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**INTERNATIONAL CYANIDE MANAGEMENT CODE  
GOLD MINING OPERATION VERIFICATION AUDIT  
BARRICK HEMLO, CANADA**

**SUMMARY AUDIT REPORT**

*Submitted to:*



*International Cyanide Management Institute  
888 16<sup>th</sup> Street N.W., Suite 303  
Washington, D.C. 20006*

*and*

*Williams Operating Corporation & DB Operating Corporation  
P.O. Bag 500,  
Marathon, Ontario, Canada  
P0T 2CE0*

*Submitted by:*

*Golder Associates Inc.  
44 Union Boulevard, Suite 300  
Lakewood, Colorado 80228*

September 15, 2010

103-81727

Name of Project: Barrick Hemlo

Project Owner / Operator: Williams Operating Corporation & DB Operating Corporation

Name of Responsible Manager: Andrew Baumen, General Manager

Address and Contact Information: Williams Operating Corporation & DB Operating Corporation  
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Audit Dates: April 19-22, 2010

**Location and Description of Operation**

Barrick Hemlo is a combination of two mine properties (David Bell Mine and Williams Mine). All of the major cyanide facilities are associated with the Williams Mine. The David Bell Mine has a paste plant, thickener and associated pipeline system. The operations of the David Bell Mine and Williams Mine are managed as a single operation. The operation refers to itself as Barrick Hemlo (Hemlo). This report refers to the operation as Hemlo. Hemlo is located in the District of Thunder Bay, Bomby Township near the north shore of Lake Superior, at approximately 85° 53' W longitude and 48° 40' N latitude. The site is adjacent to Highway 17, approximately 37 kilometers (km) east of Marathon, 350 km east of Thunder Bay and 430 km northwest of Sault Ste. Marie.

The active cyanide facilities at the Hemlo operation include:

- Grinding Circuit;
- Gravity Concentration Circuit;
- Pre-Leach Thickener;
- Cyanide Storage Tank and Offload Facility;
- Cyanide Leach Circuit;
- Carbon-In-Pulp (CIP) Circuit;
- Carbon Strip Circuit;
- Barren Solution Tank;
- Loaded Solution Tank;
- Tailings Pump Box;
- Tailing Management System (TMS – includes tailings pond and polishing pond);
- TMS pipeline systems;
- Williams Paste Plant; and
- David Bell Paste Plant.

All milling is at the Williams Mill. The grinding circuit includes two parallel trains, each comprised of a semi-autogenous grinding (SAG) mill, a ball mill, and primary and secondary cyclones. The gravity concentration circuit in each grinding train employs a Knelson concentrator for gravity gold recovery. The grind slurry enters a large pre-leach thickener at approximately 25% solids, and the resulting thickener underflow is transferred to the cyanide leach circuit at approximately 50% solids.

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The cyanide leach circuit consists of nine leach tanks; however, only seven tanks are currently used. Gold is extracted from solution in the CIP circuit, which consists of six tanks. Loaded carbon is stored in two storage vessels. Acid and caustic are used in the carbon strip circuit and the loaded strip solution is pumped to a surge tank prior to entering the electrowinning circuit located within the refinery. Barren strip solution is stored in a surge tank adjacent to the loaded strip solution surge tank. The stripped carbon is reactivated via acid washing and a regeneration kiln.

Tailings from the CIP circuit report to the tailings pump box. Approximately 40% of the tailings are pumped to the two paste plants. One paste plant is located at the Williams site and the other at the David Bell site. Each paste plant is a standalone facility enclosed within a building with an adjacent, external thickener tank. Flyash and cement are used to bind the filtered tailings slurry and the final tailings paste is pumped into the underground mine workings as backfill. The remaining 60% of the CIP tailings are pumped to the tailings pond via a high-density polyethylene (HDPE) pipe with a varying diameter. The TMS consists of a large impoundment separated into two cells by an internal divider dam. One cell (currently the David Bell Pond) receives tailings slurry from the Mill and the filtered tailings solution from the David Bell paste plant. The other cell (currently the Williams Pond) functions as a polishing pond. The function of each cell (i.e., tailings deposition pond or polishing pond) changes periodically as the tailings management plan requires. Reclaim water from the tailings pond is returned to the Mill for use in the grinding circuit.

Sodium cyanide is delivered in liquid form and is offloaded to the cyanide storage tank located within the Mill building at the Williams site. The grinding and process circuits are also located inside the Mill building, with the exception of the large, 215-ft. diameter pre-leach thickener located on the north side of the Mill building. As mentioned above, the paste plants are located within separate buildings and each plant has a thickener tank located outside. The Williams paste plant building and thickener tank are located just northwest of the Mill building. The David Bell paste plant is within the decommissioned David Bell Mill building located at the David Bell site.

Weak Acid Dissociable (WAD) cyanide concentrations in the tailings pond (i.e., David Bell Pond) reclaim water are above 0.5 milligrams per liter (mg/L), generally ranging between 0.002 and 8 mg/L. Therefore, because reclaim water from the tailings pond is returned to the Mill for use in the grinding circuit, the milling and gravity concentration equipment are considered cyanide facilities under requirements of the International Cyanide Management Code (ICMC).

The Hemlo operation also operates an Effluent Treatment Plant (ETP) at the TMS on a seasonal basis (permitted April through November) to treat water from the polishing pond prior to discharge to the receiving environment (surface water). The ETP is designed to precipitate antimony and heavy metals and to adjust pH levels. Reagents used in the process include ferric sulfate and lime. Hemlo relies on natural degradation of cyanide in the polishing pond, and the water is not specifically treated to reduce cyanide levels; although, the plant includes a destruct circuit, which utilizes hydrogen peroxide and copper sulfate in the event cyanide levels are above the allowable discharge standards. The WAD cyanide concentrations in the ETP feed are consistently below 0.5 mg/L. Therefore, for purposes of this certification audit, the ETP is not considered a cyanide facility, although it is considered in relation to water balance requirements.

Hemlo receives liquid sodium cyanide in specially engineered tanker trucks from Cyanco's Cadillac Facility. The sodium cyanide is delivered by Quality Carrier's Inc. Cyanco and Quality Carriers are signatory to the Code. Cyanco is certified as compliant with the International Cyanide Management Code (Code). Quality Carriers has submitted their third-party audit to the ICMI and is awaiting approval.

