SUSTAINABILITY
FUTURE GROWTH

Anglo Gold Ashanti Australia Ltd: Sunrise Dam Goldmine

Corrective Action Plan Completion Report

Re Certification Audit: International Cyanide Management Code - Gold Mining Operations Verification Protocol

August 2014

SUSTAINABILITY
FUTURE GROWTH

CORRECTIVE ACTION PLAN COMPLETION REPORT

Name of Mine:	Sunrise Dam Gold Mine
Name of Mine Owner:	AngloGold Ashanti Australia Ltd
Name of Mine Operator:	AngloGold Ashanti Australia Ltd
Name of Responsible Manager:	Paul Elms, Senior Project Metallurgist
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AUDITOR FINDINGS

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 the CAP dated May 2014 has been implemented and the SDGM is:

The operation is

☑ in full compliance with
☐ in substantial compliance with
☐ not in compliance with

The International Cyanide Management Code

Sunrise Dam Gold Mine		20th August 2014
Name of Facility	**Signature of Lead Auditor**	**Date**

BACKGROUND

Anglo Gold Ashanti (AGA)'s Sunrise Dam Gold Mine (SDGM) was initially certified under the International Cyanide Management Code (Code) in 2007 and was subsequently re-certified in 2010. To attain re-certification, a site is assessed against its performance in adhering to the Code principles throughout the previous three years, as opposed to how it is performing at the time of the initial Code certification audit (i.e. a snapshot in time).

In September 2013, SDGM underwent its second re-certification audit. The Auditor (Sustainability Pty Ltd) conducted the audit of SDGM from 24th to 27th September 2013 and provided SDGM with a detailed audit report of its findings (Sunrise Dam ICMI Gold Mining Certification Audit; Sustainability Pty Ltd; May 2014). All Code principles and standards of practice were found to be fully compliant with the Code with the exception of Standard of Practice 4.4; which was deemed to be in 'substantial compliance' with the Code.

CORRECTIVE ACTION PLAN

The SDGM Summary Audit Report (Sustainability Pty Ltd; May 2014) identified the following Standard of Practice as being substantially compliant with the Code:

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

SDGM endorsed a Corrective Action Plan (May 2014) which detailed the necessary actions to bring the operation into full compliance with the Code and which was submitted to the ICMI to support certification.

VERIFICATION OF CORRECTIVE ACTION PLAN IMPLEMENTATION

A review of the evidence presented by SDGM supporting the full implementation of the Corrective Action Plan was conducted by Sustainability Pty Ltd in August 2014. The review verified that SDGM has fully implemented the Corrective Action Plan within the specified timeframe.

The following sections detail:

- The relevant section of the Code where SDGM is deemed to be in 'substantial compliance';
- The original deficiency observed;
- The corrective actions proposed by SDGM within the Corrective Action Plan and the evidence required to close out the actions;
- The implementation verification of corrective actions; and
- A statement that the required evidence was observed and SDGM is fully compliant with the Code's Principle and Standard of Practice.

RELEVANT SUBSTANTIAL COMPLIANCE SECTION OF CODE

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

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

DEFICIENCY

A finding of 'substantial compliance' for Standard of Practice 4.4 has been awarded as SDGM operated outside its site-specific Code-compliant operating parameter during the audit period. The deficiency associated with Standard of Practice 4.4 is described as: *"the loss of the alternative wildlife protection mechanism, being the minimum salinity criteria, as established in the SDGM Cyanide Management Plan"*. That is due to the fact that salinity concentrations at the spigot were below 90 000 mg/L total dissolved solids (TDS) for an extended period following two intense rainfall events in February 2011.

Hypersalinity has been demonstrated to be a protective mechanism for wildlife at the SDGM tailings storage facility thereby allowing the site to discharge concentrations of weak acid dissociable (WAD) cyanide above 50 mg/L. Compliance with Standard of Practice 4.4 is dependent on the site maintaining the protective mechanism. The risk to wildlife associated with the loss of salinity following the rainfall events in February 2011 was described by Donato Environmental Services (DES) in the report titled *"Assessment of risk to wildlife at the tailings storage facilities: Sunrise Dam Gold Mine" (2012)* and determined to be low. The immediate actions taken by SDGM in response to the deficiency and the effectiveness of these actions are included in the Summary Audit Report (Sunrise Dam ICMI Gold Mining Certification Audit; Sustainability Pty Ltd; May 2014) and have not been repeated here.

The SDGM Corrective action Plan was subsequently developed to address the 'substantial compliance' identified by Sustainability Pty Ltd as part of SDGM's second recertification audit.

