

***INTERNATIONAL CYANIDE
MANAGEMENT INSTITUTE***

***Cyanide Code Compliance Audit
Gold Mining Operations***

***Summary Recertification
Audit Report***

***Acacia
Bulyanhulu Gold Mine
Tanzania***

22nd – 26th June 2015



Name of Operation: Bulyanhulu Gold Mine
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Location detail and description of Operation

Location detail

The Bulyanhulu gold mine is located in north west Tanzania, in the Kahama district of the Shinyanga region, approximately 55 kilometres south of Lake Victoria and approximately 150 kilometres south west of the city of Mwanza, a regional business and economic hub. The Bulyanhulu process plant has the capacity to process an average of approximately 3,300 tonnes of ore per day (approximately 1.1 million tonnes per year) operating 24 hours a day on a 365 day per year basis.

The mine consists of an underground mine, a process plant, waste rock dumps, tailings containment, water management ponds and associated facilities. The mine is an underground trackless operation using long-hole as its principal stoping method. As at 25 June 2015, a total of 1,859 individuals were employed at Bulyanhulu (excluding contracted personnel).

Bulyanhulu is a narrow-vein gold mine containing gold, silver and copper mineralisation in sulphides. Mineralisation of Bulyanhulu is associated with steeply-dipping Argillite units refer to as Reefs. To date a number of distinct reefs have been identified including Reef Zero, Reef One and Reef Two. Bulyanhulu life-of-mine is currently estimated to be in excess of 25 years, based on its proven and probable gold reserves of 7.64 million ounces.

Process Plant description

The run of mine, after being hoisted from underground operations is crushed in a jaw crusher before milling in an open circuit SAG mill. The feed ore to plant contains gold, silver and copper. The feed grade is between 6.5 – 10.0 g/t of gold and 0.3 – 0.5% of copper. The sulphide minerals mined are mainly pyrite (FeS₂) and chalcopyrite

(CuFeS₂). The plant recovers these valuables using gravity and flotation processes. Free milling gold and electrum particles are recovered using gravity techniques and intensive cyanide leaching reaction followed by electro-winning to produce doré bars.

The primary cyclone overflow is sent to rougher flotation from where the tailings are thickened and disposed of to the tailings dam or as backfill. The rougher concentrate is classified to produce a cyclone overflow which goes to four stage re-circulating concentrate cleaner cells.

The first stage cleaner tail is cleaned in scavenger cells, the concentrate from which is returned to the second cleaner stage. The cleaner scavenger tails stream is fed to a CIL plant for gold extraction to produce doré for sale. The rougher concentrate cyclone underflow reports to a flash flotation cell, the tailings of which are reground before joining the rougher concentrate, and the concentrate of which is cleaned in flash flotation cell to produce final concentrate.

The concentrate thickener receives the final sulphide and the underflow is pumped to a Larox filter via a stock concentrate storage tank to produce a cake of 8.0 -1.0% moisture content. The final concentrate is loaded into containers. Bulyanhulu Process Plant produces between 40.0 – 70.0 t of concentrate per day. The copper concentrate contains approximately 200.0 -280.0g/t gold, 200.0 – 250.0g/t silver and 11.0 – 25.0% copper. The recovery varies between 85.0 – 93.0% for gold and 75.0 – 95.0% for copper.

In July 2014, a new Carbon in Leach (CIL) Plant was commissioned to treat the re-mined tailings from the old TSF(Tailings Storage Facility) and also the Cleaner Scavenger Tailings which initially were treated in the old CIL Plant. After cyanidation process in the CIL circuit, the final tailings are detoxified to destruct cyanide to less than 50ppm WAD cyanide before discharging into TSF 4. The feed to the CIL plant is made up of 1.2 million tonnes of reclaimed tailings from the old tailings (TSF 1&2) and 121kt of cleaner scavenger tailings in a year. The CIL plant operating 24 hours a day on a 365 day per year basis at 92% availability.

The tailings re-mining is done using high pressure water and then the slurry is pumped to the new CIL Plant for gold extraction through cyanidation leach process. The water recovered from the re-mined slurry (through thickening) is pumped back to the reclamation plant for reuse. The operation of tailing re-mining process and TSF 4 is managed by Fraser Alexander Tailings (FAT) as the operator.

The use of paste tailings in the design of the Tailings Facility at Bulyanhulu was largely to do with the amounts of water that could be recovered inside the process, compared to that of a conventional tailings facility and the requirement to produce Paste Backfill product for Underground. Waste products are filtered and transported as paste for tailings deposition and placement of backfill.

Surface tailings deposition is based on building a stable stack using end-of pipe paste discharge from multiple deposition points. The paste is currently being deposited on a combined surface area of approximately 50 ha. The facility includes a stormwater run-off trench, a sedimentation pond and two return water ponds.



The process used in the Bulyanhulu Process Plant is a three-stage process which consists of: (a) Thickening stage which is performed by conventional thickeners that raise the slurry density to approximately 55% solids, (b) Filtration where a filter cake is produced with 76-77% solids and (c) Paste conditioning where the filter cake is re-pulped in a paddle mixer, which produces a consistent paste product of 75% solids and a 10-inch (250mm) slump.

The paste being generated, with a consistent 75% solids, offers a great saving of water to the process and advantages such as:- reduced risk (paste is stable at deposition point and highly unlikely to liquefy); low cyanide contaminated water seepage to the environment; access time onto the tailings surface is greatly reduced; low footprint (area of the dam) of the tailings area as stacking is possible, the stability of the paste reduces the costs associated with building a conventional dam; and reclamation of the dam can be initiated while the dam is still functional. Bulyanhulu needs to produce paste for its underground mining activities.

Background to 4.4 Non-Compliance Finding

A decision was taken to build a new CIL plant which started commissioning in July 2014. The plant was designed with a downstream detoxification circuit to bring WAD cyanide levels down below 50mg/l WAD cyanide before disposal on the new TSF 4.