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Hemlo stores and manages sodium cyanide in engineered tanks, pipelines and a tailings storage facility that have had appropriate Quality Assurance and Quality Control (QA/QC). Hemlo employees are trained in cyanide hazards and first aid, first response, emergency response, and specific operational task training. Hemlo facilities are fenced to preclude wildlife and livestock from entering reagent grade cyanide process areas. Hemlo conducts inspections to assure that facilities are functioning as designed and to monitor process solutions. Preventive maintenance programs are in place to assure the continuous operations. Hemlo has approved closure and reclamation plans along with financial assurance to support the appropriate management of cyanide solutions and solids.

Hemlo has identified potential cyanide exposure scenarios and developed plans and standard operating procedures to eliminate, reduce and control exposure to cyanide. Operating plans and individual task specific SOPs provide details for safe storage, handling and distribution of sodium cyanide liquid; safe operation of cyanide equipment; personal protective equipment (PPE) requirements; and inspection requirements.


Environmental and wildlife monitoring associated with the cyanide facilities is conducted and reported to regulatory agencies.

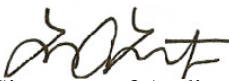
**Auditors:** Pamela Stella, Lead Auditor and Gold Mining Technical Expert Auditor  
Ivón Aguinaga, Gold Mining Technical Expert Auditor  
Mark Montoya, Outside Auditor

**The operation is**  **in full compliance with** **All Code Principles**  
 in substantial compliance with  
 not in compliance with

Audit Company: **Golder Associates Inc.**  
 Audit Team Leader: **Pamela J. Stella, CEA**  
 E-mail: [Pamela\\_Stella@golder.com](mailto:Pamela_Stella@golder.com)

Names and Signatures of other Auditors:

G. Ivón Aguinaga		September 15, 2010
Name of Auditor	Signature of Auditor	Date

Mark Montoya		September 15, 2010
Name of Auditor	Signature of Auditor	Date

I attest that I meet the criteria for knowledge, experience and conflict of interest for Code Verification Audit Team Leader, established by the 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 Verification Protocol for Gold Mine Operations and using standard and accepted practices for health, safety and environmental audits.

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**1. PRODUCTION:** *Encourage responsible cyanide manufacturing by purchasing from manufacturers who operate in a safe and environmentally protective manner.*

Standard of 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.*

The operation is  **in full compliance with**  
 in substantial compliance with **Standard of Practice 1.1**  
 not in compliance with

**Basis for Audit Finding:** Hemlo has committed to only purchase cyanide from producers that are compliant with the Code. Cyanco is the cyanide supplier to Hemlo since January 2009. Cyanco purchases the solid sodium cyanide from E.I. DuPont de Nemours and Company (DuPont) in Memphis, Tennessee. The solid cyanide is rail shipped to Cyanco's Cadillac, Ontario, Canada facility, offloaded and then dissolved into 30% liquid sodium cyanide. The Cadillac facility was initially certified as CyPlus Corporation on January 4, 2007. The facility was purchased by Cyanco in 2008. Cyanco and DuPont are both signatory to the Code. Personal communication with Mr. Norm Greenwald of the ICMI indicated that Cyanco has submitted their re-certification report for the Cadillac Facility to the ICMI in a timely manner and is awaiting completeness review by the ICMI. DuPont's production facility has been re-certified in full compliance with the Code on December 1, 2009.

**2. TRANSPORTATION:** *Protect communities and the environment during cyanide transport.*

Standard of 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.*

The operation is  **in full compliance with**  
 in substantial compliance with **Standard of Practice 2.1**  
 not in compliance with

**Basis for Audit Finding:** The transporters in the supply chain include: Canadian National Railway and Quality Carrier's Inc., trucking company. The Canadian National Railway takes custody of the rail boxcars at the DuPont's Memphis plant to the Cadillac facility in Canada. Quality Carriers Inc. is the trucking company responsible for delivery of the liquid cyanide from Cyanco's Cadillac facility to the Williams mine. In March 2010, DuPont became an ICMI signatory cyanide transporter, acting in the role of a consignor for the rail supply chain. DuPont listed the US/Canada Rail Supply Chain from their Memphis production plant to the customer locations in US and Canada. Personal communication with Mr. Norm Greenwald of the ICMI indicated that DuPont has submitted their certification report for the Canadian National Railway to the ICMI in a timely manner (within the ICMI required timeframe) and is awaiting completeness review by the ICMI. In May 2010, Quality Carriers Inc. became an ICMI signatory transporter. Prior to May 2010, Quality Carriers Inc. was the transporter for DuPont to Hemlo and had a due diligence audit completed (in 2006) by an ICMI approved transporter auditor as required by the ICMI at that time. Quality Carriers Inc. is the trucking company responsible for delivery of the liquid cyanide from Cyanco's Cadillac facility to the Williams mine. Personal communication with Mr. Norm Greenwald of the ICMI indicated that Quality Carriers Inc. has submitted their certification report to the

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ICMI, the ICMI completed their completeness review, and found them to be in full compliance. The ICMI is awaiting an approval letter from Quality Carriers to publish the summary report on the ICMI website.

The Barrick contract with Cyanco specifically identifies the ICMI requirements as a provision for transportation. The cyanide supply contract between Barrick and Cyanco also specifies that Hemlo takes ownership of the product at the time the liquid cyanide is delivered into the cyanide storage tank at the mine site.

Standard of Practice 2.2: *Require that cyanide transporters implement appropriate emergency response plans and capabilities and employ adequate measures for cyanide management.*

The operation is  in full compliance with **Standard of Practice 2.2**  
 in substantial compliance with  
 not in compliance with

**Basis for Audit Finding:** The transporters in the supply chain include: Canadian National Railway and Quality Carrier's Inc., trucking company as described in Standard of Practice 2.1. In March 2010, DuPont became an ICMI signatory cyanide transporter, acting in the role of a consignor for the rail supply chain. DuPont listed the US/Canada Rail Supply Chain from their Memphis production plant to the customer locations in US and Canada. Personal communication with Mr. Norm Greenwald of the ICMI indicated that DuPont has submitted their certification report for the Canadian National Railway to the ICMI in a timely manner (within the ICMI required timeframe) and is awaiting completeness review by the ICMI. In May 2010, Quality Carriers Inc. became an ICMI signatory transporter. Prior to May 2010, Quality Carriers Inc. was the transporter for DuPont to Hemlo and had a due diligence audit completed (in 2006) by an ICMI approved transporter auditor as required by the ICMI at that time. Quality Carriers Inc. is the trucking company responsible for delivery of the liquid cyanide from Cyanco's Cadillac facility to the Williams mine. Personal communication with Mr. Norm Greenwald of the ICMI indicated that Quality Carriers Inc. has submitted their certification report to the ICMI, the ICMI completed their completeness review, and found them to be in full compliance. The ICMI is awaiting an approval letter from Quality Carriers to publish the summary report on the ICMI website. Bills of lading were reviewed to confirm that the cyanide was, in fact, transported by Canadian National Railway and Quality Carriers Inc.