SDGM CORRECTIVE ACTION PLAN AND REQUIRED EVIDENCE

To obtain full compliance with the Code, SDGM needed to provide evidence for implementation of the following corrective actions:

1. **Corrective Action:**
   Investigate works to increase the capacity of the Central Thickened Discharge (CTD) Tailings Storage Facility (TSF) and associated water holding structures (this includes, but is not limited to the Stormwater Storage Pond (SSP). The works will provide for an increase in water holding capacity such that following exceptional events (such as, but not limited to storm events), a return to hypersaline conditions at the CTD TSF will occur in a timely manner and quicker than following the rainfall events in February 2011.
   Evidence Required:
   Design reports and drawings of the CTD and associated water holding facilities and statements with evidence (from SDGM personnel or external technical experts) indicating that an increased capacity exists (compared to the capacity available prior to the February 2011 rainfall events).
2. **Corrective Action:**
   Review and re-develop the site probabilistic water balance to include the rainfall events of 2011 to ensure that a return to hypersaline conditions can be achieved in a quicker timeframe.
   Evidence Required:
   Updated probabilistic water balance report, to be completed by recognised external experts.
3. **Corrective Action:**
   Refurbishment of the SSP to ensure capacity is restored and it is operated in accordance with its design. Procedures relating to the maintenance of the SSP and any additional water holding facilities pertaining to the CTD TSF shall be developed.
   Evidence Required:
   Provide survey data indicating available capacity of the SSP and completion of a works report including details of work completed. Provide procedures relating to the maintenance of the SSP (and any other water holding facilities associated with the CTD TSF).
4. **Corrective Action:**
   Review and update the SDGM Cyanide Management Plan (CMP) to include an escalation of management controls for events where operational parameters could be exceeded for a prolonged period. The escalation process should be in addition to the management controls currently in place for exceedances of operating parameters during normal operating conditions. In addition, the CMP should also be updated to reflect any new documents, procedures or work instructions as developed and required by the actions of the CAP.
   Required Evidence:
   Update the SDGM CMP with details on management controls to be taken during exceptional events where operational parameters may be exceeded for prolonged periods. Details of any new documents as required by the CAP to be included.

An overview of the Code deficiency, required corrective actions and the supplied evidence is provided in Appendix A.

IMPLEMENTATION VERIFICATION

SDGM provided the below evidence to demonstrate implementation of the CAP:

1. The following drawings demonstrate plans for the works to increase the capacity of the CTD TSF and associated water holding structures (this includes the SSP):
    - CTD TSF - STORMWATER STORAGE CAPACITY [];
    - CTD TSF - STAGE 9 EMBANKMENT RAISE EMBANKMENT RAISE EXTENSION GENERAL ARRANGEMENT [98322.53_002];
    - CTD TSF - STAGE 9 EMBANKMENT RAISE EMBANKMENT RAISE SECTION (1 OF 2) [98322.53_003];
    - CTD TSF - STAGE 9 EMBANKMENT RAISE EMBANKMENT RAISE SECTION (2 OF 2) [98322.53_004];
    - CTD TSF - STAGE 9 EMBANKMENT RAISE CTD SPILLWAY SECTIONS AND DETAILS [98322.53_005];
    - CTD TSF - STAGE 9 EMBANKMENT RAISE STORMWATER STORAGE POND DECANT POND AND SSP TEMPORARY BUNDS SECTIONS [98322.53_007]; and
    - CTD TSF - STAGE 9 EMBANKMENT RAISE STORMWATER STORAGE POND DECANT POND SPILLWAY SECTIONS [98322.53_008].
2. The developed Site-Wide Water Balance Report (Sunrise Dam Goldmine, WA; Golder and Associates; June 2014) and the GoldSim player file for prediction purposes; the player allows for running different scenarios and assessing impacts on the water balance and the water levels in the SSP.
3. Drawings provided by ATC Williams include "as constructed" (26/3/2014) verification of works to the CTD including embankment raises, increased capacity of decant pond and increased capacity of the storm water pond. Revised CMP includes description of process to manage water storage facilities. The 'Manage Process Water Salinity – 6.5.5 Processing' Procedure has been developed and issued for use. This Procedure outlines the method to increase the salinity levels in the Process Water when it has dropped to less than 90,000 mg/l whilst pumping wet tailings to the CTD.
4. The CMP has been reviewed and section 3.3.1 has been updated to reflect the newly developed and implemented 'Manage Process Water Salinity – 6.5.5 Processing' Procedure. This Procedure also contains an Appendix for 'SDGM Process Water Salinity Trigger Action Response Plan' and prompts action management for specific roles during unusual rain events and water levels in the SSP.

Based on the review of the evidence supplied, it can be confirmed that SDGM has implemented the required corrective actions and is now in full compliance with the Standard of Practice 4.4 of Principle 4 of the Code.

STATEMENT OF COMPLIANCE

Based on the evidence observed, I am satisfied that SDGM has fully implemented the Corrective Action Plan submitted to the ICMI and consequently the operation is fully compliant with the Code.

Should you require any additional information, please do not hesitate to contact me the undersigned.

