

***INTERNATIONAL CYANIDE
MANAGEMENT INSTITUTE***

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

Summary Audit Report

***AngloGold Ashanti
Mponeng Gold Plant West Wits***

7th - 11th May 2007

Name of Operation: AngloGold Ashanti Mponeng Gold Plant West Wits

Name of Operation Owner: AngloGold Ashanti Africa Underground Region Metallurgy

Name of Operation Operator: AngloGold Ashanti Africa Underground Region Metallurgy

Name of Responsible Manager: Russell Peacey, Plant Manager

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Location detail and description of operation:

Mponeng Gold Plant is located in the West Witwatersrand area, about 80km north west of Johannesburg, treating ore from Mponeng mine. The plant comprises of the ore storage and transport section, the milling, thickener, leach and CIP section, the elution circuit, the smelthouse and the backfill and residue section.

Ore from the mine is milled in three ROM (Run of Mine) mills operating in closed circuit with hydro cyclones. The cyclone overflow product reports to the thickeners for dewatering prior to leaching. The coarse cyclone underflow material is directed back to the mills for re-grinding.

Lime is added to the thickener feed to achieve a pH of 10.5 reporting to the pre-leach tank. The leach section consists of 10 leach tanks in series. The first tank is used for pre-oxidation while cyanide is added to the second leach tank.

Cyanide dosing control is affected by means of an on-line cyanide analyser and cyanide addition is controlled according to the dry tonnage feed to the leach.

The leach slurry reports to the CIP tanks where activated carbon is used to adsorb the dissolved gold. The gold loaded carbon is removed from the CIP tanks and reports to the elution circuit for de-sorption of the gold back into solution.

The CIP residue slurry reports to the backfill feed tank feeding the backfill section. The excess residue slurry not used for backfill reports to the final residue tank together with the fines removed from the backfill product. The final residue slurry is pumped to the tailings storage facility for disposal. The WAD cyanide in the final residue is continually monitored by means of an on-line CN WAD analyser located in the plant. Ferrous sulphate is used to complex the residual free cyanide in the backfill material before it reports to the shaft backfill storage tanks.

Loaded carbon from the CIP section is washed before reporting to the acid wash columns where it is treated with hydrochloric acid. Following a sodium hydroxide neutralisation step, the gold is stripped from the carbon in the elution columns using a hot caustic cyanide solution. The gold solution from the elution circuit reports to the smelthouse where the gold is recovered in the electrowinning cells and smelted into bullion bars.



Auditor's Finding

This operation is

- ☐ in full compliance
- X in substantial compliance *(see below)
- ☐ 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.

Audit Company: Eagle Environmental

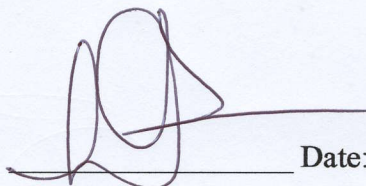
Audit Team Leader: Arend Hoogervorst

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Names and Signatures of Other Auditors:

Name : Dawid M. L Viljoen

Signature



Date: 24/08/2007

Date(s) of Audit: 7th – 11th May 2007

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.

AngloGold Ashanti
Mponeng Gold Plant West Wits

Facility

Signature of Lead Auditor

24/8/07
Date

Certified/notarized:-

LYNETTE HEATHER LAUDERDALE

Conveyancing Paralegal
Ewing McKeown Inc.

(Formerly Ewing Adams & Associates)
Commissioner of Oaths RSA

28 Old Main Road, Hillcrest 3610
REF: 9/1/8/2 Dinetown 18/11/2004

Mponeng Gold Plant West Wits Signature of Lead Auditor

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Auditor's 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.

☐ in full compliance with

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

☐ not in compliance with

Basis for this Finding/Deficiencies Identified:

The plant's cyanide manufacturer, Sasol Polymers, is a ICMI Code Signatory and has undergone an compliance audit which resulted in a substantial compliance finding. This prevents the Mponeng Gold Plant from achieving full compliance with this Standard of Practice. The Sasol Corrective Action Plan is expected to be complied with, and thus enabling full ICMI compliance, by the end of the third quarter of 2007.

The supply contract stipulates that the producer must be a signatory to the ICMI and must be ICMI compliant.