**3. HANDLING AND STORAGE:** *Protect workers and the environment during cyanide handling and storage.*

Standard of 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.*

The operation is  in full compliance with **Standard of Practice 3.1**  
 in substantial compliance with  
 not in compliance with

**Basis for Audit Finding:** The facilities for the unload and storage of cyanide have been designed and constructed in accordance with sound and acceptable engineering practices. The design and construction of the cyanide unload and storage facilities including piping have been completed appropriately as

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documented in final design and construction drawings prepared and stamped by a licensed engineer. The drawings include concrete and reinforcing layout, concrete elevations and section, steel fabrication details, liquid cyanide storage fabrication details, equipment and piping layout and elevations, piping details, and cyanide supply piping to barren strip area.

Liquid cyanide is unloaded into the cyanide storage tank located inside the Williams mill building. The unloading and storage area is located away from public access. All personnel with access to the unloading and storage facilities, including contractors receive site-specific health and safety training that includes cyanide hazard awareness. The cyanide unload pad on which the tanker truck parks when unloading liquid cyanide is constructed with cast-in-place reinforced concrete with curbed containment. The concrete unload pad is an adequate barrier to prevent seepage to the subsurface. All leakage on the offload pad and the tank containment area would gravity drain to the leach circuit containment sump via a polyvinyl chloride drainpipe connecting the two sumps and ultimately pumped into the process circuit. The tanker unload containment allows containment and recovery of all spilled solution. The Williams cyanide storage tank has level indicators (a pressure transducer and a float) and a high level alarm that prevent the overfilling. In addition, the cyanide levels within the tanks can be monitored from the control room. The cyanide supplier, Cyanco, has remote telemetry monitoring of the cyanide tank level to track cyanide usage and inventory, allowing them to dispatch cyanide loads when needed. The cyanide storage tank is located inside the Williams mill building and has adequate ventilation. The Williams mill building is within the fenced complex of the Williams Mining operation. There are no unsecured valves at the cyanide storage tank or unload system that would allow direct access to the liquid cyanide. Williams has isolated the cyanide storage tank and unload pad away from incompatible chemicals such as acids, strong oxidizers and explosives. No smoking or eating is allowed near the cyanide storage area or in the mill.

*Standard of Practice 3.2: Operate unloading, storage and mixing facilities using inspections, preventive maintenance and contingency plans to prevent or contain releases and control and respond to worker exposures.*

**The operation is**       **in full compliance with**  
                                   in substantial compliance with      **Standard of Practice 3.2**  
                                   not in compliance with

**Basis for Audit Finding:** Hemlo and the cyanide supplier have developed SOPs to prevent exposures and releases during cyanide unloading. The procedures include a description and photograph of the valves and couplings on the tanker and the unload connections to operate to complete a liquid cyanide unload. Unload procedures by Cyanco and Hemlo were reviewed. The procedures cover the responsibilities for the transporter and the Hemlo operator. Unloading does not occur until a Hemlo operator is present to observe compliance with the PPE requirements, truck parking and chocking, and to unlock the unload piping. Both the transporter and the Hemlo operator check to confirm that the storage has sufficient capacity for the unload. The Hemlo operator is trained in the transporter PPE requirements, procedures, and emergency shut off locations. The transporter and the Hemlo operator have access to PPE, cyanide antidote and oxygen in the case of an emergency. The Hemlo operator observes the entire offload event including the disconnection upon completion of the offload.

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**4. OPERATIONS:** *Manage cyanide process solutions and waste streams to protect human health and the environment.*

Standard of Practice 4.1: *Implement management and operating systems designed to protect human health and the environment utilizing contingency planning and inspection and preventive maintenance procedures.*

The operation is  **in full compliance with** **Standard of Practice 4.1**  
 in substantial compliance with  
 not in compliance with

**Basis for Audit Finding:** The Hemlo operation has developed written management, operating and contingency plans and procedures for all cyanide facilities at the Williams and David Bell operations. The operating plans and procedures developed and implemented by Hemlo, which include task-specific SOPs and procedures to identify and evaluate operational changes, cover safe operation and management of the facilities. Additionally, Hemlo provides basic and specialty common core training modules to all Mill and process circuit operators, which provides the procedures that workers follow for the safe and proper operation of the Mill and process area equipment.

Hemlo has implemented inspection programs for cyanide facilities at the Williams and David Bell operations. These inspections cover the cyanide offload area, leach circuit, CIP circuit and carbon strip circuit, and include visual inspections of reagent pumps, process tanks, and piping for leaks and signs of corrosion, as well as containment areas. In addition to the daily process area inspections, safety inspections of the cyanide offload facility are conducted upon each delivery event. Hemlo also conducts routine inspections of the tailings systems and performs wildlife inspections daily, at minimum. The combination of inspections performed by operations, maintenance and safety personnel adequately encompass the cyanide facilities to ensure their safe and environmentally sound operation.

Hemlo has implemented a PM program for critical equipment. The PM schedule provides a listing of the equipment along with the planned time for maintenance. The PM system is managed using Oracle® software, which automatically produces PM work orders on an established schedule.

The Hemlo operation maintains two diesel power generators on site. The primary generator is located in the Mill building and a secondary generator is located at the tailings impoundment. The generator located in the Mill is capable of powering all critical process equipment during primary power outages.

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

The operation is  **in full compliance with** **Standard of Practice 4.2**  
 in substantial compliance with  
 not in compliance with

**Basis for Audit Finding:** The Hemlo operation has implemented a continuous cyanide reduction program to optimize the use of cyanide and to control WAD cyanide concentrations discharged to the tailings pond. The end of pipe (end spill) target concentration at the discharge to the tailings pond is less than (<) 50 mg/L WAD cyanide. This value is based on the numerical guideline established by the ICMC for limiting exposure to wildlife in open waters. Hemlo uses an automated online cyanide monitor and

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controller to regulate, and minimize, cyanide addition at the leach circuit and also performs manual titrations every two hours, to supplement data generated by the online system.

