### **Golder Associates Pty Ltd**

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# INTERNATIONAL CYANIDE MANAGEMENT CODE GOLD MINING OPERATION VERIFICATION AUDIT AHAFO MINE, GHANA

#### **SUMMARY REPORT**

Submitted to:



Newmont Ghana Gold Limited C825/26 Lagos Avenue East Legon Accra Republic of Ghana

And

International Cyanide Management Institute 1200 G Street N.W, Suite 800 Washington, D.C. 20005

Submitted by:

Golder Associates Pty Ltd. 124 Pacific Highway, Greenwich NSW 2065 Australia

March 6, 2008 077622030/013





#### SUMMARY AUDIT REPORT Ahafo Gold Mine

Name of Project: Ahafo Gold Mine

Project Owner / Operator: Newmont Ghana Gold Limited, a wholly owned

subsidiary of Newmont Mining Corporation

Name of Responsible Manager: Jay Bastian, General Manager Operations

Address and Contact Information: Newmont Ghana Gold Limited

C825/26 Lagos Avenue

East Legon Accra

Republic of Ghana

Phone +233 21 701 1852

Ken Ramsey

Newmont Ghana Gold Limited

Ahafo Gold Mine

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Email – Ken.Ramsey@Newmont.com

Audit Dates: June 25-29, 2007

# **Location and Description of Operation**

The Ahafo Gold Mine, owned and operated by Newmont Ghana Gold Limited (NGGL), a wholly owned subsidiary of Newmont Mining Corporation is located in the Brong Ahafo Region of Ghana, approximately 300 kilometres northwest of the capital city, Accra and 107 km northwest of the city of Ashanti Region capital of Kumasi. The mine is 40 km south of the Brong Ahafo regional capital Sunyani. Access to the mine is by air from Accra to Sunyani and then by road to the mine, or by road from Accra via Kumasi.

The Ahafo Gold Mine had been operational for some twelve months at the time of the Operational International Cyanide Management Code audit. The Ahafo Gold Mine poured its first gold on July 18, 2006 and commenced commercial production in August 2006. Ahafo sold 202,000 ounces of gold in 2006 and is expected to produce between 410,000 and 450,000 in 2007 as the mine enters its first full year of production.

Newmont currently operates two open pits at Ahafo with total reserves contained in fifteen pits. The process plant consists of a conventional mill and carbon-in-leach circuit. Ahafo reserves as of December 31, 2006, were 12.6 million equity ounces. The life of mine is currently estimated to be 20 years to 2027.

Ore is recovered from the pits using conventional surface mining techniques and is transported to a crushing, grinding and milling circuit. Ore processing consists primarily of carbon-in-leach cyanidation, followed by elution, and refining for gold recovery. There is a secondary gravity flotation circuit for collecting gold concentrates for intense cyanidation

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Tailings remaining after completion of the processing and precious metals recovery are conveyed by pipeline to an engineered lined tailings storage facility (TSF) for permanent disposal. Tailings water is recovered from a decant pond back to the process facilities for reuse. The entire process and tailings facilities are designed as a zero-discharge operation.

## Cyanide Management

Cyanide is supplied to the mine by Orica Australia Pty Ltd (Orica) from its Yarwun manufacturing plant in Queensland, Australia. Cyanide in solid briquette form is packaged in one tonne plastic bags within plywood boxes and transported by sea in shipping containers to the port of Takoradi in Ghana. From Takoradi the containers are transported by road to Tarkwa by Barbex Technical Services Limited (Barbex), which is subcontracted to Orica for transport of cyanide in Ghana. Barbex operates a cyanide transfer facility at Tarkwa on behalf of Orica where the cyanide briquettes are transferred from boxes into isotanks. Cyanide is delivered to the Ahafo mine in dry briquette form in truck-mounted isotanks by Barbex for solid to liquid sparging. The cyanide mixing facility at Ahafo is specifically designed to handle the sparging operation.

Sparging is a closed circuit mixing process that passes pH adjusted water from a mixing tank through the isotank in a continuous circuit until the required concentration of liquid cyanide is achieved. On completion of the sparging process the liquid cyanide is transferred from the mixing tank to a dedicated storage tank ready for delivery by pipeline to the process plant. All pipelines used for the transfer of cyanide to the process plant or within the process plant are either double piped or installed above containment facilities to prevent escape of leaks or spills to the surrounding ground surface.

The cyanide mixing facility is also capable of handling the one-tonne plywood boxes. However this facility has never been used and at the time of the Operations Audit there are no foreseeable plans to use it.

Ahafo has installed a counter current decantation (CCD) cyanide recovery plant located where tailings is discharged from the process plant to the tailings disposal system. The purpose of this plant, which is scheduled for commissioning in March 2008 and operation soon thereafter is to treat the tailings to recover liquid containing cyanide. The plant is intended to reduce the amount of cyanide used at the mine through recovery of usable cyanide back to the process plant and to deliver WAD cyanide concentrations to the TSF at the discharge spigots of less than 50 mg/L. A short term compliance plan to deliver tailings at the TSF spigots in concentrations less than 50 mg/L WAD cyanide is implemented pending final commissioning of the CCD.

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Hugh Wyndham, Lead Auditor Auditors: John McKenna, Auditor, Gold Mining Technical Expert in full compliance with The operation is |X|in substantial compliance with **All Code Principles** not in compliance with Audit Company: Golder Associates Pty Ltd Audit Team Leader: Hugh Wyndham hwyndham@golder.com.au E-mail: Names and Signatures of Other Auditors: John McKenna February 15, 2008 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 International Cyanide Management Institute and that all members of the audit team meet the applicable criteria established by the International Cyanide Management Institute 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. Hugh Wyndham Declared at: 124 Pacific Highway, Greenwich. NSW 2065 Australia This: 12th day of March 2008,

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Before me: Kylie Jane Lloyd, Justice of the Peace in and for the State of NSW

Signature

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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.	
		in full compliance with	
The operation is	X	in substantial compliance with	Standard of Practice 1.1
		not in compliance with	
contract between a that all facilities we duration of the co-independent audito facility at Tarkwa, on behalf of Orica isotanks for transpransfer facility ha Cyanide Code Audiactions that are required has committed to in with an auditor's statistical transfer facilities actions that identifies actions that are required to in with an auditor's statistical identifies actions.	Ahafo and where cyan contract. For and contract and contract are all to be a contract and the contract and the contract are and the contract and the contract are are all to be a contract are	Australia Pty Ltd, (Orica) to provide d Orica requires that Orica will be nide is manufactured or stored will Orica's manufacturing facility has ertified as being in Full Compliance which is operated by Barbex Technic to transfer sodium cyanide briquet hafo. This facility is classified as addited by third party independent aufound to be in Substantial Compliancing the facility to Full Compliance are not the corrective action by 30 Septembor that effect. A Corrective Action Plad by Ahafo to monitor progress and the corrective by the specified date.	compliant with the ICMC and be similarly compliant for the s been audited by third party the with the ICMC. A transfer ical Services Limited (Barbex) tes from one tonne boxes into a manufacturing facility. The ditors listed in the ICMI list of the with the ICMC. Corrective identified in the report and Orica per 2008, and to providing Ahafon has been established by Ahafo
2. TRANSPORTA	TION:	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.	
	X	in full compliance with	
The operation is		in substantial compliance with	Standard of Practice 2.1
		not in compliance with	
		1 ( .	