A series of design, commissioning and teething problems were experienced between July 2014 and June 2015 resulting in significant and regular WAD cyanide exceedances above the 50mg/l levels. These are summarised in the table below:-

Operational Date	Reasons	Remedial Action taken
Sep-14	Frequent blockages of the SMBS transfer pipes to the cyanide detoxification tanks	Strainers were installed on the transfer lines
Nov-14	Insufficient oxygen flow into the cyanide detoxification tanks due to improper design of the oxygen sparging systems - frequent blockages of the nozzles during commissioning.	Modification was done to change the sparging system from the original design to a single pipe with umbrella air diffusers.
Feb-15	Frequent SCADA communication system failures within the CIL plant which affected the detoxification system and hence resulted into WAD cyanide spikes during Plant start up.	Replacement of the communication module
Mar-15		Installation of UPS for the PLC CPU
Mar-15		Installation of the UPS for the RPMs in all three MCC
Mar-15	SMBS mixing process failure due to blockages of the screw feeders which led to poor control of WAD cyanide as a result of improper reagent strength.	A new SMBS mixing system was constructed, installed, and commissioned for use.

Apr-15	Insufficient residence time for the cyanide detoxification reaction as a result of parallel detoxification tanks design.	Modification was done to change the detoxification tanks from parallel to series configuration for increased residence time.
Jun-15	Insufficient dissolved oxygen for the detoxification process once the oxygen plant goes down.	Additional line of compressed air was installed to all detoxification tanks to supply air for the cyanide detoxification circuit in case the oxygen plant goes down (as breakdown). This will offset the effect of high WAD CN to TSF.
July 2015	To keep birds away from the TSF pool	Three birds scarers are installed at TSF as a short term measure to minimize the risks.
July 2015	To keep birds away from the TSF pool	In addition to the installed bird scarers, two gas cannons have been ordered (PO no. 10008722) to be used in addition to the installed birds scarers for the purpose of minimizing the risk of birds mortality. Expected to be installed on November 2015.
August - 2015	Cyanide spikes into TSF as a result of plant stoppages.	Ferrous Sulphate reagent is being utilised into the last transfer detoxification tank (detox 4) once high WAD cyanide spikes are observed on the SCADA, this will control high values to be discharged into TSF.

The operation has shown good faith in attempting to deal with the problems causing the elevated WAD cyanide levels. A number of these initiatives are beginning to show results but there has been insufficient time to evaluate whether the solutions and initiatives are able to ensure a sustained operation depositing on the TSF at below 50 mg/l WAD cyanide.

The operation has been found in non-compliance for the following reasons:-

1. Frequent, and sometimes extended, exceedances of the 50 mg/l WAD compliance limit at the compliance point with no associated implementation of additional, temporary mitigation measures to manage the increased cyanide risk to birdlife.



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2. At the time of the audit, there was insufficient information available to show that the operation could consistently maintain below 50mg/l WAD cyanide levels at the compliance point.



Auditor's Finding

This operation is

- in full compliance
- in substantial compliance *(see below)

X not in compliance

with the International Cyanide Management Code.

* The Corrective Action Plan to bring an operation in substantial compliance into full compliance must be enclosed with this Summary Audit Report. The plan must be fully implemented within one year of the date of this audit.

This operation has experienced compliance problems during the previous three year audit cycle. These are discussed under 4.4 below and above.

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Names and Signatures of Other Auditors:

Name : Dawid M. L Viljoen

Signature



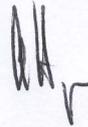
Date: 15/12/2015

Dates of Audit: 22nd – 26th June 2015

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.

Bulyanhulu Gold Mine



20/12/2015

Facility

Signature of Lead Auditor

Date

Bulyanhulu Mine

Signature of Lead Auditor

13th December 2015

Audit Findings

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.

X in full compliance with

The operation is in substantial compliance with **Standard of Practice 1.1**

 not in compliance with

Basis for this Finding/Deficiencies Identified:

African Barrick Gold and Acacia Mining, under an umbrella contract for all Barrick global subsidiaries, obtains its cyanide, on behalf of Bulyanhulu Gold Mine, from Orica, who produce the product. Orica is a signatory to the ICMI Cyanide Code, and the contract requires that the producer must comply to the provisions of the Cyanide Code. Orica's cyanide production facility is fully certified, under the ICMI code, and supplies solid sodium cyanide to African Barrick Gold and Acacia Mining for use at the Bulyanhulu Gold Mine.

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.

X in full compliance with

The operation is in substantial compliance with **Standard of Practice 2.1**

 not in compliance with



Basis for this Finding/Deficiencies Identified:

A supply contract is in place with ICMI certified Orica who are responsible to supply and deliver sodium cyanide to the Port of Dar Es Salaam. Transport to Dar es Salaam is included in the Orica ICMI East Africa Supply Chain certification. Freight Forwarders Tanzania, is a certified ICMI Transporter, whose contract and certification includes all offloading and interim storage at the Port of Dar es Salaam and transport to the Bulyanhulu site.

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

X in full compliance with

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

Basis for this Finding/Deficiencies Identified:

The contracts with Orica and FFT (Freight Forwarders Tanzania) requires that the transporters comply with all the provisions of the ICMI Cyanide Code. The Australian Supply Chain covers the transportation of solution sodium cyanide and solid sodium cyanide from the manufacturing facility in Yarwun, Australia, by road and rail direct to its end point users within Australia and the Port of Brisbane and was recertified on 26th January 2015. Recertification of Orica's transport supply chain for East Africa was published on the ICMI website on 15th May 2015. The East Africa Supply Chain covers the transportation of solid sodium cyanide by ship from the Port of Brisbane, Australia to the Port of Dar es Salaam, Tanzania, via the Mediterranean Shipping Company.