*Standard of Practice 4.3: Implement a comprehensive water management program to protect against unintentional releases.*

The operation is  in full compliance with **Standard of Practice 4.3**  
 in substantial compliance with  
 not in compliance with

**Basis for Audit Finding:** Hemlo has developed a comprehensive, probabilistic water balance model, using Microsoft Excel© software, which tracks water flow throughout the engineered water management facilities at the Williams and David Bell sites, including the mines, Mill complex, and the tailings impoundment. Hemlo uses the 1:10-year wet runoff event to forecast water management requirements although the water balance model can be used to evaluate conditions for variable storm events as well. The design maximum operating water level in the TMS ponds is three meters below the embankment crests to allow for retention of a 24-hour PMP event while maintaining 0.5 meters of freeboard. Onsite precipitation data is collected by the Environmental Department and is used to recalibrate the water balance model on a monthly basis.

The operating manual for the tailings facility describes the operating standards and procedures for the transport and containment of tailings, process water recycling, effluents and residues to ensure the economical, safe, and environmentally responsible storage and disposal of tailings and the management of water. Hemlo conducts operational and environmental inspections to evaluate the condition of the entire tailings management system. The Environmental Department inspects the water levels in the tailings facility two times per week, bathymetric surveys are conducted every six months, and the design engineer conducts annual inspections of the facility embankments.

An overflow weir and launder system continuously maintains the solution level in the pre-leach thickener structure at a level approximately 1.5 feet below the top of the concrete ring wall. The overflow system reports to the process water tank located inside the Mill building, which feeds the grinding circuit. If the overflow system were to become blocked, process water would be lost and the grinding mills would shut down.

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

The operation is  in full compliance with **Standard of Practice 4.4**  
 in substantial compliance with  
 not in compliance with

**Basis for Audit Finding:** The tailings impoundment and the pre-leach thickener structure are the only facilities at the Hemlo operation in which open cyanide-bearing solutions are stored. The operation does not have other active solution ponds, open solution channels, or sumps. Hemlo manages its cyanide addition rates at the cyanide leach circuit to optimize cyanide use while maintaining WAD cyanide concentrations below 50 mg/L at the discharge to the tailings pond. Dilution water is added at the final tailings pump box to further lower cyanide concentrations in the tailings stream, if necessary. Since WAD cyanide concentrations are maintained below 50 mg/L in the TMS, no other protective measures for wildlife have been implemented.

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The sole source of water introduced into the pre-leach thickener structure is reclaim water from the TMS, which is also used in the grinding mill. WAD cyanide concentrations in the TMS reclaim water are well below 50 mg/L. Therefore, wildlife protective measures have not been implemented at the structure.

The tailings impoundment and related systems are inspected on a daily basis and site-wide wildlife monitoring is conducted four times daily. Field personnel are trained to report wildlife observances according to the Hemlo Wildlife Management Procedure.

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

**The operation is**  **in full compliance with**  
 in substantial compliance with **Standard of Practice 4.5**  
 not in compliance with

**Basis for Audit Finding:** The Hemlo operation operates an Effluent Treatment Plant (ETP) at the tailings facility on a seasonal basis (permitted April through November) to treat water from the polishing pond prior to discharge to the receiving environment (surface water). The plant is designed to precipitate antimony and heavy metals and to adjust pH levels and water is not specifically treated to reduce cyanide levels; although, the plant includes a destruct circuit, which utilizes hydrogen peroxide and copper sulfate in the event cyanide levels are above the allowable discharge standards. Samples are taken three times each week during the treatment season according to Hemlo's Industrial Sewage Works Certificate of Approval with the Ontario Ministry of Environment (MOE).

Effluent from the ETP is discharged to an ephemeral wash, which drains to Frank Lake (the receiving water body downstream of the end-of-pipe discharge point). Water quality at Frank Lake is sampled four times each year (March, May, August, and October). End-of-pipe WAD cyanide concentrations for the ETP effluent over the last treatment season (April 30, 2009 through November 13, 2009) were all below 0.5 mg/L. WAD and Total cyanide concentrations at Frank Lake were 0.002 mg/L or less and 0.005 mg/L or less, respectively, for all sampling events in 2008 and 2009. The Hemlo operation does not have an indirect discharge of cyanide solutions to surface waters and is not subject to a designated beneficial use for surface water.

Regarding surface water quality standards, in accordance with its Industrial Sewage Works Certificate of Approval, the effluent limit is a monthly average concentration limit of 2.0 mg/L. Total cyanide and the effluent being discharged to Frank Lake shall not be acutely toxic. The operation is also subject to a regulatory requirement to monitor surface water monthly and compare results to Provincial Water Quality Objectives (PWQO) for annual reporting purposes only (i.e., concentrations above the PWQO are not considered regulatory exceedances). The PWQO for cyanide is 0.005 mg/L Free. Monitoring results are reported annually to the Ontario MOE.

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

**The operation is**  **in full compliance with**  
 in substantial compliance with **Standard of Practice 4.6**  
 not in compliance with

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**Basis for Audit Finding:** The Hemlo tailings facility consists of a large impoundment separated into two cells by an internal divider dam. One cell receives tailings slurry from the Mill and the filtered tailings solution from the David Bell paste plant. The other cell functions as a polishing pond. The facility is designed, constructed, and operated to prevent seepage through the dam and foundations. The containment embankments are constructed with a low permeability compacted till core. The divider dam separating the tailings pond and the polishing pond is a permeable structure. Collector dikes and seepage collection sumps are located along the perimeter of the facility at the downstream toes of the containment embankments. The tailings slurry delivery and water reclaim pipelines are constructed of HDPE material and are predominately located above ground to facilitate regular inspections. A series of catch basins and dump ponds exist along the tailings pipeline corridors to collect and control inadvertent pipeline releases or leakage.

Hemlo conducts regular monitoring of the tailings pond water levels and volumes to ensure that the operating criteria are being met. In addition, regular monitoring of groundwater quality is conducted to ensure that the facility is functioning as designed and protective of the environment. Water quality data for 2009 demonstrates that WAD, Total, and Free cyanide concentrations at the groundwater monitoring locations were below the detection limits (i.e., <0.002 mg/L WAD and Total, and <0.005 mg/L Free). There are no regulatory water quality standards for cyanide in Ontario, nor are there identified beneficial uses of groundwater for the Hemlo operation.