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### OFF Proj (001-050)077623030\_Newmont\_ICMC Audit\_Ahafo Ghana|Audit Protocols And Reports|Final Reports And Documents|Final Reports Submitted To ICMC/Operations Summary Audit Report\_Ahafo\_Ghana\_077622030\_013.Doc

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Basis for Audit Finding: Ahafo has a sodium cyanide supply contract with Orica, which specifies that the operation take ownership of the cyanide at the time of delivery at Ahafo. Orica is by contract solely responsible for the production and transport of sodium cyanide to the delivery point at Ahafo. The contract between Ahafo (the buyer) and Orica (the seller) clearly establishes responsibility for all of the requirements identified in this Standard of Practice covering production and transport of cyanide to the point of delivery at Ahafo. Specifically the contract requires that in performing its obligations for supply of cyanide to Ahafo the seller must comply with the production and transportation principles and standards of practice as published and amended from time to time by the ICMI. The contract also specifies that the seller is required to maintain complete control of its employees, agents, methods, operations and subcontractors. Orica has engaged subcontractors to provide transportation services from Yarwun to the Port of Brisbane (Toll Resources), shipping from the Port of Brisbane to the Port of Takoradi (Maersk Line and MSC), transport from the port of Takoradi to a transfer facility at Tarkwa (Barbex Technical Services), operation of the transfer facility at Tarkwa, (Barbex Technical Services) and transport from the Tarkwa transfer facility to Ahafo (Barbex Technical Services).

<u>Standard of Practio</u>	<u>ce 2.2</u> :	Require that cyanide transport emergency response plans and adequate measures for cyanide man	and capabilities and employ
	X	in full compliance with	
The operation is		in substantial compliance with	Standard of Practice 2.2
		not in compliance with	

Basis for Audit Finding: Orica is contracted to supply cyanide to Ahafo gold mine. The supply chain covers transport of cyanide from the Yarwun manufacturing facility at Gladstone, Queensland to the Port of Brisbane, shipment from the Port of Brisbane to the Port of Takoradi in Ghana, transport from the Port of Takoradi to a transfer facility at Tarkwa operated on behalf of Orica by Barbex Technical Services, and transport from the transfer facility to Ahafo mine. In addition to supply the contract requires that Orica must comply with the ICMC's Production and Transportation Principles and Standards of Practice. Under the contract Orica is solely responsible for the transport of cyanide from the production to final delivery and is required to take all actions necessary to ensure the safety of all personnel involved in the transport of product, packaging and labelling suitable for all jurisdictions the shipment will pass through, evaluation and selection of routes to reduce risk, the security of cyanide during transport, release prevention, safety and maintenance of the means of transportation, interim storage and appropriate personnel training and emergency response plans.

Toll Resources is contracted by Orica as the prime contractor for transport of cyanide within Australia. Toll Resources in turn utilises a number of subcontractors and subsidiaries to provide transport services. An independent third party cyanide transport code equivalent non certification audit of transport of cyanide from Orica's Yarwun manufacturing plant to and including the Port of Brisbane found transport operations to be in Full Compliance with the ICMC.

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An independent third party cyanide transport code equivalent non certification audit of transport from the Port of Brisbane to Ahafo including the Port of Takoradi and the transfer facility at Tarkwa has been carried out against the International Cyanide Management Code Verification Protocol for Transport Operations. The audit covered shipping between the Port of Brisbane and the Port of Takoradi; the Port of Takoradi; road transport between the Port of Takoradi and the transfer facility in Tarkwa operated by Barbex Technical Services; interim storage at the Port of Takoradi and at the transfer facility in Tarkwa operated by Barbex Technical Services; road transport between the transfer facility in Tarkwa and Ahafo Gold Mine; and operational systems, workshops and administration areas of Barbex Technical Services in Tarkwa and Accra. Orica has carried out a formal due diligence of shipping companies used to transport cyanide on its behalf. The scope of this due diligence assessment and associated documentation is cited in the independent third party cyanide transport code equivalent non certification audit covering shipment of cyanide from the Port of Brisbane to Ahafo Gold mine. Shipping companies covered by that due diligence assessment are Maersk Line (first choice) and Mediterranean Shipping Company (MSC). Barbex Technical Services is contracted by Orica to transport cyanide from the Port of Takoradi to the transfer facility in Tarkwa where cyanide is transferred from box to sparge isotainers and on to Ahafo. Occasionally Barbex use Antrak Transport of Takoradi to transport containers from the Port of Takoradi to the transfer facility at Tarkwa. Antrak is required to comply with all Barbex requirements in respect of transport of cyanide containers. Road transport covering Takoradi to Tarkwa and Tarkwa to Ahafo was found to be in Substantial Compliance with the Code. Operation of the transfer facility at Tarkwa, which is considered to be a production facility and is covered in Standard of Practice 1.1, was found to be in Substantial Compliance with the Code. All other activities covered by the audit were found to be in Full Compliance with Code requirements.

A subsequent Code Certification Audit of Barbex Technical Services transport operations covering shipping by road from Takoradi to Tarkwa and from Tarkwa to Ahafo resulted in a finding of Full Compliance with the International Cyanide Management Code Verification Protocol for Transport Operations.

All audits were carried out by auditors who are on the ICMI list of registered Cyanide Code auditors.