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.

X in full compliance with

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



Basis for this Finding/Deficiencies Identified:

Design and quality control/quality assurance documentation audited during the certification audit for the original plant was confirmed for the cyanide mixing storage tanks i.e. detailed, professionally designed, drawings for the cyanide mixing and storage areas were sighted which clearly indicated the structures were designed for sodium cyanide and located on concrete and away from people and surface waters. Design and Material Standards used were the Australian Standards or the relevant British and American Standards. The Cyanide area is within a security controlled area with adequate controls and separation to prevent mixing with incompatible materials.

A new cyanide mixing plant was constructed and a new CIL Plant was built and commissioned in July 2014. The plant was designed by MDM Engineering and the African Barrick Gold and MDM contract includes the requirements that the plant be designed for cyanide specific use and to be ICMC compliant. Design files, process and instrumentation drawings (P&IDs) for Reagents 1 Cyanide and caustic were sighted as were the cyanide make up tank mechanical design drawings (including reference to mechanical and material specifications) and the tank foundation drawing indicating the use of a reinforced concrete layer on the top of the foundation for the tanks.

In the old CIL plant, the mixing and storage tanks are equipped with ultrasonic level sensors showing on the SCADA alarming at 90% (H) and 95% (HH). The Mixing tank water feed valve level was interlocked at 90% of the tank level, and there was an interlock between the cyanide storage tank and the transfer pump from the cyanide mixing tank triggering at 90%, and showing on the SCADA, alarming at 90% (H) and 95% (HH). Secondary containments built from concrete provided a competent barrier to leakages and provided adequate and appropriate containment for the tanks.

In the new CIL plant, the P&ID for Reagents 1 Cyanide and caustic show the installation of level detectors. The African Barrick Gold Bulyanhulu Process and Operating Manual includes the control philosophy describing level transmitter controls and level settings used in the plant. The Mixing Sodium Cyanide (Area 4167 New CIL) Safe Work Procedure includes task steps which include reference to settings and safety controls.

In the old CIL plant, the solid cyanide was stored in the cyanide shed under roof, closed on the sides, and designed to prevent water from entering from the sides. The risk at the side door where a risk for water entering the shed was addressed by putting up a plastic barrier and earthen wall. The building was fitted with ventilation slots in the roof, and the mixing tank was open at the top to enable the addition of the cyanide from bulk bags. The mixing tank was equipped with a dust extractor point. Entry into the shed required the wearing of a personal HCN gas monitor as per procedure and there were safety signs on the door. The old section has been decommissioned.

In the new CIL plant, the new store has a concrete floor, the entry is equipped with berms to prevent water from entering, and the sides of the galvanised sheeting route rain water to the outside of the cyanide storage floor area. The new cyanide mixing facility is equipped with ventilation openings on top of the tanks. The building is open at the front, sides and back to assist with ventilation of the area. The new dry solid cyanide box store is equipped with some ventilation slots in the roof apex (which appeared to be retrofitted to an old store).



The cyanide is stored inside a double fenced security area with access control and only authorised people allowed inside the plant. Furthermore, the cyanide is stored in its own dedicated store, separate from oxidizers and explosives and apart from foods, animal feeds and tobacco products. This applies to both the old and new CIL plants.

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 this Finding/Deficiencies Identified:

No liquid cyanide is delivered and all cyanide used is mixed from solid briquettes. The procedures covering offloading from containers, mixing and disposal of packaging were sighted, reviewed and found to be clear and descriptive. All empty cyanide boxes and plastic liners are retained within the secure area adjoining the mixing facility until ready to be taken for burning. Operators undertaking the box burning are escorted to the incinerator by security officers.

The mixing procedure spells out the sequence of tasks clearly to avoid spillages and releases and includes pre-work inspections, required PPE (Personal Protective Equipment), and the use of a sentry (“Buddy”).

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.

X in full compliance with

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

Basis for this Finding/Deficiencies Identified:

The process plant has 62 integrated operational and engineering procedures for the CIL cyanide areas, supported by appropriate environmental procedures. Procedures and

systems for the old CIL plant (which was decommissioned in October 2014) were confirmed to have operated effectively prior to the new CIL plant. The new CIL Plant was commissioned in July 2014. Commissioning procedures were drafted and procedures were reviewed to reflect the new CIL. The list of 41 revised procedures affecting the new CIL plant were sighted and were all signed off. The operation inspects cyanide facilities on an established frequency sufficient to assure and document that they are functioning within design parameters.

The new TSF and remining operations were commissioned July 2014. The Bulyanhulu Gold Mine Operation, Maintenance and Surveillance Manual - TSF Cell No.4 was sighted and reviewed, along with the Fraser Alexander Tailings (FAT) procedures for operation of the TSF and the remining operations.

The new water pond no 3 was commissioned to better manage the risk of overflow and the Probabilistic Water Balance model did not indicate an overflow when running scenarios under the design storm event. The plant will be stopped in case of breakdowns or planned maintenance or water balance problems, as per the operational procedures.

A change management procedure is in place and functioning and change management exercises are signed off by Health, Safety and Environmental officials.

On the site and the TSF, preventative maintenance and inspections have been controlled by a software-based, Planned Maintenance System (PMS) called PRONTO. Key pumps, tanks, bunded areas, pipes and pipelines, and equipment were checked on the system and found to be systematically maintained through visual and mechanical checks, thickness tests and historical reviews. Records were sampled covering the three year period.

The plant is designed with minimum gravity flow back and is also equipped with sumps and pumps and no risk of unintentional releases exists. The TSF is designed with sufficient run-off capacity to prevent unintentional releases in case of a power outage which was confirmed by the probabilistic water balance. However, A standby generator is available in case of power outages. The unit can run the TSF solution dam pumps.