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:

Clearly identified lines of communication and responsibility exist between the producer, transporter and the plant as a result of the supply contract and a mutual aid agreement which involves the entire chain from the producer, through to the transporter and the plant. Evidence of cyanide training, systems and procedures, fully integrated and multi-disciplinary drills, and regular liaison was sighted. Formalised communication also exist with the emergency authorities.

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 supply and transport contract stipulates that the transporter must be a signatory to the ICMI and must be ICMI Code compliant. The transporter, Sasol Infrachem SILog, is a ICMI signatory and has been audited by an independent third party auditor and was found to be ICMI transportation compliant on 8th March 2007. Emergency response plans were sighted along with evidence of adequate capabilities, training and resources. Transport routes have been risk assessed and are regularly updated with information on changing route circumstances. The Mutual Aid Agreement ensures that adequate emergency resources are available throughout the length of the cyanide delivery route.

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

Mponeng Gold Plant West Wits Signature of Lead Auditor

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Basis for this Finding/Deficiencies Identified:

No mixing or storing of solid cyanide takes place on site and all facilities are designed to handle and store liquid cyanide which is delivered by bulk tanker. Original drawings of unloading and storage areas were sighted and noted to be custom designed for cyanide. Engineer's inspection reports and subsequent remedial actions and improvements were also sighted. Drawings and over-inspections were signed off by competent engineers whose qualifications and professional affiliations were checked. Containment was noted as a key part of the design philosophy. The cyanide areas were secured from unauthorized access and site inspections revealed appropriate design for containment and seepage prevention. Control systems were included in design structures to prevent overfilling and spillage during off-loading.

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:

Only bulk liquid cyanide unloading is undertaken and no mixing or storing of solid cyanide takes place. A full and detailed off-loading procedure is in place which uses a buddy system with the tanker driver and off-loader. The procedure includes detailed sequential steps for the operation of valves, couples and hoses and of loading is a dual responsibility from both supplier and customer who cooperated on the development of procedural stages of the operation. The procedure requires a checklist approach to ensure the appropriate precautions are taken to prevent spillages and leakages and unplanned exposures. All reagent cyanide facilities are covered in the CMMIS (Computer Maintenance Management Information System) which includes preventative maintenance checks and inspections. Maintenance frequencies are determined by Failure Mode Evaluation Critical Analysis (FMECA). Regularly operation checks and inspections are carried out on a shift basis. Procedures and emergency plans are in place to cover normal and abnormal occurrences in the off-loading process.

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

Mponeng Gold Plant West Wits Signature of Lead Auditor

23rd August 2007

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

Summarize the basis for this Finding/Deficiencies Identified:

The site has 93 procedures in place, plus 13 specific environmental procedures, all of which cover the management of cyanide. The systems and procedures are all based upon the requirements of the AngloGold Ashanti Cyanide Safe Handling Guidelines, which address best practice standard requirements for cyanide management throughout the entire cyanide handling chain. TSF management and control is all covered by a set of 24 procedures but is also managed according to a legally required Code of Practice for Mine Residue Deposits. In addition, a specific operating manual for West Wits Tailings Facility has been developed which is more specific than the Code of Practice. The CMMIS (Computer Maintenance Management Information System) controls preventative maintenance checks and inspections both on the site and on the TSF. Emergency equipment, including generators and pumps fall under the CMMIS system and are regularly inspected. Systems and procedures are geared to prevent overtopping and to manage cyanide levels before they reach the tailings tip point. Change management procedures are in place to check that changes and modifications will not create cyanide management problems. Regular operational inspection routines proactively check operational conditions to ensure that cyanide levels remain within predetermined levels and this is guided by regular checks of feed ore and laboratory testing.

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

☐ not subject to

Basis for this Finding/Deficiencies Identified:

The plant has an ongoing external laboratory test programme which undertakes diagnostic leach appraisal, which is used to determine optimal leach conditions. The control strategy is to use on-line instrumentation measuring throughput and on-line instrumentation measuring cyanide levels in the leach. The plant is currently evaluating the cyno-probe with a view to possibly replacing the TAC 2000 auto cyanide titrator. Cyanide dosing requirements are carefully controlled procedurally and cyanide dosing amendments requirement the plant manager's signature. The cyanide dosing amendments control book was sighted and SGS Lakefield leach test results related to the performance of the cyno-probe automatic control. The plant applies the corporate strategy which is to evaluate feed mix, conduct diagnostic leach programs and make additional changes based on results from laboratory tests.