3. HANDLING AND handling and storage		GE: Protect workers and the	e environment during cyanide
Standard of Practice	<u>3.1</u> :	Design and construct unloading consistent with sound, accepted control/quality assurance procedu containment measures.	engineering practices, quality
	X	in full compliance with	
The operation is		in substantial compliance with	Standard of Practice 3.1
		not in compliance with	

**Basis for Audit Finding:** Cyanide is delivered to the Ahafo mine in dry briquette form in truck-mounted isotanks for solid to liquid sparging, a closed circuit mixing process that passes pH adjusted water from a mixing tank through the isotank in a continuous circuit until the required concentration

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of liquid cyanide is achieved. On completion of the sparging process the liquid cyanide is transferred from the mixing tank to a dedicated storage tank ready for delivery by pipeline to the process plant. There is no storage of solid cyanide at present although there is a reagent store adjacent to the reagent mixing area which is suitable for storage of dry cyanide in boxes should the need ever arise. There is a cyanide mixing tank for the addition of dry cyanide briquettes but it has never been used and there is no plan to use it in the foreseeable future. The design of the facility is based on maintaining a closed circuit to minimize the risk of spill during sparging operations.

The reagent mixing area is constructed on concrete pads with containment bunding to prevent any discharges to the sub surface. All surface run off from the area is directed into containment bunds that enclose the reagent tanks. Containment capacity of the bund is 100% of the total capacity of the storage and mixing tanks within the bund. The design and construction of the cyanide mixing and storage facilities have been completed appropriately as documented in final design and construction drawings prepared by qualified Professional Engineers.

There are two on line CN gas monitors mounted at the reagent mixing area which are monitored in the CIL plant control room. These monitors are inspected, maintained and calibrated by the Instrumentation Section of the process plant maintenance department. During cyanide sparging there are two operators and two members of the site emergency response team with an emergency response vehicle present at all times. The emergency response vehicle is fully equipped to respond to a cyanide emergency during sparging.

The sparge and cyanide solution storage tanks are equipped with overfill protection that will result in a shut down of pumps should the alarms be tripped. There is an overflow pipe that links the sparge tank and the cyanide solution storage tank to direct cyanide solution back to the sparge tank.

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

Basis for Audit Finding: A sample of written procedures covering cyanide mixing at the reagent mixing area that were sighted during the audit cover: Cyanide Sparging; Cyanide Circulation Pump Start Up; Cyanide Solution Transfer; Cyanide Circulation Pump operation; Cyanide Equipment Decontamination; Cyanide Sparging Pre-fill; Liquid Cyanide Spill Emergency. The cyanide sparging procedure covers use of PPE, pre sparge activities, operation of valves and couplings, clean up after sparging, rinsing of the isotainers, cleaning of hoses and the general area, completion of relevant documentation, the completion of checklists, and area monitoring during sparging. Two trained operators carry out the sparging activity with full protective equipment. Sparging procedures cover pre sparging checks, connection of hoses and sparging activities in the correct sequence designed to be carried out safely and methodically, the presence of emergency response support with personnel in PPE and equipment ready for immediate use, and correct documentation provided and

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Date Page 9 of 26 completed as required. Operators responsible for carrying out sparging have been trained by the supplier (Orica) to carry out sparging correctly. Training covers theory, practice and assessment of competence. Certificates of competence have been issued. The Reagent Area Supervisor is responsible for ensuring that procedures are followed correctly.

There are no empty cyanide containers on site. Isotainers are returned immediately to the transporter facility at Tarkwa. Following sparging the isotainers are rinsed to remove residual cyanide solution with the rinse water pumped into the sparge tank. The valves of the isotainer are rinsed with a hose with the rinse water draining into the bunded area, collected in the sump and pumped to CIL tank #1.

<b>4. OPERATIONS:</b> <u>Standard of Practice 4.1</u> :		Manage cyanide process solutions and waste streams to protect human health and the environment.  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 substantial compliance with	Standard of Practice 4.1
		not in compliance with	

Basis for Audit Finding: Ahafo has developed and implemented operating procedures covering cyanide related activities such as in the CIL circuit, the carbon stripping circuit, the intensive cyanide reactor, and the TSF. Operating procedures are tailored to the design of cyanide related facilities and include measures for the protection of human health and the environment. The standard for preparation of operating procedures at Ahafo is that PPE is identified and hazards to health, safety and the environment are identified in operating procedures. A broad summary of the management of cyanide at Ahafo is contained in the Cyanide Management Plan. This Plan is aligned to the ICMC with sections covering Cyanide Production and Purchasing; Transportation of Cyanide to Ahafo; management of reagent cyanide; operations; decommissioning; worker safety; emergency response; training; and dialogue. HCN gas detectors are installed at various locations in the plant and linked to the control room. Operational criteria for the cyanide mixing area and the CIL circuit include a structural inspection cycle involving non destructive testing.

A change management procedure has been established to cover changes in mine operating procedures that are the result of changes to operations or to equipment.

Daily and monthly inspections of cyanide related facilities and equipment are documented and cover the mixing tanks and equipment and the mixing area, pipelines pumps and valves, bunding and secondary containment structures, the TSF and its associated leak detection and recovery systems, such as piezometers and under drainage, other ponds and impoundments covering the raw water dam, the event pond, the process water pond and the raw water pond, the tailings pumps area (in the process plant), the elution area, the intensive cyanidation reactor (at the Knelson Concentrators), the CIL tanks and the thickener. Corrective actions are identified and actioned either immediately as a

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part of normal operations or through work orders which are documented.

Ahafo uses a computer based preventive maintenance system, Ellipse, to identify, issue work orders and document all preventive maintenance activities. The Ellipse maintenance management system generates work orders for programmed maintenance and activities such as regular inspections. The Ellipse system has the capacity to print programmed work orders and will also accept work orders generated for a specific need, such as associated with inspections. Monthly inspections carried out by the process plant maintenance department are a programmed item and triggered by an automatic work order.

With continuing concern about the reliability of external power supply Ahafo is increasing its internal generating capacity. Ahafo has 10Mw capacity of back up power, which is adequate to power pumps necessary to manage solutions around the plant. The plant is in use weekly in response to power fluctuations/cuts in Ghana. Periodic maintenance is carried out through the mine programmed maintenance system. A power load shedding plan has been prepared and it is designed in part to ensure that cyanide related activities continue to receive power to prevent discharges of cyanide containing materials to the environment.

<u>Standard of Praction</u>	ce 4.2:	Introduce management and og cyanide use, thereby limiting contailings.	
	X	in full compliance with	
The operation is		in substantial compliance with	Standard of Practice 4.2
		not in compliance with	

**Basis for Audit Finding:** A Cyanide Management Plan prepared by the mine includes a table that identifies the different pits and the ore types. For each pit there is projected cyanide consumption in kg/tonne based on analysis of the ores. Cyanide addition to the CIL tanks is controlled by a cyanide analyser. The current cyanide use strategy is to control cyanide rates from the back of the circuit and is based on balancing the recovery of gold and the WAD cyanide concentrations at the TSF spigots. Analysis of concentrations of sodium cyanide at tank 1 is used to control the dosing of cyanide solution into tank 1. Additional potential to leach gold has been identified but managing the dosing rate to achieve target WAD cyanide at the TSF restricts the ability to increase the dose rate into tank 1 of the CIL circuit. This restriction will be overcome when the cyanide recovery unit which has commenced construction is commissioned in March 2008. A metallurgical study of the ores that are found at Ahafo was carried out at the Plato Malozemoff Technical Facility, Newmont Metallurgical Services, Colorado in 2006. This study consisted of a detailed review of ore characteristics with reagent consumption at various recovery rates for various grades. The ore body at Ahafo is not complex and on that basis the mine has determined that continual review of the ore/cyanide mix is not considered to be appropriate. Test work is being carried out at intervals that are deemed by the mine to be appropriate to the circumstances.