The 215-ft diameter pre-leach thickener has concrete walls (ring beam) and a floor constructed of two layers of compacted sand with a 1-mm thick HDPE geomembrane placed between the upper and lower sand layers. The floor system is supported by compacted rockfill, sloped to the center. The entire structure is partially embedded in rockfill with approximately two-thirds of the concrete ring wall exposed. Therefore, this large structure essentially functions as a synthetic-lined pond. The physical integrity of the facility is inspected regularly and an overflow weir and launder system continuously maintains the solution level in the pre-leach thickener structure at a level approximately 1.5 feet below the top of the concrete ring wall. The facility does not employ a leak detection system and Hemlo does not conduct groundwater monitoring directly downgradient of the structure.

*Standard of Practice 4.7: Provide spill prevention or containment measures for process tanks and pipelines.*

<b>The operation is</b>	<input checked="" type="checkbox"/>	<b>in full compliance with</b>	<b>Standard of Practice 4.7</b>
	<input type="checkbox"/>	in substantial compliance with	
	<input type="checkbox"/>	not in compliance with	

**Basis for Audit Finding:** With the exception of the thickeners, all cyanide storage and process tanks at the Hemlo operation are located inside buildings within concrete secondary containment (concrete floors and stem walls). The large pre-leach thickener structure is located outside, on the north side of the Mill building. The Williams and David Bell paste plant facilities are located inside individual buildings within concrete secondary containment (concrete floors and stem walls). The paste plant thickener tanks are located outside of each plant. Stormwater controls and sedimentation ponds provide secondary containment for the pre-leach and paste plant thickeners. The Williams paste plant thickener has a concrete ring beam foundation with a leak detection and recovery system installed. The foundations for all other process tanks containing cyanide solution and slurry provide an impermeable barrier between the tank bottoms and the ground. Secondary containments for cyanide process tanks within the process buildings are sized to contain a volume greater than that of the largest tank within the containment and any piping draining back to the tank. The ponds, which provide secondary containment for the large

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thickeners are adequate to contain the volume and design storm event. The pond at the Williams site incorporates a pumping system, to provide additional capacity to account for the design storm event.

The concrete secondary containments provided for the cyanide process tanks in the Mill building and the paste plants have concrete floor sumps with dedicated pumps to collect and remove cyanide solution and slurry spillage for return to the process circuits. The Hemlo Spill Prevention and Contingency Program includes a specific procedure for the sampling and remediation of contaminated soil to prevent adverse impacts on surface water or groundwater. The procedure also provides instructions for the proper disposal of cyanide-contaminated soil, which include returning the material to the Mill process or placing it in tailings facility. Hemlo prohibits the use of the sediment ponds at the Williams and David Bell sites for containment of material from the paste plant thickeners except in emergency situations.

Hemlo has constructed cyanide process pipelines with spill prevention and containment measures to collect leaks and prevent releases. Leak detection measures implemented for the tailings pipelines include a differential flow alarm system and an infrared/optical monitoring system. Hemlo implemented a pipe-in-pipe system along a portion of the pipeline corridor between the Mill and the tailings facility where it runs alongside an environmentally sensitive area. Hemlo has also implemented a robust inspection program along the pipeline corridors. The corridors are patrolled and inspected daily. Based on the physical controls and inspection program implemented by Hemlo, adequate spill prevention and containment measures are provided for the tailings pipeline system.

Hemlo uses steel, HDPE and PVC pipelines for conveyance of cyanide solutions and slurries. All cyanide storage and process tanks are steel. These materials are compatible with cyanide and high pH solutions.

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

<b>The operation is</b>	<input checked="" type="checkbox"/> <b>in full compliance with</b> <input type="checkbox"/> in substantial compliance with <input type="checkbox"/> not in compliance with	<b>Standard of Practice 4.8</b>
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**Basis for Audit Finding:** Hemlo implemented QA/QC programs during construction of new cyanide facilities and modifications to existing facilities; however, the operation could not provide evidence of the QA/QC reports for all facilities during the onsite certification audit. Therefore, subsequent to the onsite audit, Hemlo commissioned an outside engineering firm to perform field inspections of those facilities for which QA/QC documentation was unavailable. The report concluded that the facilities and associated equipment inspected, have been constructed and are operated in general accordance with industry standards of practice and care. The inspection report was certified by a structural engineer and a mechanical engineer, licensed in the Province of Ontario. Qualified persons prepared all other QA/QC documentation.

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Standard of Practice 4.9: *Implement monitoring programs to evaluate the effects of cyanide use on wildlife surface and ground water quality.*

The operation is  **in full compliance with** **Standard of Practice 4.9**  
 in substantial compliance with  
 not in compliance with

**Basis for Audit Finding:** Hemlo has prepared and implemented written standard procedures for monitoring activities to evaluate the effects of cyanide use on wildlife, surface water and groundwater quality. The environmental programs have been prepared, approved and implemented by qualified professionals and include all appropriate sampling and analysis documentation. Review of field sampling forms, chain of custody and quality assurance data was completed.

Hemlo conducts monitoring at frequencies adequate to characterize the surface water and groundwater quality and wildlife mortalities. WAD cyanide concentrations for the ETP effluent are monitored over each treatment season and water quality at Frank Lake (receiving water) is sampled four times each year. Hemlo conducts surface water sampling for cyanide monthly and quarterly at numerous monitoring locations site wide, including two monitoring points located immediately downgradient of the tailings facility embankments. Hemlo conducts semiannual monitoring of groundwater quality at numerous groundwater wells surrounding the tailings impoundment. Wildlife monitoring is integrated into the daily inspections performed at the tailings facility and field personnel are trained to report wildlife observances.

**5. DECOMMISSIONING:** *Protect communities and the environment from cyanide through development and implementation of decommissioning plans for cyanide facilities.*

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

The operation is  **in full compliance with** **Standard of Practice 5.1**  
 in substantial compliance with  
 not in compliance with

**Basis for Audit Finding:** Hemlo has developed written plans and procedures to decommission their cyanide facilities at the cessation of operations. Hemlo has two separate closure plans, one for David Bell and another for the Williams Mine. The Williams Operating Corporation Mine Closure Plan includes management of cyanide solutions, rinsing and disposal of piping, tanks and other equipment and collection and control of seepage. The David Bell plan included measures that have been implemented at David Bell to date including removal of all supplies of cyanide associated with the former milling operations and removal of unnecessary mill equipment and the removal of the liquid cyanide storage tank. Both plans include a schedule of closure activities. The schedule is described in yearly increments starting within one year of a decision to commence close out.