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

X in full compliance with

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

Basis for this Finding/Deficiencies Identified:

The ore mined is from an underground deposit and is reported to be relatively uniform with one area different. The ore is of a polymetallic type and contains e.g. copper, galena, pyrite, pyrrhotite, gold, and silver.

The cyanide optimisation program for Bulyanhulu, prior to the new CIL plant, included objectives to minimise impact on environment, reduce risk and reduce capital expenditure.



A new CIL plant was commissioned in July 2014 and the Bulyanhulu Process Plant Expansion Project Feasibility Study contained details on cyanide consumption and Leach Residence Time Analysis. The Process Design Criteria indicate cyanide on re-mining - 1.65kg/t and float cleaner 3.7 kg/t. The CIL Cyanide Dosing Optimization Procedure was reviewed to apply to the new CIL plant covering four streams. The Mintek report characterising Toure streams: "CIL tails Cleaner scavenger tails, reclaimed material TSF and combination of the sources: Mineralogical And Chemical Characterisation of Gold Ore Products from Bulyanhulu Gold Mine, in Tanzania" by: Piet Sebola, Veruska Govender, Themba Muthupi, dated 22 June 2015 was sighted. In addition, the report, "Optimization of the Reagents at New CIL Plant Cyanide Concentration and Lime", Aug 2014 by university students was done for the new CIL in which the recommended optimum pH proposed to the new Bulyanhulu CIL circuit should be 10.5 pH, at 1000ppm of cyanide concentration dosing. Also sighted were Test Works for Cyanide Optimization in Leaching Tanks prepared by Emmanuel M Muchunguzi 17/6/2015. The test results here indicate cyanide concentration of 1300 ppm in the CIL 1.

The new plant was designed with a TAC 1000 / ratio control system in place and the current control system still needs to be optimised after commissioning. Optimisation control strategies include the use of variable speed drive pumps (Hose pumps) for each dosing point, replacing the previous valve / ring main system.

The controls on the new plant include under Primary control, ratio control using the mass flow and estimated kg/t cyanide requirement with a control valve on a ring main reagent cyanide solution system. Under manual secondary control, there is a TAC 1000 online cyanide measurement instrument which measures the cyanide ppm. The CRO inputs the desired cyanide concentration ppm's and this is shown in blue on the SCADA cyanide tag 4131_IAC01. This is not used for control purposes. The measured cyanide ppm is observed over a continued period and if found to differ considerably from the desired ppm's, the cyanide g/t set point is adjusted.

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

X in full compliance with

The operation is

- in substantial compliance with **Standard of Practice 4.3**
- not in compliance with

Basis for this Finding/Deficiencies Identified:

The Mine has used the GoldSim model since 2007 for the comprehensive probabilistic water balance (PWB) covering the whole mine area, TSF ponds and all other water ponds. Hydrology run off calculations are done using HEC-HMS software fed with the daily rainfall data, which then produces an input file to GoldSim when the probabilistic model is run. An update of the model now embeds inputs to simplify use and includes the new re-mining operation and TSF 4. The model is updated on a monthly basis and data is

inputted as it becomes available through the links. The latest version of the model was sighted and electronically demonstrated.

The Bulyanhulu automatic weather station reports are used in the model and this data is supported by a manual station at the water treatment plant. The operations use a paste disposal type TSF, limiting evaporation and the water ponds evaporation is included in the GoldSim model simulations. The model does not indicate the need for standby power or pumps although standby generators are available.

The Water Management Plan specifies pond levels and overflow risk levels which form part of operational management. The Pond management input page of the model includes pond management priorities, daily pond levels and water meter readings.

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

in full compliance with

The operation is

in substantial compliance with **Standard of Practice 4.4**

X not in compliance with

Basis for this Finding/Deficiencies Identified:

A review of the WAD cyanide data for the old CIL plant compliance point from the previous recertification audit up to October 2014 showed no unexplained exceedances of the 50 mg/l WAD cyanide levels.

During the commissioning of the new CIL plant, the WAD cyanide in the spigot at the TSF exceeded the 50 mg/l WAD CN requirement frequently. During these periods, no mitigating measures were applied to minimise the increased risk to birdlife. The Mine identified the issues and is in the process of rectifying the problems. (See background notes on pages 4 and 5 of this document.) Results have not yet stabilised to show a sustainable performance that gives consistent WAD cyanide levels of below 50 mg/l WAD cyanide. A corrective action plan has been agreed to give time to fully implement corrective actions related to the Detox plant problems during commissioning and to fully optimise WAD cyanide performance and ensure sustainable compliance to the 50 mg/l Wad cyanide limit.

Ponds and the TSF are monitored daily for wildlife mortalities and 9 bird mortalities were noted on 19 June 2015 around the penstock area. This is the only incident of bird mortalities recorded since the previous re-certification audit.

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

X in full compliance with

The operation is

in substantial compliance with **Standard of Practice 4.5**

not in compliance with

Basis for this Finding/Deficiencies Identified:

There is no direct discharge to surface water and the nearest river, the Bulyanhulu river, is 5kms away. A surface water dam is situated below the TSF return water ponds and boreholes are placed around the ponds and sampled and analysed for WAD and free cyanide. Borehole values upstream of the river were reviewed and values are less than limits of detection of 0.001 and 0.05 mg/l WAD cyanide indicating that no indirect discharge occurred. Difference in the limits of detection are due to a change in analytical method. Cattle Pond values between January 2013 and May 2015 were sighted and values are between limits of detection <0.001 and 0.19 (The one exceedance sample was traced to a pond overflow, investigated and preventative action completed and implemented.) The WAD cyanide levels for the Bulyanhulu river up and down stream were shown to be less than levels of detection from 2013 to date. Borehole values upstream of the river are less than limits of detection of 0.001 and 0.05 mg/l WAD CN. Once again, the difference in limits of detection is due to change in analytical method. The legal standard is 1 mg/l WAD cyanide.