Standard of Practice 4.3: Implement a comprehensive water management program to protect

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		against unintentional releases.	
	X	in full compliance with	
The operation is		in substantial compliance with	Standard of Practice 4.3
		not in compliance with	
multiple variables and maintaining the water by according to the latest deposition and density, station and variables alled dynamic nature of the regional capital of Surface to 2 to 5 years of local mine. Ahafo has install provides updates of data reclaim pool and exposincorporation of a seep tailings storage facility, from the tailings impout the return pumping systunder the reclaim pool and measurements mon	nultiple balance. It development for reclaim per control of the co	Ahafo has developed a water bala inputs. The Metallurgical Departmet. The water balance includes produted oped mine plan as well has histerist a climate generator, using historist modelling under a wide range of compond with respect to changing beach cet water levels and freeboard availar riod just before an embankment rais 5 years of regional daily precipitation which is approximately 40km from A ration gauges. Sunyani weather data eather station, which has been in ope water balance. The water balance hes, as well as solution bound in the lection system under the compact are returns to the reclaim pond, allows to the compact and the process plant in the process plant, the raw water paraw water reservoir (above the TSI at the process plant), the raw water paraw water plants in the process plant, the raw water paraw water plants is the process plant, the raw water paraw water plants.	ent is responsible for running and action rates and tailings densities orical measurements of tailings c data from the Sunyani weather ditions. The model simulates the slopes and incremental increases able at any point in the mine life, e occurs and during a 1 in 100 yr on and evaporation data from the hafo was evaluated and regressed a has been extrapolated for Ahafo eration for less that one year that the address evaporation from the net tailings mass pore space. The not synthetic lining system of the the assumption of no net seepage limited by the design capacity of on. The TSF has an HDPE liner age collection. Daily inspections F), the process water dam (at the
Standard of Practice 4.4	<u>1</u> ;	Implement measures to prote livestock from adverse effects of cyc	
		in full compliance with	
The operation is	X	in substantial compliance with	Standard of Practice 4.4
		not in compliance with	
Cyanide Management Concentration at the poi	Code Nont of d	m the time that Newmont became fewmont Ghana has been working ischarge to the tailings storage facily of supply and transport hazards	to ensure that the WAD cyanide ity at Ahafo is less than 50 mg/l.

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communities chemical treatment was rejected as an option. The installation of a counter current decantation (CCD) circuit, a non chemical treatment method was approved and construction commenced during the first half of 2007 with construction and commissioning completion confirmed for the end of March, 2008.

Pending installation and commissioning of the CCD, cyanide concentrations at the TSF discharge spigots have been managed through control of cyanide addition to the CIL circuit supplemented by physical deterrents to bird and animal incursions to the TSF. These deterrent measures included installation of wailers and air cannons, fencing of the TSF, control of vegetation surrounding the TSF, permanent patrols during daylight hours, and regular inspections of the TSF and of tailings delivery and decant recovery pipelines.

Records of analysis of tailings discharges into the TSF show that Ahafo has had difficulty in maintaining WAD cyanide concentrations below 50 mg/L at the discharge spigots. An extensive program of sampling and analysis at the spigots and at another eight locations on the perimeter of the TSF where open water is accessible has shown that while the concentration of WAD cyanide at the spigots has regularly exceeded 50 mg/L, cyanide concentrations in samples taken from open water at all other sampling locations have been less than 50 mg/l in 99.8% of samples.

In order to maintain WAD cyanide concentrations at the TSF discharge spigots below 50 mg/L Ahafo has established a Compliance Action Plan for the long term management of discharges into the TSF at WAD cyanide concentrations of below 50 mg/L. The Action Plan covers a short term compliance program, the commissioning of the CCD and verification through a period of sampling and analysis of spigot discharges that the short term compliance program and the CCD can continually deliver tailings to the TSF that contain less than 50 mg/L WAD cyanide. The action plan includes a visit to Ahafo by the Cyanide Code Auditor to verify that the CCD is operating as intended and is delivering tailings to the TSF spigots continually that contain less than 50 mg/l WAD cyanide. The short term compliance program is based on reduction of plant cyanide operating levels, CIL circuit monitoring and CIL circuit cyanide action level excursion management. Results of sampling and analysis since the implementation of the short term compliance program show that WAD cyanide concentrations at the TSF discharge spigots are being maintained at below 50 mg/L. A Corrective Action Plan has been prepared covering the commissioning of the CCD facility and demonstration that it is capable of delivering WAD cyanide concentrations of less than 50 mg/L to the TSF at the discharge spigots.

The decant recovery pond at the process plant contains only trace amounts based on the daily analysis of the reclaim pool at the TSF. Records of analysis of the reclaim pool on the TSF show that the WAD cyanide concentration is less than 5 mg/L. Analysis for 24 June 2007 showed WAD cyanide concentration in the reclaim pool was 0.08 mg/L.

The raw water pond at the process plant does not contain any cyanide in solution.

An event pond for recovery of spills in the CIL circuit and of surface water from the process plant is designed for prompt recovery of any such accumulation. Event pond operating procedures include recovery pumps triggered by level alarms, a requirement for sampling and analysis and measures to maintain the WAD cyanide concentration of residual material in the pond below 50 mg/L.