The Ontario Ministry of Northern Development and Mines (MNDMF) requires that mine closure liabilities be externally reevaluated with every process modification and Barrick internally requires the closure plan to be updated every year as part of its Asset Retirement Obligation Policy.

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

The operation is  **in full compliance with** **Standard of Practice 5.2**  
 in substantial compliance with  
 not in compliance with

**Basis for Audit Finding:** Hemlo has developed a cost estimate for the funding of third party implementation of the decommissioning activities for David Bell and Williams Mines. The cost estimates for David Bell and Williams Mine have been reviewed and approved by the MNDMF. Hemlo is required by the MNDMF to review and update the cost estimate at least every five years or as required by changes in planned disturbances. Barrick requires ongoing annual review and update of the Life of Mine Plan. Hemlo has established approved financial mechanisms to cover the estimated costs for cyanide related decommissioning activities. Barrick has an independent review of the Corporate Guarantee conducted by independent Certified Public Accountants to verify that the funds are available. This report is to be updated every 5 years.

**6. WORKER SAFETY:** *Protect workers' health and safety from exposure to cyanide.*

Standard of Practice 6.1: *Identify potential cyanide exposure scenarios and take measures as necessary to eliminate, reduce and control them.*

The operation is  **in full compliance with** **Standard of Practice 6.1**  
 in substantial compliance with  
 not in compliance with

**Basis for Audit Finding:** Hemlo has developed written Standard Operating Procedures (SOPs) and Operating Plans that describe how cyanide related tasks are performed. These plans and procedures cover the safe operation of the entire cyanide management facilities at the Williams and David Bell operations. Individual task specific SOPs provide details for safe operation of cyanide equipment, PPE requirements and inspection requirements. Hemlo has also signage for PPE requirements located at the entrances of the process areas. In addition, cyanide training materials discuss PPE requirements.

Barrick has a Management of Change (MOC) Procedure that includes the methods to be used to manage changes at all Barrick Gold operations and sites. The procedure includes minimum standards to ensure changes that impact safety, health, environment or productivity are identified, assessed, managed and appropriately communicated to all affected personnel. All changes are communicated to the workforce and training requirements updated. Hemlo has safety meetings to provide information and training to employees as well as solicit input from employees on worker safety issues.

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

The operation is  **in full compliance with** **Standard of Practice 6.2**  
 in substantial compliance with  
 not in compliance with

**Basis for Audit Finding:** Hemlo has determined the appropriate pH for limiting the evolution of hydrogen cyanide gas (HCN). The pH is monitored on a regular basis to maintain its concentration as

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recommended in the operating plans. Daily pH logs were reviewed to verify compliance. Fixed HCN monitors are installed in areas of potential exposure to cyanide. In addition, Hemlo requires the use of portable HCN meters to conduct work in areas where cyanide is present and fixed HCN monitors are not installed. Prior to maintenance work or confined space entry, work areas are checked for HCN concentrations with a portable HCN meter. HCN meters (fixed and portable) are set at 4.7 ppm low level alarm and 10 ppm high level alarm. Low level alarms require investigation and high level alarms require evacuation. HCN monitors are maintained, calibrated and inspected as recommended by the manufacturer.

Warning signs are in areas where cyanide is used to alert workers that cyanide is present, that smoking, open flames, eating and drinking are not allowed and that the necessary cyanide-specific PPE must be worn. Pipes carrying cyanide are marked and the direction of flow is indicated with arrows on the pipe. Signage for confined spaces at the tank entry points has also been placed.

Showers, low-pressure eye wash stations and non-acidic sodium bicarbonate fire extinguishers are located at strategic locations throughout the operation and are maintained, inspected and tested on a regular basis. Showers and eyewash stations were inspected and determined to be operational. MSDS are available through the Canadian Centre for Occupational Health and Safety website. This service is used by Hemlo to provide up to date MSDS. If the website is unavailable, a person can see Security to obtain hard copies of MSDS. First aid procedures for cyanide are also available in areas where cyanide is managed. The MSDS and first aid procedures are in English, the language of the workforce. Hemlo has and implements procedures for accident and incident investigations. These procedures include actions to determine the reason why the accident/incident occurred, and identify the corrective actions and/or controls to take to prevent similar occurrences in the future.

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

The operation is  in full compliance with **Standard of Practice 6.3**  
 in substantial compliance with  
 not in compliance with

**Basis for Audit Finding:** There are cyanide antidote kit (amyl nitrite and oxygen) at the cyanide offloading area and in other different areas of the process building. In addition, Hemlo has a telephone and alarm system in the offloading area. The medical unit and the emergency response vehicle (ERV) also have cyanide antidotes (amyl nitrite, sodium thiosulfate, sodium nitrite, oxygen and Automated External Defibrillator (AED)). Cyanide antidotes are stored in locked refrigerators and are within expiration dates. First aid equipment is inspected regularly. All operators working with cyanide carry a radio to notify the control room or their supervisor in case of an emergency.

Hemlo has developed written emergency response plans for cyanide exposures. These plans include emergency actions for HCN Elevated Levels, PPE, First Aid for Cyanide Poisoning including the Cyanide Antidote Use and Decontamination Procedures, Major Releases of Liquid, Transportation Events, Offsite and Onsite, Releases during Fire and Explosion Events, Pipe, Tank and Ruptures, and Overflow of Ponds and Impoundment Areas. The plan also includes emergency contact information, accounting for employees and mill evacuation.

Hemlo has a trained and equipped Emergency Response Team (ERT). Qualifications range from Emergency Medical Technician (EMT), First Responder, Firefighting, Rescue and HazMat certifications.

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Every shift has a responder trained to administer amyl nitrite and oxygen. In addition, Hemlo has an on-site medical unit that is staffed with a nurse. There is also a physician who provides 24 hour medical services over the telephone if the nurse calls him.