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

X in full compliance with

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

Basis for this Finding/Deficiencies Identified

All TSF return water dams are lined and the process plant uses a detoxification section to reduce cyanide in the tailings to less than 50 ppm WAD cyanide. The new TSF is double lined and equipped with under drains to recover any seepage to the silt trap. The new CIL plant is equipped with concrete bunds and spillage systems to prevent and manage seepage. Beneficial uses for groundwater are primarily mining. There is no specific legal standard for groundwater in place but the drinking water standard is 0.2 mg/l. Groundwater sample results were sighted from Jan 2013 to May 2015. Boreholes up and down gradient of the site were all values less than limits of detection of 0.05 mg/l. Backfill is placed underground and the backfill cyanide standard is to keep cyanide below 50 ppm WAD cyanide. A report on the impact of backfill on the underground mine was completed and sighted during the certification audit. A risk assessment for the use of mill tailings with residual cyanide for backfill, emergency preparedness, training, and awareness report for CIL plant project for Bulyanhulu Mine, August 2007, was also sighted. CIL Detox tailings are monitored by an on-line WAD 1000 analyser and cyanide values are reduced by a factor of 3 during dilution of the CIL tails with the float tails. A detoxification process upset safe working procedure requires, "...If the concentration of

WAD Cyanide in Detox Tank #2 is above 50ppm: 1. The CIL Operator is to stop the feed to the CIL plant...". Values to the paste plant were sighted from January 2013 to the date of closure of the old CIL plant in October 2014 and no values exceeding 50 ppm WAD cyanide were observed in the tailings samples. The backfill feed, following the closure of the old CIL plant, contains float rougher tails only, thus no cyanide bearing slurry is treated to produce backfill.

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

X in full compliance with

The operation is in substantial compliance with **Standard of Practice 4.7**

not in compliance with

Basis for this Finding/Deficiencies Identified:

All tanks are placed inside bunds serving as secondary containment. All bunds are equipped with sumps and dedicated sump pumps returning any spillage back to the process. In the old CIL plant, the cyanide storage tank is placed on a solid concrete base. CIL tanks are placed on ring beams with a 100mm slab with a fabric reinforcing under the tanks. Cyanide tanks and pipelines are manufactured from materials compatible with cyanide and high pH conditions.

In the new CIL plant, all tanks are placed inside bunds. Civil drawings and site inspections confirmed the containments of pipes and tanks. Detox tank civil drawings and site inspection confirmed impervious layer in the tank foundations. The pregnant and barren solution tanks were reported to be placed on impervious concrete plinths by Daniel Kalemela, Acting Maintenance Section Leader. He was present at the time of their construction of the tank foundations. The process water tank was sighted and confirmed that there was an impervious layer in the tank foundations.

All secondary containments, in both the old and new CIL plants, for cyanide unloading, storage, mixing and process tanks were confirmed as being sized to hold a volume greater than that of the largest tank within the containment and any piping draining back to the tank, and with additional capacity for the design storm event.

In the old CIL plant, reagent strength pipelines were routed across competent secondary containment bunds and placed in a pipe where it crossed the road to the Acacia system. Preventative measures included having all pipelines on the Pronto PM system covered by operational inspections.

In the new CIL plant, the new cyanide dosing lines are running in a pipe-in-pipe system where it crosses bare soil, with the other pipes installed above competent concrete bunds. The reagent strength cyanide line to the Acacia reactor is taken off the ring main from the new cyanide dosing lines and run in a pipe-in-pipe secondary containment to the Acacia reactor make-up system. All other low strength cyanide containing pipes are part of the PMS inspections as a preventative measure.



Tailings lines and return water pipelines are contained in a lined trench. Tailings lines at the TSF are placed inside the berms to contain any spillage. Tailings lines run in a lined trench and in a pipe in pipe system where roads are crossed. All tailings lines are inspected via the Pronto Preventative Maintenance system.

No special areas posing a risk to surface water have been identified and there are no rivers close by.

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

Basis for this Finding/Deficiencies Identified:

A new CIL Plant was constructed including pre-thickeners, water tanks, CIL, cyanide mixing and storage and detoxification processes. The QA/QC was managed per section and workbooks were sampled and inspected in the project library.

The Caspian Data book quality control index for the caustic cyanide area of the CIL project covering the civil construction was sampled. The data book contains all QA/QC related records including as built drawings.

The sign off by Caspian (civils contractor) MDM (main contractor), African Barrick Gold (Client) was verified. The QA/QC system considered the design documents, cube tests, compaction tests, pre concrete and post concrete inspections and rebar. It was reported during the interviews that all sections are covered by similar data books and signs-offs.

The Caspian Data Book for the Detox area, included test certificates, as built drawings, survey report, cube data results, excavation permits, compaction controls, founding level approval, pre- and post- concrete inspections and the handover certificate. For the mechanical QA QC, the existence of the project work books in the project library covering Civil, Electrical, Mechanical and other related project files was verified.

The Genrec (mechanical contractor) Data Book includes General Documents, Item documentation, Materials documentation, site modifications and customer feedback. The documents include qualification certificates, magnetic particle examination certificates, mechanical test results, welding certificates, chemical test certificates, Arcelor Mittal inspection certificates (plates), MDM Quality surveillance inspection reports and sign offs. The pipe fabrication data book containing a quality control plan, drawings, welding procedures and qualifications, material certificates, weld maps and NDT reports, corrosion protection, inspection reports and correspondence. The signed off MDM inspection release report was sighted. The BSI SA Pty Ltd Data Book for Bulyanhulu tanks including Quality control plan, inspection report, corrosion quality control plan, blast profile and inspection report, Stoncor batch test certificates was also sighted.