<u>Standard of Practice 4.5</u>: Implement measures to protect fish and wildlife from direct and indirect discharges of cyanide process solutions to surface

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		water.	
	X	in full compliance with	
The operation is		in substantial compliance with	Standard of Practice 4.5
		not in compliance with	
potential to contain cyantachieving nil discharge. decant pond. TSF designemergency spillway. Pieseepage and water quality regularly to identify pote surface water from the TSurface water sampling hwater. The tailings pipel	ide. The TS include ezomet y. Mornatial in SF to the tass been ine and	fo does not discharge to surface water ne design of the TSF and its operating SF is designed for under drain and see des diversion drainage from around the ters installed in the TSF wall are samp nitoring bores are installed downstream pacts on ground water. To date there the environment and no evidence of in an carried out with no evidence of cyan direturn water pipeline from the reclain of the with any releases directed either be	procedures are all directed to epage recovery back to the model of the TSF and sampled epage has been no discharge of epacts on ground water. In ide contamination of surface model pool are contained in HDPE
bunds) and secondary co- contain process circuit sp spills that are not recover	ntainm oills out ed fror	ith primary (process tank, thickener a ent (secondary perimeter bunding and tside the primary bunds and surface w in the primary bunds and surface wated process slurry to the tailings tank or	d spoon drains) designed to vater in the plant area. Process or are directed to an event pond
Standard of Practice 4.6.	:	Implement measures designed to facilities to protect the beneficial use	
	X	in full compliance with	
The operation is		in substantial compliance with	Standard of Practice 4.6
		not in compliance with	

Basis for Audit Finding: There is no evidence to date of contamination of groundwater with cyanide. Groundwater monitoring bores have been installed downstream of the process plant and below the TSF. Measures been included in the design and construction of the cyanide mixing area, the CIL circuit and the TSF to prevent seepage. The cyanide mixing area is constructed on a concrete slab with bunding for all tanks and direction of all drainage from the mixing area to the bunds. CIL tanks are constructed on ring beams with an HDPE liner that will divert any leak from tanks floors into the containment bunds. All CIL and associated vessels, such as the tailings tank and the thickener are constructed within containment bunds which have containment sumps. Process

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Date Page 14 of 26 slurry that is spilt outside the primary bunds and surface water that is collected in the plant area is directed via concrete spoon drains to the event pond. The event pond is sized to contain the capacity of the thickener, the largest vessel in the plant and a concurrent 1:25 year rain event. TSF design includes the following protection against seepage to groundwater: a clay liner covering the whole of the TSF, an additional HDPE liner under the reclaim pool within the TSF and underdrainage and seepage collection and recovery. Monitoring bores have been installed downstream of the plant and at the TSF to identify potential impacts on groundwater. Sampling and analysis records provided did not disclose any such impacts. Analytical results from sample analysis are compared against the Ghana EPA draft standard for groundwater quality of 0.07 mg/L free cyanide. This standard is the same as the WHO drinking water quality guideline for beneficial use of groundwater.

Standard of Practice and pipelines.	<u>4.7</u> :	Provide spill prevention or contain	inment measures for process tanks
	X	in full compliance with	
The operation is		in substantial compliance with	Standard of Practice 4.7
		not in compliance with	

**Basis for Audit Finding:** Spill containment measures have been incorporated in the design of the cyanide mixing, storage, distribution and process facilities. The cyanide mixing area is constructed on a concrete pad with mixing and storage tanks contained in a bunded area designed to contain 100% of the total volume of all tanks within the bunded area. All tanks within the bunded area are constructed on solid concrete foundations.

The cyanide solution pipelines from the cyanide mixing plant are partly double piped and partly installed over a bunded area of the process plant. Pipelines that are double piped drain into the bunded area that is gravity drained to the event pond. All process tanks, the tailings tank and the thickener are constructed on a concrete floor with containment bunds. The process plant is also provided with secondary containment in the form of bunding and concrete spoon drains that direct slurry spills that are outside the primary bunds and surface water to the event pond. The event pond is operated to limit accumulation of process slurry or surface water in the pond and is capable of holding the contents of the thickener, which is the largest vessel in the plant and a concurrent 1:25 year storm event.

Construction materials used for tanks and pipelines are compatible with the storage and handling of liquids containing cyanide and with a high pH.

Water that collects within the cyanide mixing area bunds is pumped to CIL tank #1. Surface water that collects in bunded areas associated with pipelines containing cyanide solution, the CIL tanks, the elution area, the intensive cyanidation reactor, the tails tank and the thickener is directed by gravity flow to the event pond. Surface water collected in the event pond is pumped to the process water pond.

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The TSF pipeline is installed in an HDPE lined trench for its full length from the process plant to the TSF. The TSF pipeline is inspected daily and is equipped with pressure monitoring and flow rate deviation to identify a major leak.

Risks to surface water are controlled through purpose built containment bunding and pipelines that are installed across bunded areas or double piped and through protocols that allocate emergency power to critical need facilities in the event of power failure such as for flushing the TSF line with clean water.

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.	
	X	in full compliance with	
The operation is		in substantial compliance with	Standard of Practice 4.8
		not in compliance with	
and footings and tan accordance with accep TSF Operations Manu covering the TSF cons	k and poted stand tal, TSF struction Quality lant and	cumentation held by Ahafo verifies the pipeline construction is by qualified dards for such facilities. TSF design QA Reports and Ahafo TSF Final I was achieved through technical directly control records have been retained the TSF.  Implement monitoring program cyanide use on wildlife, surface and	d engineering companies and in specifications are contained in the Design Report. Quality assurance ection, inspection, supervision and d by Ahafo covering the cyanide are to evaluate the effects of
	X	in full compliance with	
The operation is		in substantial compliance with	Standard of Practice 4.9
		not in compliance with	

Basis for Audit Finding: Monitoring and measurement schedules and sampling and analysis procedures cover the TSF, surface water, the water storage dam, the STP, air emissions, and groundwater. Sampling and analysis and monitoring procedures have been developed by appropriately qualified personnel who possess relevant technical training and extensive experience in the mining industry. Monitoring frequencies were initially established in the EIS for the project and have been agreed with the Ghana EPA. These are reflected in the monitoring and measurement schedule. Monitoring and measurement locations are identified on an Environmental Monitoring map of the whole site. Sampling and analysis procedures have been established for monitoring activities and cover sample collection, sample preservation, transport of samples, sampling equipment and the use of a registered laboratory for sample analysis. Samples collected for the laboratory are covered

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Date Page 16 of 26 by appropriate chain of custody documentation. Field duplicates are collected and check samples are sent for analysis to other laboratories. Monitoring of surface and groundwater downstream of the process plant and the TSF is carried out in accordance with the monitoring and measurement schedule. TSF monitoring includes piezometers installed in the downstream dam wall. There are four people on patrol at the TSF every day and they provide full coverage of the TSF. They are responsible in part for keeping bird life off the dam and for reporting bird and animal visits and for reporting bird and animal mortality. Monitoring data is reported to the Ghana EPA and to the Water Resource Commission monthly.