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:

Water balances are in place which cover both the plant and the West Wits TSF. The plant water balance takes into account all of the key elements including potable water, underground water, slimes dam return, anti-pollution dam, return water dams, water to backfill, water to residue, water from backfill, water from shaft and rainfall. Evaporation and seepage is not significant and probabilistic calculations were sighted. Water balance data and calculations for the West Wits TSF were sighted, as was the detailed report by consultants covering water management for the area. TSF scenarios cover both 1:100 and 1:50 year storms and the plant scenarios cover 1:50 year storms. Water management includes controls such as plant containment, clean/dirty water separation, concrete surfacing, dam containment, dam level alarming, and excess freeboard capacities. A daily water balancing and management system is in place to ensure that water distribution is done correctly to maintain water levels in return dams and prevent risk of overtopping.

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

☐ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

At the TSF, livestock has been removed from the TSF land, the area is effectively fenced off. There are procedures in place to scare off birds, should high WAD cyanide levels be reported at the tipping point, or the plant warn the TSF that high WAD cyanide levels could be expected. Contractors on site are equipped with air horns to scare off birds when required.

Measurements of WAD cyanide levels at the TSF during 2006 and 2007 showed levels below 50ppm WAD but levels during mid-2006 for some four months showed some exceedances. Measures were taken to manage and measure the WAD cyanide levels more effectively and accurately from a plant perspective, during 2007. An early trend showed lower WAD cyanide levels but there was insufficient data to indicate that these new management measures were sustainable and formalized systems and procedures to maintain this initiative were not yet in place. WAD cyanide measurement points were changed and cyanide destruction facilities have been put into place as an additional safeguard but insufficient results are presently available to demonstrate the sustainability of the activities.

Studies have been commenced by the University of the North West which have looked at bird behaviour and related this to water, environment and habitat characteristics on the TSF. This has contributed to beginning to develop better wildlife management practices (the study is due to be completed in October 2007.) Training of staff in bird identification is beginning to contribute to better quality data relating to the presence and absence of birds and the absence of mortalities. To date, there have been no cyanide-related bird mortalities observed by staff or researchers.

A Corrective Action has been agreed to, which will demonstrate the effectiveness and sustainability of the measures put into place to manage WAD cyanide levels and the practicality of the procedures, processes and systems developed. WAD cyanide measurement trends will also be provided to support control measures.

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

Mponeng Gold Plant West Wits Signature of Lead Auditor

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Basis for this Finding/Deficiencies Identified:

The plant has no direct or indirect discharges to surface water.

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

Plant design is based upon a containment principle which means surfaces are concreted or tarmac-ed to direct and control flows or releases. Cutoff trenches are installed around the plant to ensure clean/dirty water separation. Two lined anti-pollution dams are used to contain stormwater and any plant runoff water and prevent seepage. Boreholes up and downstream of the plant are sampled and monitored for cyanide content but have indicated no detectable or "at limits of detection" cyanide levels in boreholes. The controls on tailings as backfill include dilution with underground water in the cyclone feed tanks. Tests are conducted on each Batch before being sent underground. Ferrous sulphate is added to the final product before being finally tested and sent underground.

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:

The plant is designed with bund walls around all cyanide tanks, leach tanks, CIL tanks, Elution section and residue section. All in-plant process pipelines are either positioned over bund areas or concrete/asphalt-covered surfaces. All reagent strength cyanide pipelines are equipped with secondary containment systems which drain back to the reagent strength bund area. The TSF pipelines are patrolled daily and artisans inspect pipes, valves and pumps weekly. Paddocks exist around pipelines in areas where spillage could pose an environmental risk. Pipes crossing streams are covered with culverts and paddocks dug to contain any spillage. All cyanide equipment is constructed from materials that meet the engineering design specifications of the AngloGold Ashanti Cyanide Safe Handling Guidelines. All cyanide equipment (including tanks, pipes, valves, couplings and bunds) are included in the CMMIS preventive maintenance system and are regularly inspected by operational staff.

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:

No major modifications or additions to the plant facilities have been undertaken since signing to the ICMI Code. Annual inspections of the TSF, against the Code of Practice and Operating Manual, are signed off by a professional Geotechnical Engineer to ensure that operation and design meet legal, engineering and design requirements. The plant has been formally inspected by a Professional Engineer, who produced a report on his inspection, and signed off subsequent remedial work undertaken.

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:

Broad based studies conducted by MINTEK (independent laboratory and research body) were undertaken to ensure that the most appropriate areas are checked and sampled.