The MDM data book index including order, drawings, paint data book, material certificates, inspection reports, minutes, release notes, Sertica industrial fabrication cc QA QC reports, and the sign off by MDM and the supplier.

New extensions were added to the TSF and it was confirmed that a complete QA/QC program was implemented and Return Water Dam no 3 was sampled to confirm QA/QC detail.

The Return Water Dam no 3 civil QA/QC files included Caspian Site inspection Check sheets, compaction tests, RWD-West Wall drawings, Field tests signed off by the QA/QC Engineer, and the SLR Consulting (Tanzania) representative. Other documents sampled included:- the Foundation approval check sheet, Aquatan Non-destructive quality testing log forms (Aquatan was the liner manufacturer and liner installation contractor), panel placement forms, panel seaming forms, repair report log forms, and the Aquatan surface acceptance certificate signed by installation Contractors, Civil Contractors and Engineer's Representatives.

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

X in full compliance with

The operation is

in substantial compliance with **Standard of Practice 4.9**

not in compliance with

Basis for this Finding/Deficiencies Identified:

A water sampling procedure and a monitoring program is in place to sample both surface and groundwater for cyanide. The general sampling procedure specifies roles and responsibilities, actions and methods, cleaning of equipment, preparation, sample labelling, sampling, sample preservation, the sampling packaging and transportation, and notification of the laboratory. Monitoring, sample preservation and custody and chain of custody procedures were developed internally by the appropriately qualified site Environmental Officer.

The monitoring and inspection frequencies are deemed adequate to characterize the medium being monitored and to identify changes in a timely manner.

Surface water is sampled monthly, boreholes quarterly and wildlife monitoring daily by TSF staff and weekly by environmental staff.

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.



X in full compliance with

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

Basis for this Finding/Deficiencies Identified:

The Acacia Mining PLC Bulyanhulu Gold Mine Standardised Cyanide Decontamination and Decommissioning Plan includes details of cyanide decontamination and decommissioning. An implementation schedule is in place and the details in the Plan are reviewed annually.

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

- in full compliance with

The operation is X in substantial compliance with Standard of Practice 5.2

- not in compliance with

Basis for this Finding/Deficiencies Identified:

There is a Conceptual Mine Closure Plan which is updated to 2014 which includes closure estimates. The estimates are reviewed annually. There are now jurisdictional requirements for a financial assurance mechanism and the Tanzanian Government requires a bank guarantee for the three Acacia mines (including Bulyanhulu) for the cost of the rehabilitation (including cyanide decommissioning) of its three mines. The draft agreement was sent to the Government and the Mine is awaiting finalisation of the bank guarantees/bonds and subsequent approval by the relevant Government department. The legal team of the Ministry of Energy and Minerals are still reviewing the draft agreement for the bond. The mine is still awaiting formal, documented approval of its assurance mechanism for closure costing including cyanide decommissioning. Confirmation of the documented approval of the financial instrument developed for Bulyanhulu forms a part of the Corrective Action Plan agreed with the site.

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 or 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 this Finding/Deficiencies Identified:

The process plant has 62 integrated operational and engineering procedures for the CIL cyanide areas, supported by appropriate environmental procedures. All procedures include PPE requirements and appropriate pre-work inspections. Procedures and systems for the old CIL plant (which was stopped in October 2014) were confirmed to have operated effectively prior to the new CIL plant. The new CIL Plant was commissioned in July 2014. Commissioning procedures were drafted and procedures were reviewed to reflect the new CIL. The list of 41 revised procedures affecting the new CIL plant were sighted and were all signed off.

A change management procedure is in place and functioning and change management exercises are signed off by Health, Safety and Environmental officials. Worker input is solicited during daily toolbox meetings and weekly health and safety meetings and through worker involvement in job safety analyses (JSAs). This was confirmed in interviews with staff across the disciplines.

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.

X in full compliance with

The operation is

in substantial compliance with **Standard of Practice 6.2**

not in compliance with

Basis for this Finding/Deficiencies Identified:

In the old CIL Plant, the CIL 1 tanks pH set point is at 11.5, pH is measured by on line pH probes indicating on the SCADA, and alarms are set at L pH 10.7, LL 10.5. Make up water pH is adjusted to pH 12 by the addition of two 25kg bags NaOH and pH is measured at the cyanide make up. In the new CIL plant, the optimum CIL pH was determined as 10.5. and the functional specifications for cyanide make-up require NaOH to be added to adjust pH before mixing of cyanide briquettes.

The mine identified the potential HCN gas hot spots and located fixed monitors in those areas. In the old CIL plant, fixed HCN monitors were placed at no 1 CIL, Detox (reduction area) tanks and bottom at Desorption, top of alkaline reagent mixing tanks and Acacia. Values were displayed on the SCADA , with the first alarm at 4.7ppm HCN for evacuation (with audible as well as SCADA screen pop up alarms). In the new CIL Plant, fixed HCN Monitors are installed at Gold Room (3), CIL (2), Cyanide mixing (1), Elution bund (1), and Detox plant(1). Personal PAC 7000 HCN gas monitors are used with a total of 56 personal HCN gas monitors in use. Personal gas monitors are required to be worn at the CIL. Personal monitors are set to alarm at 10 ppm instantaneous exposure and 4.7 ppm continuously over an 8-hour period.

Cyanide mixing is identified as a risk area and PPE, including the wearing of a Dräger PAC 7000 personal monitor is required. The solid sodium cyanide store is a risk area and workers are also required to wear personal monitors. Signage is used to indicate where cyanide gas risks are possible. Cyanide first aid response information is available at the cyanide dry store and the mixing areas in both English and Swahili. The workforce speaks both English and Swahili.

The Manufacturer requires monitor calibration at 6 monthly intervals. Monitors lists and record files of calibration for each monitor were reviewed and confirmed that the units were calibrated as per the manufacturers' instructions.