		Protect communities and the ementation of decommissioning pla	•
Standard of 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	Standard of Practice 5.1
		not in compliance with	
accounting. The most document. It cover decommissioning of the chemicals and disposal the plant for decommis use established to date in the closure plan. An specified in the draft I authorities and social representatives. The G in the project EIS.  In accordance with Neupdated annually.	recent is all for mill an of surplisioning in A mornual representations in the surpline is a surpline in the surpline in the surpline is a surpline in the surpline is a surpline in the surpline in the surpline is a surpline in the surpline in the surpline is a surpline in the surpline is a surpline in the surpline in the surpline is a surpline in the surpline in the surpline in the surpline in	mont environmental standards required Reclamation Closure Plan was prefacilities associated with cyanidal process plant, decontamination of the lus chemicals. The cyanide mixing purposes. TSF reclamation is covernitoring program following decomporting is also a part of closure and tion Closure Plan and include consility forum members covering a range A has established closure criteria a corporate requirements the Reclamation.	pared in January 2007 as a draft e use including the TSF and requipment to remove all residual area is considered to be a part of red although there is no final land hissioning and closure is included reclamation. Closure criteria are sultation with relevant regulatory ge of community and government and there are closure commitments attion Closure Plan is reviewed and
Standard of Practice 5.	<u>2</u> :	establish an assurance mechanism related decommissioning activities.	n capable of fully funding cyanide
	X	in full compliance with	
The operation is		in substantial compliance with	Standard of Practice 5.2
		not in compliance with	

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Basis for Audit Finding: Ahafo is required to lodge a bond established by the Ghana EPA to cover its mine closure liabilities. Closure cost estimates based on current activities have been established and reviewed with the EPA and accepted by the EPA. Closure costs have been estimated in the Ahafo draft Reclamation and Closure Plan. Detailed cost estimate work sheets have been prepared. Costs have been estimated for both contractor and owner closure work. The highest unit rates have been used to arrive at the cost estimates in the draft Plan. Cost estimates are based on a Newmont standard which reflects a proportion of the as built costs adjusted for inflation. Cyanide related plant and equipment is covered in the Plan and cost estimates are provided. Cleaning and detoxification of pipelines that may have contained cyanides solutions is included in the cost estimate calculations.

In February 2007 Ahafo submitted a closure cost estimate to the Ghana EPA. In June/July 2007 EPA informed Ahafo that the bond would take the form of 10% cash and 90% letter of Credit. The form of the Reclamation Bond was finalised in September 2007 with Ahafo committed to submit the bond at that stage. In late October 2007 the EPA requested that Ahafo increase the amount of bond (which is calculated on decommissioning and reclamation for three years in advance). This has been done and the revised amount has been accepted by the Ghana EPA. Newmont has subsequently issued a letter of credit to the Ghana EPA covering 90% of the closure cost estimate. The letter of credit has been issued to Ghana Environmental Protection Agency, P.O. Box M 326, Ministries Post Office, Accra. Ghana. The letter of credit more than covers the total estimated cost of decommissioning all cyanide related facilities.

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

Basis for Audit Finding: There are written procedures for all cyanide related tasks. All procedures identify the PPE required for the activities covered by the procedure, potential health and safety risks associated with the procedures and pre work inspections that are required, such as prior to commencement of sparging operations and for confined space work. Area signs reinforce PPE requirements. All induction courses with specific cyanide references cover PPE requirements. Safety & Environment Inspections are carried out once per week involving Process, Safety and Environment personnel. There are pre-shift meetings where safety issues are discussed. Ahafo has a Change Management procedure that requires proposed changes in process operations and cyanide management be formally evaluated to identify the need for amended or new procedures. A procedure covering Risk and Opportunity Management provides a plan for the systemic and structured identification of operational risks, including risks associated with cyanide.

Standard of Practice 6.2: Operate and monitor cyanide facilities to protect worker health

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		and safety and periodically evalua safety measures.	te the effectiveness of health and
	X	in full compliance with	
The operation is		in substantial compliance with	Standard of Practice 6.2
		not in compliance with	
established and implem safety and environment work inspections. Aha have been placed within previous experience and most likely that cyanide accordance with Code Maintenance section. It monitors with calibration orders are issued autom the sensor life is 12 morand a calibration unit a exposure to cyanide is obe taken. Emergency Delivery area and the system. Eye wash stat sufficient to deliver a simplant are Dry Powder where cyanide is handled during the operations are gular intervals. MSD emergency response at an another standby 24/7. All e site induction which in	ented fall required for uses in the pall verification interpartically in the considering shower plant. It is a shower plant in the considering shower plant in the considering shower plant in the considering shower plant. It is a shower plant in the considering shower plant in the consi	perating procedures, referred to in State of all aspects of cyanide management irements, PPE requirements for each is both fixed and personal cyanide more process plant and at the cyanide mixing cation through a survey of the plant to all be encountered. Fixed monitors have ment. Fixed Monitors are calibrate trument Maintenance section is responsively when calibration is due. The re-cal new supply of portable HCN monitors uded in the order. There is signage ared a risk alerting personnel to the day and eye wash stations are installed at They are inspected regularly through the low pressure flow. Flow of eye not volume but it was not under high pure or used. Vessels and pipes contained or used. Vessels and pipes contained are clearly marked with contents and operating procedures are placed at the selegated to the emergency response set at Ahafo, including those of Combasic cyanide emergency response. Set be able to read and understand and the procedures to respond to worker expenses to respond to the responses to the plant	activity and requirements for presonitors. Fixed cyanide monitors ing area with locations based on didentify the locations where it is two been set to alarm at 5 mg/L in atted monthly by the Instrument insible for managing the personal work order system so that work dibration period is 3 monthly and ors has been ordered. Spare parts across the plant in areas where angers and precautions that must at many locations throughout the ghost the programmed maintenance wash water was observed to be ressure. Fire extinguishers in the in the process plant or in areas aning cyanide that were sighted direction of flow displayed at the cyanide mixing area. Cyanide the group which has a trained team tractors, are required to attend a A condition of employment at English. MSDS and operating
The operation is		in substantial compliance with	Standard of Practice 6.3
-		not in compliance with	

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Basis for Audit Finding: Ahafo has established dedicated emergency response teams that have responsibility for responding to all cyanide emergencies. An emergency response team is on duty 24/7 and a team is always present at the cyanide mixing area during sparging operations with an emergency response vehicle equipped with full immediate response equipment. Emergency response team members are trained to administer oxygen, which is the primary response to cyanide poisoning at Ahafo. Cyanide antidotes are stored at the clinic for administration under controlled conditions by qualified medical practitioners who are specifically trained to carry out this procedure. The clinic on site is staffed by registered medical practitioners and trained staff. Emergency response teams are provided with special training in cyanide emergency response and the clinic medical staff are trained and equipped to respond to a cyanide emergency. The clinic does not have an ICU capability but can provide primary life saving treatment. Communication of an emergency is by radio, land line or mobile telephone. All operators in the process plant carry portable radios. The mine wide Emergency Management Plan covers cyanide emergencies. In addition there are various specific emergency procedures that have been prepared for specific areas, such as Liquid Cyanide Spill Emergency, Solid Cyanide Spill Emergency, and Tailings Spill Clean Up.