Hemlo made formalized arrangements with the Wilson Memorial General Hospital located in Marathon, Ontario, to provide assistance to workers exposed to cyanide. Hemlo has determined the facility has adequate, qualified staff, equipment and expertise to be able to respond effectively. Hemlo has developed procedures to transport workers exposed to cyanide to the hospital. Hemlo conducts mock emergency drills based on likely cyanide release/exposure scenarios to test the response procedure, and incorporates lessons learned from the drills into its response planning.

**7. EMERGENCY RESPONSE:** *Protect communities and the environment through the development of emergency response strategies and capabilities.*

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

The operation is  in full compliance with  
 in substantial compliance with **Standard of Practice 7.1**  
 not in compliance with

**Basis for Audit Finding:** Hemlo has developed several plans and SOPs that address emergency response to potential accidental releases of cyanide. Hemlo plans contain procedures for potential scenarios such as: 1) cyanide intoxication; 2) accidents during cyanide transportation; 3) releases during offloading; 4) release of cyanide during fires and explosions; 5) pipe, valve or tank ruptures; 6) overtopping of ponds and impoundments; 7) power failure; 8) uncontrolled seepage; 9) tailings impoundment failure; 10) cyanide spill control and clean-up; and 11) decontamination and emergency evacuation.

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

The operation is  in full compliance with  
 in substantial compliance with **Standard of Practice 7.2**  
 not in compliance with

**Basis for Audit Finding:** Hemlo has involved its workforce and stakeholders in the emergency response planning through safety meetings and mock drills. Hemlo also meets with local response agencies to discuss its emergency response planning. Hemlo conducted a meeting with representatives of the Wilson Memorial General Hospital, the Marathon Fire Department, the Ontario Provincial Police (OPP), and the Marathon ambulance to distribute its Site Awareness Presentation on Sodium Cyanide and discuss Code requirements and its emergency response plans. Hemlo sponsors and conducts “Communities of Interest Meetings” with the participation of local communities. These meetings are conducted periodically and members of the general public and government leaders are encouraged to attend and discuss issues related to the mining operation including the use of cyanide at the mine site and the emergency response plans. The “Surface Emergency Procedures” Plan includes updated contact information of local response agencies (e.g., the Marathon Fire Department, Manitouwadge Fire Department, Marathon ambulance, hospital, OPP and others).

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

**The operation is**  **in full compliance with**  
 in substantial compliance with **Standard of Practice 7.3**  
 Not in compliance with

**Basis for Audit Finding:** Hemlo has committed in its emergency response plans the necessary emergency response equipment and first aid to manage all cyanide incidents at the operation and to coordinate transportation to the nearest medical facility. The emergency response plans include the anticipated roles and responsibilities of emergency response coordinators as well as an updated list of the members of the ERT. The plans also include call out procedures and 24-hour contact information for the management and emergency control team. Hemlo has a list of its emergency response equipment (e.g., fire, cyanide exposure and spill response equipment). All emergency equipment and supplies are inspected on a regular basis.

Emergency responders are required to be trained in Advanced Medical First Aid, HazMat and Firefighting. Some responders are EMT and Mine Rescue certified. All ERT members are trained in first aid and emergency response for cyanide exposure including the use of the emergency response equipment.


Hemlo has its own on-site capabilities for Firefighting, HazMat Clean-up and Medical Emergency. Hemlo made formalized arrangements with the Wilson Memorial General Hospital located in Marathon, Ontario, to provide assistance to workers exposed to cyanide. Hemlo had confirmed that these response agencies are aware of their involvement and are included as necessary in mock drills. Contact information of the ambulance and hospital is included in the "Surface Emergency Procedures" Plan.

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

**The operation is**  **in full compliance with**  
 in substantial compliance with **Standard of Practice 7.4**  
 not in compliance with

**Basis for Audit Finding:** The "Surface Emergency Procedures" plan includes procedures and contact information for notifying the management, regulatory agencies (e.g., Ministry of Labor (MOL), Ministry of Natural Resources, Mine Rescuer Officer, Ontario MOE, Environment Canada and other regulatory agencies) and outside response providers (e.g., Marathon Fire Department, Manitouwadge Fire Department, Marathon ambulance, hospital and OPP). The Contingency Plan for Notification of Downstream Users includes procedures and contact information for notifying the communities. The "Surface Emergency Procedures" Plan includes procedures for communication with the media.

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Standard of Practice 7.5: *Incorporate into response plans and remediation measures monitoring elements that account for the additional hazards of using cyanide treatment chemicals.*

**The operation is**  **in full compliance with**  
 in substantial compliance with **Standard of Practice 7.5**  
 not in compliance with

**Basis for Audit Finding:** The “Spill Prevention and Contingency Program” requires that immediate measures be taken to shutdown and isolate the source of the spill to minimize the spill quantity. Emergency containment structures would be constructed to minimize the extent of any releases to prevent released material from reaching natural drainages. The spilled solution will be removed and recovered back into the mill process or deposited in the tailings pond, as necessary. Soils samples will be taken following clean up to confirm complete removal of all cyanide contaminated materials. The plan describes what final cyanide concentration will be allowed in residual soil as evidence that the release has been completely cleaned up. Hemlo does not consider the use of chemicals such as sodium hypochlorite, ferrous sulfate and hydrogen peroxide to treat cyanide that has been released into surface waters.

The “Spill Prevention and Contingency Program” addresses the potential need for environmental monitoring to identify the extent and effect of a cyanide release. The plan includes a sampling protocol for spills to the environment. The protocol includes soils and water sampling procedures, parameters, sampling methodologies and potential sampling schedule and locations.

Hemlo has two approved permits to take water from White Lake for the purpose of emergency drinking water supply.

Standard of Practice 7.6: *Periodically evaluate response procedures and capabilities and revise them as needed.*

**The operation is**  **in full compliance with**  
 in substantial compliance with **Standard of Practice 7.6**  
 not in compliance with

**Basis for Audit Finding:** The emergency response plans are reviewed and evaluated annually through the Intellex document review system. Hemlo 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. The emergency response plans are also reviewed following any incident or mock drill requiring their implementation.

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**8. TRAINING: Train workers and emergency response personnel to manage cyanide in a safe and environmentally protective manner.**

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

The operation is  in full compliance with **Standard of Practice 8.1**  
 in substantial compliance with  
 not in compliance with

**Basis for Audit Finding:** Hemlo provides initial training and annual refresher training to all employees on Sodium Cyanide Site Awareness. This cyanide training includes Code Compliance requirements, uses of cyanide at Hemlo, location of cyanide, cyanide offloading, physical appearance, cyanide properties, cyanide exposure, precautions, HCN alarms, exposure limits, symptoms of exposure and emergency response. Hemlo retains all cyanide training records for all employees. Training records include the names of the employee and the trainer, the date of training, the topics covered, and test results demonstrating an understanding of the training.