MSDSs are available electronically. Signage was observed during the site inspection, including no smoking, no open flames and no eating and drinking allowed. Required PPE signage is placed at various locations in the plant including the dry cyanide store and the cyanide mixing and storage area, CIL, detoxification, and pregnant tanks. The induction programmes includes that no eating and drinking is allowed outside dedicated eating and drinking areas in the plant.

On-going inspections and checks are also used to monitor and check facilities and that emergency response equipment is functioning. Safety equipment such as safety showers, low pressure eye wash stations, and fire extinguishers are numerous and adequately signposted.

A site wide pipe colour coding system is in operation which includes cyanide pipe colour coding and directional flow signage. English is the operational language used, but Swahili is the local language and Swahili signs were observed. Formal employee interviews were used to check awareness and sensitivity to health and safety measures and the response from employees and contractors alike, was found to be appropriate and acceptable. Accident and incident reporting and investigation procedures were found to be in place and effective.

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

X in full compliance with

The operation is

in substantial compliance with **Standard of Practice 6.3**

not in compliance with

Basis for this Finding/Deficiencies Identified:

Radios are used for communication of incidents and Supervisors and ERT first responders may bring cell phones onto the plant as a back-up. The operation has Oxyviva oxygen kits available in the CIL control room, in the emergency kit at the Acacia reactor, and CIL PPE container. All antidotes are stored at the clinic in fridges (confirmed during site visit). Medical Oxygen resuscitators (Oxyviva) are available in the control room and the ERT container, old Acacia reactor, and old Electrowinning gold room on the plant. Running water is available throughout the plant. All plant personnel are trained in cyanide first aid, and a mine-wide Emergency Response Team (ERT) is in place to

provide emergency response, Paramedics form part of the ERT, and a fully equipped mine clinic with a medical doctor, available 24 hours per day and 3 ambulances, two fully equipped to handle cyanide emergencies. It was confirmed by the Doctor that documented inspection checklists and inspections of the cyanide emergency equipment take place and samples of these documents were sighted. Cyanide antidotes are kept in the emergency room and the pharmacy. The pharmacist orders replacement as a part of the wider drug management system, approximately 3 month before expiry. Cyanide emergency procedures form part of the site-wide emergency preparedness plan which covers the whole site and includes the cyanide facilities. No local hospitals or clinics are used for cyanide exposure patients. A medical advisor or the most senior doctor available will make the decision to evacuate a cyanide patient as per the procedure and agreement with the MEDEVAC service provider, ISOS. Equipment is regularly checked and tested and mock drills are held on site and in conjunction with the clinic.

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.

X in full compliance with

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

Basis for this Finding/Deficiencies Identified:

The Bulyanhulu Gold Mine Limited Emergency and Crisis Management Plan (approved 20 May 2015, revision 13), including the new CIL plant, TSF and re-mining sections, is in place and functional, and includes site-specific cyanide emergency scenarios and responses. Cyanide first aid procedures are included in the Plan. The Plan combines existing procedural responses and emergency provisions to deal with the various scenarios and includes and identifies the emergency response team and coordinators who are on all shifts. These preparations are regularly reviewed in the light of changes, mock drill learning points and employee feedback.

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

Basis for this Finding/Deficiencies Identified:

The Emergency Response Plan (ERP) is briefed to the workforce via the management system and through safety meetings and toolbox meetings and post-drill briefing sessions are used as opportunities where information and feedback on the Plan is given. No communities are directly involved with the ERP but they are briefed through the community dialogue structures. The appropriate cyanide emergency response is included in the induction program.

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

X in full compliance with

The operation is

in substantial compliance with **Standard of Practice 7.3**

not in compliance with

Basis for this Finding/Deficiencies Identified:

Using a duty card system, the ERP designates the roles and responsibilities of the controllers and ERT in the Plan. The emergency response team will commit the resources necessary to deal with the emergency. The Plan includes emergency response training be undertaken. Emergency equipment lists were checked and site inspections confirmed availability and readiness. Emergency Team members were checked and training records and assessments showed the individuals to be prepared and equipped for cyanide emergencies. Periodic full scale drills are held to ensure that roles and responsibilities are understood and clearly implemented.

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

Basis for this Finding/Deficiencies Identified:

The Emergency Preparedness Plan includes full details of appropriate emergency contacts and reporting, media communication and the call-out procedure and contact information lists.



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

Basis for this Finding/Deficiencies Identified:

The Emergency Preparedness Plan links to environmental procedures which cover clean-up and neutralisation of solid or solution spills, sampling, PPE and materials to be used/are used. The use of treatment chemicals such as ferrous sulphate, hydrogen peroxide and hypochlorite in surface water is prohibited, unless human life is under direct threat. The Plan includes provision for alternative drinking water supplies, as appropriate to the situation.

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

X in full compliance with

The operation is in substantial compliance with **Standard of Practice 7.6**

 not in compliance with

Basis for this Finding/Deficiencies Identified:

The Emergency Preparedness Plan is reviewed annually in terms of a continuous improvement requirement and the procedures are reviewed after every incident or drill. Reports were sighted of learning points emerging from the various drills.

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.

X in full compliance with

The operation is in substantial compliance with **Standard of Practice 8.1**

 not in compliance with

Basis for this Finding/Deficiencies Identified:

All personnel working in the plant for longer than 5 days, including full time staff, contractors and visitors, receive 1 day chemical and cyanide awareness training during induction. A PowerPoint presentation used, covering cyanide awareness and recognition, and cyanide first aid in detail was reviewed. Written tests are completed to confirm competency. Assessment forms are also available in Swahili and verbal assessments are done for non-literate persons. Eight selected employees were checked in interviews on their understanding of cyanide hazards, first aid and emergency response and this was verified through checking of their training records. Refresher training is given annually and this was confirmed during interviews and review of training records of the interviewees. Hard copy and electronic training records are kept and Company policy requires training records to be kept for 10 years.