Ahafo mine is located in a relatively remote area of Ghana. There are no local facilities with any capability to assist in the management of medical emergencies. The closest medical support is an ICU at Kumasi which is two hours by road or twenty minutes by air from the site. There is also ICU support in Accra which is seven hours by road or 1 hour 30 minutes from the site. Medevac by helicopter is available but there is a significant lead time. Fixed wing medivac is also available from Sunyani which is approximately one hour by road from the site. Newmont has a general provider agreement with International SOS, which is able to provide medivac services and to source the most appropriate receiving location in a medical emergency. Emergency evacuation procedures are in place. One cyanide emergency drill has been carried out in 2007. The clinic participated in the emergency drill up to the point where the patient reached the clinic. The plan is for each of the four emergency response teams at Ahafo to participate in a cyanide emergency drill at least once per year.

7. EMERGENCY R	RESPONSI		nd the environment throw vergency response strates	0
Standard of Practice	<u>27.1</u> :	Prepare detailed emer potential cyanide releases		for
	X	in full compliance with		
The operation is		in substantial compliance with	Standard of Practice 7.1	
		not in compliance with		

**Basis for Audit Finding:** A mine wide Emergency Response Plan has been prepared and includes a section covering cyanide emergencies. It us reviewed and updated at least annually. Specific operating procedures have been prepared that focus on cyanide emergencies in specific areas of the site covering liquid cyanide spill and solid cyanide spill and the clean up of a tailings spill. The

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procedure for liquid cyanide spill covers releases during unloading and mixing. The clinic has developed its specific procedures for a medical emergency involving cyanide poisoning. The mine wide Emergency Response Plan covers the following cyanide related emergencies: releases during fires or explosions, tank, pipe and valve ruptures, tank overtopping, power outages, which are covered by a load shedding process, and cyanide emergencies associated with transport on site. Transport emergencies off site are the responsibility of the contract transporter although Ahafo is available to provide assistance if needed. Management of seepage from the TSF is built into the design and construction of the TSF and covers clay lining of the TSF and an HDPE liner beneath the reclaim pool in the TSF, under drainage recovery, seepage recovery, dam wall piezometers and downstream monitoring bores. The site does not have a cyanide destruct facility but has commenced construction of a cyanide recovery facility. This facility will be completely contained to prevent discharges to land or surface water. The TSF is subject to an annual audit which includes a risk assessment.

assessment.			
Standard of Practice 7.2:		Involve site personnel and stakeholders in the planning process.	
	X	in full compliance with	
The operation is		in substantial compliance with	Standard of Practice 7.2
		not in compliance with	
communities to contrib the development of it stakeholders such as of prepared by the Safet stakeholders such as department, process de external stakeholders in action in the event of programs for dialogue emphasis has been on are protected from any	bute to ess Emergians End Mana Esty Mana the emerger the vice a cyanice with explaining impactals in result arise.	the circumstances of the location of the emergency planning Ahafo has not in gency Response Plan. Ahafo has EPA for review and comment. The ager and has been subject to review ergency response coordinator and not, maintenance department and security of the mine site that would be determined emergency on site. Ahafo has external stakeholders including location in the control of cyanide. The clinic has exchange spect of the use of their ICUs for securing the state of the security of the use of their ICUs for securing the	involved external stakeholders in distributed the Plan to external Emergency Response Plan was ew and amendment by internal teams, the clinic, environment truity department. There are no capable of or required to take any established Community Relations cal communities. The primary make sure that local communities aged letters with the Kumasi and tabilisation of cyanide poisoning
	X	in full compliance with	
The operation is		in substantial compliance with	Standard of Practice 7.3
		Not in compliance with	

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Basis for Audit Finding: The emergency response section is the primary response to all site emergencies. Key personnel associated with the Emergency Response function are the Emergency Response Coordinator, the Health Safety and Loss Prevention Manager and the Emergency Response Teams. The Clinic, Security Department and the process Department also have key roles in the cyanide related emergencies. Training for the emergency response teams includes cyanide emergency response. Emergency Response Teams work eight hour shifts and there is an emergency response team on duty 24/7. The Emergency Response Coordinator is on call out 24/7. Responsibilities for key emergency response personnel and for all employees, the Site Manager, Managers, general foremen and supervisors, the H&S Manager, and Security Department are described in the Emergency Response Plan. Emergency response equipment associated with cyanide emergencies is in the custody of either the clinic or the emergency response section. Each emergency response team carries out a check of emergency equipment with deficiencies or action items noted in an occurrence book. The checklist covering all emergency response equipment is being continually updated as additional equipment is purchased.

Standard of Practice 7.4:		Develop procedures for internal and external emergency notification and reporting.	
	X	in full compliance with	
The operation is		in substantial compliance with	Standard of Practice 7.4
		not in compliance with	
personnel in the event control room which is external notification. A process for notification notification is determin alternate have been approximately approximately communications control	of an enthe first Rapid I from the desired to I room	mine wide call out tree has been es mergency. The call out tree is applet point of contact for any emergency. Response Plan supports the Emergenche mine site level to regional and the severity of the emergency. A Report manage the process. Rapid response coordination, community relations, use process includes external notification.	lied by the Security Department by and covers both internal and cy Response Plan by providing a corporate levels. The level of capid Response Coordinator and expersonnel at the mine site cover environment, recovery, security
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.	
	X	in full compliance with	
The operation is		in substantial compliance with	Standard of Practice 7.5
		not in compliance with	

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Basis for Audit Finding: The Emergency Response Plan and associated emergency response procedures cover the remediation of contaminated areas and disposal of contaminated material. In the event that there is a solid or liquid cyanide spill to ground the response process requires that all contaminated soils are recovered for disposal into the TSF. The Plan permits the use of ferrous sulphate or sodium hypochlorite on small spills of cyanide slurry or cyanide solution that occur to land. The Plan prohibits the use of chemicals to treat materials containing cyanide that have been released to surface water. The potential for an impact on the drinking water supply at the site has been assessed as negligible but in the unlikely event that there is an impact an alternate supply could be made available from the on site potable water treatment plant. An Environmental Advisor checklist is completed for emergencies that require assessment of the need for post clean up monitoring based on the circumstances of the incident.