Sincerely yours,

John Miragliotta

Lead Auditor

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APPENDIX A:

CORRECTIVE ACTION PLAN AND IMPLEMENTATION VERIFICATION

SDGM ICMI Corrective Action Plan and Implementation Verification – 20th August 2014				
Standard of Practice	**Deficiency**	**Corrective Action Description**	**Evidence Required for Verification**	**Implementation Verification**
4.4: Implement measures to protect birds, other wildlife and livestock from adverse effects of cyanide process solutions.	"The loss of the alternative wildlife protection mechanism, being the minimum salinity criteria, as established in the SDGM Cyanide Management Plan". That is, that salinity concentrations at the spigot were below 90 000 mg/L TDS for an extended period following two intense rainfall events in February 2011.	SDGM shall provide evidence that works to increase the capacity of the CTD TSF and associated water holding structures (this includes, but is not limited to the SSP) are being investigated. The works will provide for an increase in water holding capacity such that following exceptional events (such as, but not limited to storm events), a return to hypersaline conditions at the CTD TSF will occur in a timely manner and quicker than following the rainfall events in February 2011.	Evidence required includes but is not limited to; Design reports and drawings of the CTD and associated water holding facilities and statements with evidence (from SDGM personnel or external technical experts) indicating that an increased capacity exists (compared to the capacity available prior to the February 2011 rainfall events).	SDGM has provided the following drawings demonstrating plans for the works to increase the capacity of the CTD TSF and associated water holding structures (this includes the SSP): • CTD TSF - STORMWATER STORAGE CAPACITY []; • CTD TSF - STAGE 9 EMBANKMENT RAISE EMBANKMENT RAISE EXTENSION GENERAL ARRANGEMENT [98322.53_002]; • CTD TSF - STAGE 9 EMBANKMENT RAISE EMBANKMENT RAISE SECTION (1 OF 2) [98322.53_003]; • CTD TSF - STAGE 9 EMBANKMENT RAISE EMBANKMENT RAISE SECTION (2 OF 2) [98322.53_004]; • CTD TSF - STAGE 9 EMBANKMENT RAISE CTD SPILLWAY SECTIONS AND DETAILS [98322.53_005]; • CTD TSF - STAGE 9 EMBANKMENT RAISE STORMWATER STORAGE POND DECANT POND AND SSP TEMPORARY BUNDS SECTIONS [98322.53_007]; and • CTD TSF - STAGE 9 EMBANKMENT RAISE STORMWATER STORAGE POND DECANT POND SPILLWAY SECTIONS [98322.53_008].
		As part of a process of continual improvement, SDGM will review and redevelop the site probabilistic water balance to include the rainfall events of 2011 to ensure that a return to hypersaline conditions can be achieved in a quicker timeframe.	Updated probabilistic water balance report completed by recognised external experts.	Complete Report provided: Site-Wide Water Balance; Sunrise Dam Goldmine, WA; Golder and Associates; June 2014. A GoldSim player file was updated and provided to SDGM for prediction purposes. The player allows for running different scenarios and assessing impacts on the water balance and the water levels in the SSP. The revised model provides a tool for managing water holding facilities under various scenarios to prevent overtopping and to manage salinity of holding facilities.
		SDGM shall refurbish the SSP to ensure capacity is restored and it is operated in accordance with its design. Procedures relating to the maintenance of the SSP and any additional water holding facilities pertaining to the CTD TSF shall be developed.	Evidence required includes survey data indicating available capacity of pond and completion of works report including details of work completed. Procedures relating to the maintenance of the SSP (and any other water holding facilities associated with the CTD TSF).	Drawings provided by ATC Williams include "as constructed" (26/3/2014) verification of works to the CTD including embankment raises, increased capacity of decant pond and increased capacity of the storm water pond. Revised CMP includes description of process to manage water storage facilities. The 'Manage Process Water Salinity – 6.5.5 Processing'

				Procedure has been developed and issued for use. This Procedure outlines the method to increase the salinity levels in the Process Water when it has dropped to less than 90,000 mg/l whilst pumping wet tailings to the CTD.
		SDGM shall review and update the CMP to include an escalation of management controls for events where operational parameters could be exceeded for a prolonged period. The escalation process should be in addition to the management controls currently in place for exceedances of operating parameters during normal operating conditions. In addition, the CMP should also be updated to reflect any new documents, procedures or work instructions as developed and required by the actions of this CAP.	Updated CMP with details on management controls to be taken during exceptional events where operational parameters may be exceeded for prolonged periods. Details of any new documents as required by this CAP to be included.	The CMP has been reviewed and section 3.3.1 has been updated to reflect the developed and implemented 'Manage Process Water Salinity – 6.5.5 Processing' Procedure. This Procedure also contains an Appendix for 'SDGM Process Water Salinity Trigger Action Response Plan' and prompts action management for specific roles during unusual rain events and water levels in the SSP.