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

The operation is  in full compliance with **Standard of Practice 8.2**  
 in substantial compliance with  
 not in compliance with

**Basis for Audit Finding:** In addition to the “Sodium Cyanide Site Awareness Training,” all personnel in job positions that involve the use of cyanide and cyanide management (including offloading, production and maintenance) receive a “Sodium Cyanide Mill Training.” This training covers where the cyanide is used in the process, physical appearance, cyanide properties, pH and HCN Evolution, cyanide exposure limits, routes of exposures and human effects, HCN monitoring (portable and fixed HCN monitors), HCN monitor alarms, safety showers, Flynn kits – cyanide antidote, cyanide handling and offloading, PPE, leach circuit cyanide addition, maintenance procedures, cyanide SOPs and information, symptoms of exposure, emergency call procedures, first aid response (mild and severe poisoning), cyanide fire and cyanide spill response and clean up. Task-specific training is also provided prior to working with cyanide independently. Task specific training includes all cyanide related SOPs and Operating Plans and covers all process circuits and activities. Training elements for each specific job are identified in training materials. Training is provided by qualified personnel.

Hemlo requires and provides annual refresher for cyanide management to assure that employees continue to perform their jobs in a safe and environmentally protective manner. In addition, Hemlo discusses cyanide related health and safety issues as well as changes in cyanide management SOPs, if any, at safety meetings.

Training records are retained throughout an individual's employment documenting the training they receive. The records include the names 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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Standard of Practice 8.3: *Train appropriate workers and personnel to respond to worker exposures and environmental releases of cyanide.*

The operation is  in full compliance with **Standard of Practice 8.3**  
 in substantial compliance with  
 not in compliance with

**Basis for Audit Finding:** Personnel responsible for offloading, production, and maintenance are trained in the procedures to be followed if cyanide is released. Emergency and first responders (including offloading, production and maintenance workers) are trained in decontamination and first aid procedures for cyanide releases. Emergency Responders are trained in Advanced Medical First Aid. Qualifications of the members of the ERT range from EMT, First Responder, Fire Fighting, Rescue and HazMat certifications. Emergency and first responders have taken part in routine drills to test and improve their response skills. The Emergency Response Coordinators and members of the ERT are trained in the emergency procedures described in the “Surface Emergency Procedures” Plan including the use of necessary response equipment. Hemlo requires and provides annual refresher for response to cyanide.

Hemlo made formalized arrangements with the Wilson Memorial General Hospital located in Marathon, Ontario, to provide assistance to workers exposed to cyanide. Hemlo has demonstrated that local response agencies are familiar with those elements of the Emergency Response Plan related to cyanide and are involved in mock drills as necessary. Hemlo conducts mock emergency drills based on likely release/exposure scenarios. Cyanide emergency drills are evaluated from a training perspective to determine if personnel have knowledge and skills required for effective response. Training procedures will be revised if needed. Training records are retained throughout an individual's employment documenting the cyanide training they receive. The records include the names of the employee and the trainer, the date of training, the topics covered, and test results demonstrating an understanding of the training materials.


**9. DIALOGUE:** *Engage in public consultation and disclosure.*

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

The operation is  in full compliance with **Standard of Practice 9.1**  
 in substantial compliance with  
 not in compliance with

**Basis for Audit Finding:** Hemlo provides many avenues of opportunity for stakeholders to communicate issues of concern regarding the management of cyanide at the mine. Hemlo sponsors and conducts “Communities of Interest Meetings” with the participation of local communities. These meetings are conducted periodically and members of the general public and government leaders are encouraged to attend and discuss issues related to the mining operation including the use of cyanide. In addition, Hemlo through Barrick’s corporate website provides information on the use of cyanide and has provisions for stakeholders to communicate issues of concern (<http://www.Barrick.com>). The site is provided with a “Contact Us” tab that allows an individual to contact the company via email and telephone.

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Standard of Practice 9.2: *Initiate dialogue describing cyanide management procedures and responsively address identified concerns.*

**The operation is**  **in full compliance with**  
 in substantial compliance with **Standard of Practice 9.2**  
 not in compliance with

**Basis for Audit Finding:** Hemlo creates opportunities to interact with stakeholders and provide them with information regarding cyanide management practices and procedures. Hemlo sponsors and conducts “Communities of Interest Meetings” with the participation of local communities. These meetings are conducted periodically and members of the general public and government leaders are encouraged to attend and discuss issues related to the mining operation including the use of cyanide.

Hemlo has developed a pamphlet on Barrick’s Responsibility Use of Cyanide which is distributed during community meetings. The pamphlet includes Code Certification of Barrick mines, Worker Safety, Training, Manufacture, Transportation, Handling and Storage, Emergency Response, Cyanide and Gold Ore Processes, and Mine Closure.

Opportunities for public input were also available during the David Bell Mine Closure Plan consultation period. The presentation on the David Bell Mine Closure Plan included decommission of cyanide facilities.

Standard of Practice 9.3: *Make appropriate operational and environmental information regarding cyanide available to stakeholders.*

**The operation is**  **in full compliance with**  
 in substantial compliance with **Standard of Practice 9.3**  
 Not in compliance with

**Basis for Audit Finding:** Hemlo has developed written descriptions of how their activities are conducted and how cyanide is managed, and made these descriptions available to communities and stakeholders. The 2009 Hemlo Mine Responsibility Report and the 2009 Annual Report called “A new Era in Gold” are available on Barrick’s corporate website and describe Barrick’s Code compliance effort. In addition, their corporate website includes a link on “Facts about Cyanide” that describes cyanide usage in the mining industry. Hemlo has developed a pamphlet on Barrick’s Responsibility Use of Cyanide which is distributed during community meetings.

The “Spill Prevention and Contingency Program” requires the company to report all spills/releases exceeding the reportable quantity and conditions to provincial and federal regulatory agencies (e.g., Ontario MOE, Environment Canada and others) as needed. Spill information reported to Ontario MOE is available upon request to public. Hemlo is also required to immediately report to MOL any cyanide related worker exposure or death.

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