, following mock drills and actual incidents as needed. Wharf conducts mock drills on a regular basis to practice and prepare for emergencies and to provide insight into the effectiveness of its emergency response plans.

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PRINCIPLE 8 – TRAINING

Train Workers and Emergency Response Personnel to Manage Cyanide in a Safe and Environmentally Protective Manner

Training Practice 8.1: Train workers to understand the hazards associated with cyanide use.

[X] in full compliance with

The operation is

[] in substantial compliance with

Training Practice 8.1

[] not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 8.1 which requires that the site train workers to understand the hazards associated with cyanide use.

Wharf provides initial training and refresher training to all employees, with the potential to be exposed to cyanide, on cyanide hazard awareness and spills. Wharf retains all cyanide training records including test results demonstrating an understanding of the training.

Training Practice 8.2: Train appropriate personnel to operate the facility according to systems and procedures that protect human health, the community and the environment.

[X] in full compliance with

The operation is

[] in substantial compliance with

Training Practice 8.2

[] not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 8.2 which requires that the site train appropriate personnel to operate the facility according to systems and procedures that protect human health, the community and the environment.

All personnel in job positions that involve the use of cyanide and cyanide management (including unloading, production and maintenance) receive training on how to perform their assigned tasks with minimum risk to worker health and safety. Individual training is provided for each specific task an operator will perform related to cyanide management. Task specific SOP training is provided prior to working with cyanide independently. The SOPs include the purpose of the SOP, required PPE, safety considerations and the individual task specific steps.

All task-specific training is conducted by the Plant Supervisor and other process personnel that have several years working in the process area. In addition, Wharf uses qualified trainers under its approved Mine Safety and Health Administration Training Plan. Wharf requires and provides annual refresher training in CHAPS, the Spill Contingency Plan and in Spill (including spill prevention, control, handling and reporting). Also, refresher training in task specific SOPs is provided during weekly safety meetings in the process areas. In addition, the plant supervisor conducts task observations, once a week, of process operators to ensure that employees continue to perform their jobs in a safe and environmentally protective manner. If refresher training is needed based on the plant supervisor's observation, this refresher is provided to the operator individually.

Wharf undertakes written tests to evaluate the effectiveness of cyanide training and those training records are retained throughout an individual's employment, documenting the training received. The records include

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the name of the employee and the trainer, the date of training; the topics covered, and test results demonstrating an understanding of the training materials.

Training Practice 8.3: Train appropriate workers and personnel to respond to worker exposures and environmental releases of cyanide.

in full compliance with

The operation is

in substantial compliance with

Training Practice 8.3

not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 8.3 which requires that the site train appropriate workers and personnel to respond to exposures and environmental releases of cyanide.

Personnel responsible for unloading, production, and maintenance as well as emergency coordinators and the ERT are trained in procedures to be followed if cyanide is released (spill and exposure). These procedures are described in the Spill Contingency Plan and the Emergency Response Plan. These plans address several cyanide exposure scenarios and describe procedures for cyanide exposure (through inhalation, absorption, skin contact and ingestion), decontamination, evacuation, emergency transportation, emergency contact information, spill containment and clean up measures, reporting requirements and others. In addition, the ERT members have received advanced training including confined space, CPR, first aid for cyanide intoxication and SCBA. Refresher training in the procedures described in the Spill Contingency Plan and the Emergency Response Plan is provided through meetings and/or specific annual training sessions. Wharf has made local response agencies familiar with those elements of their Emergency Response Plan related to cyanide through training sessions and meetings.

Wharf conducts mock emergency drills based on likely release/exposure scenarios. Drills are evaluated from a training perspective to determine if personnel have knowledge and skills required for effective response.

Training records are retained and include the name of the employee and the trainer, the date of training; the topics covered, and test results demonstrating an understanding of the training materials.

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PRINCIPLE 9 – DIALOGUE

Engage in Public Consultation and Disclosure

Dialogue Practice 9.1: Provide stakeholders the opportunity to communicate issues of concern.

[X] in full compliance with

The operation is

[] in substantial compliance with

Dialogue Practice 9.1

[] not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 9.1 which requires that the site provide stakeholders the opportunity to communicate issues of concern.