Monitoring programs are in place to sample both surface and groundwater for cyanide. The programs are conducted according to formal procedures and the AngloGold Ashanti Cyanide Safe Handling Guidelines. Wildlife observations are correlated with studies conducted by the University of the North West and bird identification training programmes for monitors and inspectors have been introduced to add value to mortality observations on plant and the TSFs. Monitoring and inspections are guided by appropriate procedures and guidelines. Daily mortality inspections and borehole and surface water quality data was sampled and sighted.

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

Summarize the basis for this Finding/Deficiencies Identified:

The plant is covered by an organization-wide, corporate level Closure Plan which is updated regularly and costs updated annually. Site specific documentation relating to decommissioning of cyanide facilities and costs were sighted. Specific procedures are in place covering decontamination and removal of cyanide contaminated or redundant equipment. Planning and costing is supplemented by actual cyanide facility decommissioning experience.

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

X in full compliance with

The operation is

☐ in substantial compliance with **Standard of Practice 5.2**

☐ not in compliance with

Basis for this Finding/Deficiencies Identified:

Plans and funding of cyanide decommissioning activities are a requirement of the Minerals and Petroleum Resources Development Act and these plans and the latest cost estimates and details of financial provisions were sighted. Costs were accurately referenced to the actual WAFU (West Acid Float & Uranium Plant) decommissioning and rehabilitation costs incurred by outside contractors, JJM Filtration, and decontamination specialists, SASOL Polymers.

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:

Procedures were developed from HAZOPs and risk assessments and reflect responses to normal and abnormal conditions and various exposure scenarios. Risk assessments and procedural HAZOPs are in place and regularly revised, or undertaken, for new or changed circumstances. Procedures were extensively checked through examination and interview during the audit. Recently introduced, expanded change management procedures broaden the base for risk and hazard identification and control. Checks and balances are in place through worker involvement in HAZOPs and through consultations in Health & Safety Committee meetings and Green Area meetings. Trade Unions are also involved in Health & safety meetings to represent worker health & safety interest. Procedures are in place which cover PPE, level of use, circumstances of use, and equipment inspection and maintenance.

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:

AngloGold Ashanti Cyanide Safe Handling Guidelines establish pH requirements and the plant has pH monitoring with interlocks to cyanide pumps. Instrumentation functional specification pH control is set at 10.5 with interlock to Cyanide pumps activated at pH 10, and alarms at >pH 10.2. Personal and fixed monitoring devices are used to check cyanide exposure levels. Personal monitoring equipment is alarmed for both STEL and TWA exposures. Personal monitoring equipment use is prescribed by procedure in many routine and non-routine activities. Calibration of this equipment exceeds the frequency required by the manufacturers. Effective and numerous warning signs are in place which not only warn of hazards but also inform on PPE, control access and supplement good safety practices. Employee interviews were used to check awareness and sensitivity to cyanide health and safety measures. Accident and incident reporting and investigation procedures were found to be in place and effective although the absence of cyanide incidents made checking of this area of reporting difficult. On-going inspections and checks are also used to monitor and check facilities and emergency response equipment functioning. Safety equipment such as safety showers, eye washes, fire extinguishers and man-down alarms are appropriately located and well signposted.

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:

Emergency response plans, procedures and equipment are in place to deal with worker exposure to cyanide. Equipment availability and inspections records were thoroughly checked. Mock emergency drills are held in rotation with neighboring plants to enable effective checking of plant and full cycle (i.e. plant, ambulance, hospital) response and reports on these exercises were sighted. The plant's cyanide emergency station and emergency response trailer were checked and found to be well equipped and regularly checked. Fridges were in place to keep the antidotes and response kits at optimum temperature and expiry dates were marked and supported by a checking system to ensure appropriate replacement. AngloGold Ashanti Cyanide Safe Handling Guidelines include specific requirements and agreements relating to ambulance evaluation, agreements with hospitals and service providers, notifications of exposures and man-down alarm drill frequencies.

Mponeng Gold Plant West Wits Signature of Lead Auditor

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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 Plant has used a HAZOP study to develop site-specific emergency scenarios and responses which are incorporated into the detailed site emergency response plan. The response plan combines procedural responses and emergency provisions to deal with the various scenarios. The cyanide producer and transporter are ICMI Code compliant and transportation emergency response plans are appropriately integrated.