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.

X in full compliance with

The operation is in substantial compliance with **Standard of Practice 8.2**

 not in compliance with

Basis for this Finding/Deficiencies Identified:

All staff (operational and maintenance) receive process plant induction (including cyanide) before starting their task training using the Safe Work Procedures (SWP). All workers are trained using SWPs for their specific jobs. The index of training covered in the production task training was reviewed and training was verified during the review of the records of the staff interviewed. Fraser Alexander Tailings (FAT) conducted pre-commissioning training before commencing the re mining and the new TSF operations. Induction training was conducted by the plant before start up.

A training matrix is in place and the current electronic training matrix was reviewed and found to be up to date. Training is provided by 4 qualified trainers whose qualifications include:- Diplomas in education, Certificates in workplace training and education, industrial processing reagents handling, formal risk assessment facilitation, Train the Trainer, Mineral processing theory and practice, HAZMAT 1st responder, Oxyviva, Degrees in education, Fundamentals of front line management, hazardous chemical and cyanide awareness, diplomas in mineral process engineering, and presentation skills certificates. Supervisors are trained as trainers using “Train the Trainer” Courses. All workers receive plant induction before being allowed to start task training on the sections under a supervisor. The worker is only allowed to work unsupervised with cyanide once assessed and signed off for each task by his supervisor. Training is evaluated by Planned Task Observations (PTOs), field interviews and observations, and field questions. Hard

copy and electronic training records are kept as long as the person is in employment and company policy dictates 10 years thereafter.

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

X in full compliance with

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

Basis for this Finding/Deficiencies Identified:

The Process staff act as the first responders and are trained in cyanide spillage, decontamination, cyanide first aid and cyanide emergency response. Additionally, the Emergency Response Teams (ERT), consisting of trained members from throughout the mine, are called for specialised response by the Supervisor. (At least one ERT member is present on every shift). The training matrix for 2015 was reviewed for ERT training. It was noted that courses are run twice to cover the rotation and shift differences for individuals.

No local community or offsite emergency responders are involved in the plant ERP except ISOS (the MEDEVAC contract service providers). Periodic mock drills are undertaken and training personnel attend these drills and formally evaluate response and performance. Training records were checked to confirm attendance and successful completion. General cyanide worker refresher training is scheduled annually. Hard copy and electronic training records are kept as long as the person is in employment and company policy dictates 10 years thereafter.

9. DIALOGUE: Engage in public consultation and disclosure.

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

X in full compliance with

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

Basis for this Finding/Deficiencies Identified:

Dialogue is two way and thus the forum for receiving issues and presenting responses is the same. Stakeholders were identified and they included the 19 villages surrounding the mine, hospitals, schools, the district police commissioner, the district commissioner, and the Tanzania Port Authority. Meetings are convened according to a schedule, establishing

a chain of command in case of emergencies, including emergency number, and creation of awareness with the immediate community. Presentations to local communities are given annually using PowerPoint presentations, handouts, pictures, and verbal presentations. An updated presentation in Swahili includes uses of cyanide, how it is transported, detoxification, signage, safety, how it is stored and transported, where cyanide occurs naturally, community responsibility, contacts with police, government offices and Bulyanhulu communication on cyanide. In 2013, 7 Villages meetings, including a cyanide awareness presentation, were held, involving the process training, environment and community relations departments. The meetings are done based on an annual schedule. However, in 2014 only 1 Village meeting outreach was held on 17 Sept 2014, as per the annual program, and the village was selected based on the highest priorities, concerns and complaints. 14 Village Executive Officers confirmed receipt of presentations in June 2015. The presentations have been posted on the village notice boards.

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

X in full compliance with

The operation is

in substantial compliance with **Standard of Practice 9.2**

not in compliance with

Basis for this Finding/Deficiencies Identified:

Dialogue is two way and thus the forum for receiving issues and presenting responses is the same. Stakeholders were identified and they included the 19 villages surrounding the mine, hospitals, schools, the district police commissioner, the district commissioner, and the Tanzania Port Authority. Meetings are convened according to a schedule, establishing a chain of command in case of emergencies, including emergency number, and creation of awareness with the immediate community. Presentations to local communities are given annually using PowerPoint presentations, handouts, pictures, and verbal presentations. An updated presentation in Swahili includes uses of cyanide, how it is transported, detoxification, signage, safety, how it is stored and transported, where cyanide occurs naturally, community responsibility, contacts with police, government offices and Bulyanhulu communication on cyanide. In 2013, 7 Villages meetings, including a cyanide awareness presentation, were held, involving the process training, environment and community relations departments. The meetings are done based on an annual schedule. However, in 2014 only 1 Village meeting outreach was held on 17 Sept 2014, as per the annual program, and the village was selected based on the highest priorities, concerns and complaints. 14 Village Executive Officers confirmed receipt of presentations in June 2015. The presentations have been posted on the village notice boards.



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 this Finding/Deficiencies Identified:

A written description based on the PowerPoint presentation is available for distribution to the local communities, on request. The written presentation is also available in Swahili, the local spoken and written language. Although the presentations are given in Swahili, they are also given, when required, in Sukuma, a local spoken (but not written) language. The operation has the mechanisms and procedures to make information publicly available following a cyanide release or exposure incidents, but no such incidents have occurred to date. The Barrick website, www.barrick.com, contains Global Reporting Initiative performance data which includes health, safety and environmental statistics since 2004. The change from African Barrick Gold to Acacia Mining PLC continued the previous approach by Barrick Gold. A copy of reporting in the Acacia Mining PLC Annual Report and Accounts 2014 was noted under the performance review section.