Standard of Practice 7.0.		revise them as needed.	ocedures and capabilities and
	$\boxtimes$	in full compliance with	
The operation is		in substantial compliance with	Standard of Practice 7.6
		not in compliance with	
emergency response plar One cyanide drill has be emergency response team	n, and the een can have can be	nafo has committed to annual review following any incident when it was noticed out. Additional drills are plantials are documented with photographics and deficiencies that require corrections.	ecessary to implement the Plan. ned to involve each of the four e records and a drill post mortem
8. TRAINING:		Train workers and emergency recyanide in a safe and environmental	
Standard of 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	Standard of Practice 8.1
		not in compliance with	

Basis for Audit Finding: Ahafo provides training to all employees with the potential to be exposed to cyanide. All employees are required to attend a site induction covering cyanide awareness, identification and exposure routes. Cyanide safety training covers: general training attended by all employees; process training attended by process plant operators and maintenance personnel; and supplier training by Orica attended by process plant and maintenance personnel. Special training is provided for personnel responsible for the sparging activity (Standard of Practice 3.2). All personnel

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are required to complete an annual refresher training which contains sections on cyanide. Training records are held and controlled by the Ahafo People Development Centre. 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. in full compliance with  $|\mathbf{x}|$ The operation is in substantial compliance with **Standard of Practice 8.2** not in compliance with Basis for Audit Finding: Ahafo has developed and implemented operating procedures that cover activities and operations related to cyanide management (Standard of Practice 3.2). Operating procedures detail health and safety and environmental controls for all aspects of cyanide receipt, mixing, and use, including associated operations such as tailings management. Specific training modules covering a range of process operations are delivered to nominated personnel. These modules are designed to minimise the risk to employee health, promote safe practices and prevent uncontrolled releases. Training needs analysis carried out by Ahafo has led to the development of plant operating procedures which are then the basis for the specific training modules. In addition, there is an on the job training which is co-supervised by and assessed by the process supervisor and Training Department personnel. Ahafo policy is that all personnel are trained prior to working with cyanide. This policy is policed by the Training Department. All personnel are required to attend annual induction refresher training. All Process personnel are required to attend an annual training session on Cyanide Safety delivered by the cyanide supplier. Reagent operators and maintenance personnel attend additional refresher training. There is a yearly on the job refresher training covering SOP's. Evaluation is by Supervisors and Trainers. Training records are maintained in the PDC. Train appropriate workers and personnel to respond to worker Standard of Practice 8.3: exposures and environmental releases of cyanide.  $|\mathsf{X}|$ in full compliance with The operation is in substantial compliance with **Standard of Practice 8.3** not in compliance with Basis for Audit Finding: The unloading and mixing of cyanide is controlled by a "Reagent Team". The team members are trained in the relevant operating procedures covering receipt and mixing of isotainers at the sparging facility. Reagent, process and maintenance personnel are trained in first aid and cyanide hazard awareness and response. Emergency response to a cyanide release is the responsibility of the Emergency Response Section. A duty team is on stand by 24/7. Emergency Team personnel have been provided with specialist training in response to cyanide emergencies and

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first aid, such as the administration of oxygen and have participated in an emergency drill. Ahafo has adopted a system where the Emergency Response Teams are responsible for response, clean-up and decontamination of accidental cyanide releases. See also commentary covering Principle 7, Emergency Response. Emergency services in the local region surrounding the Ahafo mine have no equipment or training to provide any services to the mine in the event of a cyanide emergency. Provision of external medical assistance is covered in Standard of Practice 6.3. There has been one cyanide related drill that involved processing, emergency response and medical staff. Processing and emergency response training records include refresher training covering cyanide emergency response. Training records are retained for each individual and provide the date, the type of training, the source of the training (organisation and trainer), and training assessment results.

9. DIALOGUE:		Engage in public consultation and	disclosure.
Standard of Practice	<u>9.1</u> :	Provide stakeholders the opportu	unity to communicate issues o
	X	in full compliance with	
The operation is		in substantial compliance with	Standard of Practice 9.1
		not in compliance with	

Basis for Audit Finding: There are a number of external bodies that are involved in external communication programs established by Ahafo. These include: women's groups, youth groups, NGOs, farmers groups, civil union groups, and government – Assemblymen, the Departments of Agriculture, Health, and Environment, the Ghana EPA, and the Land Valuation Board. There are ten communities identified in the broad "zone of influence" of the mine and another ten outside the zone. Stakeholder engagement meetings are the most common form of community communication. All stakeholder meetings are minuted. Because of the number of groups and of stakeholders committee structures are used extensively. Some stakeholder meetings are scheduled but others are called to address particular issues. There is a grievance system in place that covers the lodgement and recording of grievances and action taken in response. Complaints are entered into a data base and attended to by Grievance Officers. There have been no registered community complaints about cyanide to date. Cyanide communication is almost invariably initiated by Ahafo. Consultation Officers have been appointed to staff information centres in various locations. Grievance officers are providing training to Environmental Officers. There was initial engagement of local communities along the transport route used by cyanide transport vehicles. Subsequently public consultation meetings have been held describing how cyanide is managed at the mine.

<u>Standard of Practice 9.2:</u> Initiate dialogue describing cyanide management procedures and responsively address identified concerns.

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	X	in full compliance with	
The operation is		in substantial compliance with	Standard of Practice 9.2
		not in compliance with	
an agenda item. A r influence was attended	ecent qu l by 24 p d the use	ractive meetings have been held with arterly meeting of Assemblymen freople. A public disclosure plan cover of posters showing how cyanide was communities.	om within the defined zone of ered stage 2 of the development
Standard of Practice 9.3:		Make appropriate operational and environmental information regarding cyanide available to stakeholders.	
	X	in full compliance with	
The operation is		in substantial compliance with	Standard of Practice 9.3
		Not in compliance with	

Basis for Audit Finding: Posters have been prepared and used to show the community how cyanide is managed at the mine. Public Consultation Officers (PCOs) are provided with a descriptive document for reference and to assist them in responding to questions. The most common medium of communication with local communities is through face to face meetings. All PCOs have attended the site induction which covers cyanide and have also been trained to respond to likely questions about cyanide. From a global perspective information on cyanide incidents is available on the Newmont web site. Incidents are also reported in the annual Sustainability Report. An incident at the mine which did not result in any spill of cyanide solution was reported to the Ghana EPA. The incident was communicated to the local community and visits to the site were hosted so that community representatives could see what had happened and how Ahafo managed the response. Newmont also hosted a press conference in Accra to communicate the incident. Newspaper coverage of the incident was considered by Ahafo to be fair and accurate.

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