Wharf has an open door policy. Wharf conducts annual meetings with the Terry Valley Landowners Association, the closest community to the mine site. Wharf also meets annually with the Lawrence County Commissioners and the South Dakota Board of Minerals and Environment to discuss mining updates, completed projects and environmental and community involvement topics. During these meetings, stakeholders have the opportunity to raise issues of concern and Wharf's personnel are available to answer questions. Projects and topics related to the use of the cyanide at the site were discussed at meetings with the community and the regulators during 2012.

In addition, Wharf has developed and implemented a community feedback program. The purpose of the program is to provide opportunities for stakeholders to communicate issues of concern. Concerns can be taken up in person (at the Wharf warehouse) or by phone or email to the environmental manager. Information on the community feedback program, including contact information, was provided at the 2012 annual meeting with the Terry Valley Landowners Association.

Stakeholders and the public may contact Wharf via advertised phone numbers in their corporate website <http://www.goldcorp.com/English/About-Us/Corporate-Directory/default.aspx>.

The auditors reviewed Wharf's community feedback log as well as records of meetings with stakeholders and Goldcorp website to verify compliance.

Dialogue Practice 9.2: Initiate dialogue describing cyanide management procedures and responsively address identified concerns.

[X] in full compliance with

The operation is

[] in substantial compliance with

Dialogue Practice 9.2

[] not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 9.2 which requires that the site initiate dialogue describing cyanide management procedures and actively address identified concerns.

Wharf has an open door policy and has developed opportunities to interact with stakeholders and provide them with information regarding cyanide management practices and procedures. Wharf conducts annual meetings with stakeholders (community members (the Terry Valley Landowners Association) and regulators (the Lawrence County Commissioners and the South Dakota Board of Minerals and Environment). Projects and topics related to the use of the cyanide at the site (e.g. construction of the new cyanide tank and offload facility) were discussed during the 2012 meetings with the community and regulators.

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Wharf has also developed an opportunity to interact with stakeholders and provide them with information regarding cyanide management practices at the site during the public inspection period of the Wharf Mine Permit Amendment Application in 2010 (Information on this permit application is located at: <http://denr.sd.gov/des/mm/documents/WRAMD464SummaryDocument.pdf>) and the Department of Environment and Natural Resources environmental audit conducted at the site on June 19 and 20, 2012.

Verification by interview with the environmental manager as well as review of meeting records, information on the Wharf Mine Permit Amendment Application published in the Department of Environment and Natural Resources website and the agenda of the Department of Environment and Natural Resources environmental audit.

Dialogue Practice 9.3: Make appropriate operational and environmental information regarding cyanide available to stakeholders.

in full compliance with

The operation is

in substantial compliance with

Dialogue Practice 9.3

not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 9.3 which requires that the site make appropriate operational and environmental information regarding cyanide available to stakeholders.

Wharf has provided information on cyanide in written format in newspaper articles and permit applications. Wharf has published an article entitled "Mining the Hills of Gold" in the local newspaper, the Black Hills Pioneer, in December 2011 (http://www.bhpioneer.com/local_news/article_8ec0160a-30af-11e1-9105-0019bb2963f4.html). The article includes information on the mine process including the use and management of the cyanide at the site.

Information regarding cyanide management practices at the site was also included in the Wharf Mine Permit Amendment Application, submitted to Department of Environment and Natural Resources in 2009 (<http://denr.sd.gov/des/mm/documents/WRAMD464SummaryDocument.pdf>) and the large-scale mine permit application (Permit 476) submitted to Department of Environment and Natural Resources on July 5, 2011 and approved on January 19, 2012. Information on this application was provided to the public by the Department of Environment and Natural Resources. Auditors reviewed the "Permit Conditions" document that includes conditions related to the cyanide releases.

A cyanide exposure or release will be reported to regulatory agencies, as required, within the corresponding regulatory timeframe. Spill reporting procedures are described in the Wharf Conditional Use Permit # 398. Any cyanide related worker exposure or death will be reported to MSHA as described in the Emergency Response Plan. Information on reportable cyanide exposures and releases that will be submitted to the regulatory agencies would be information available to the public. The Department of Environment and Natural Resources website includes information on reportable spills (<http://denr.sd.gov/des/gw/Spills/dbspills.aspx>).

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Date: November 14, 2012

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