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:

Representatives of the workforce were involved in the HAZOP Study to develop the emergency scenarios and response in the emergency response plan and procedures. Emergency response is also discussed at Health & Safety meetings which include health and safety representatives (full and part-time), and Trade Union representatives. Meetings have been held with the local business community, local authorities, local police and the local Disaster Management Department. Presentations have been given to schools regarding the dangers of cyanide and TSFs. There is close, on-going liaison with the cyanide producer and transporter (Sasol) on emergency response, drills, learning points from drills. There is close liaison and communication with medical services (ambulance and local hospital).

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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:

The Emergency Response Plan details clear roles and responsibilities for the various emergency scenarios and includes extensive contact references (telephone, cell phone, etc) of resources for the various scenarios, particularly where external resources and skills might be needed. The Plan cross references relevant procedures which guide availability and use of resources and appropriate response. A decision Tree in the Plan further guides scenario classification and appropriate decision making and resource provision. The Plan includes Emergency Team members, whose training records and assessments were checked and showed the individuals to be well prepared and well equipped for cyanide emergencies.

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 Response Plan includes cross references to procedures for appropriate emergency notification and reporting and the call-out procedure and contact information lists which are updated regularly (Updated lists sighted). Media communication is done centrally via a formal corporate procedure. Contact details for neighbours were sighted.

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

Mponeng Gold Plant West Wits Signature of Lead Auditor

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

Basis for this Finding/Deficiencies Identified:

The Response Plans cross-reference to detailed and specialised procedures which cover clean-up and remediation relating to pipeline failures and spills, as appropriate to the site specific identified scenarios. A specific procedure governs the conditions under which ferrous sulphate may be used, i.e. not under circumstances where surface water may be contaminated. The plant does not use sodium hypochlorite or hydrogen peroxide and no stocks are kept on site. There are also cross references to the centralized environmental procedures which form part of the Environmental Management System.

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:

Regular emergency drills are held as per a corporate schedule, to optimise rotation of full cycle drills amongst all the AGA gold plants in the Region. Previous versions of emergency response plans were sighted. Evidence was sighted of learning points emerging from fire, lightening and cyanide man down drills. The Emergency Response Plan includes a section covering "Plan Maintenance and Review" which dictates circumstances for Plan review and revision.

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

Mponeng Gold Plant West Wits Signature of  Lead Auditor

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Basis for this Finding/Deficiencies Identified:

Detailed checks were made of the centralized cyanide training and refresher programs. These were cross-checked with plant records and randomly selected employees were checked on understanding in interviews. Checks were made on basic cyanide training, and advanced cyanide training. The Training Centre sends qualified trainers to carry out assessments and checks on cyanide knowledge competency (both "class room" and "on-the-job" based) and re-training or refresher training is assigned according to results.

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:

Site Training is conducted by the Training Department in accordance with the South African National Unit Standard Met-G136 LG "Handle Liquid Cyanide Safely in a Metallurgical Plant" and the AngloGold Ashanti Cyanide Guidelines. Formal assessments of performance are conducted by assessors to check competency and understanding using PDAs (Personal Digital Assistants). Training for engineering maintenance staff includes cyanide training and specialised training is provided for Cyanide Off-loaders.

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

Summarize the basis for this Finding/Deficiencies Identified:

All employees receive basic cyanide training which includes raising the alarm and protecting themselves. Only the Emergency Response Team responds to cyanide emergencies. The Team receives advanced cyanide training which includes incident command and confined space rescue. 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.

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:

Evidence of meetings held with the local communities where cyanide was discussed specifically was sighted. The communities were given the opportunity to raise issues and ask questions. Sighted presentation material and meeting minutes.

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:

AngloGold Ashanti Central Services, on behalf of the plant, initiated discussions with local emergency services, fire and rescue on hazardous chemicals, transportation procedures, risk assessments and cyanide management. This is also done in liaison with discussions held by the cyanide producer and transporter, Sasol, with emergency services.

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:

Various newsletters, articles, posters and placards covering cyanide management, dangers of Tailings Storage Facilities, pipelines, and information on the ICMI which have been made available to the public and specific interest groups were sighted. All information on releases and exposures is reported to the regulator who then releases the information via regular newsletters and reports to stakeholders. The information is then in the public domain and can be requested from the regulator by interested parties. Should releases and exposures occur, they will be reported on the company's website. Information is also distributed to the Health and Safety Committee at which the employees are represented.