FINAL COMPLETION REPORT

Goldfields Agnew Gold Mine
Australia

Introduction

This Final Completion Report presents the evidence to support the successful implementation of the Corrective Action Plan to correct the deficiencies identified in the recertification audit held from 30th April – 4th May 2012 to enable the Substantial Compliance to advance to a Full Compliance.

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

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

Deficiencies

- The compliance point for open waters for the mine is the No 3 TSF pool. The tailings are deposited into a redundant pit and cascades over the pit benches with significant surface area created in the flow to the bottom of the wall entering the beach area where the WAD levels are normally below 50ppm WAD Cyanide. During the period February 2009 to May 2009, the Cyanide WAD values went up to a maximum of approximately 80 ppm, indicating exceedance of the permitted WAD values. During this period there were no bird mortalities. A report on the investigation of the exceedances indicated that an old stockpile was treated as mill gap filler. The source was not subjected to a detailed ore characterisation test procedure. It was noticed that the ore consumed more cyanide because of pH buffering at 10.3. The chemical analyses indicated that the Nickel contents in the ore more than doubled from 10 to 24ppm. The Nickel WAD complex concentration was identified as the probable cause pushing the WAD CN in the no 3 TSF pool to over 50 ppm. Corrective action included reduction of cyanide addition from 280 to 260 ppm, and 260 ppm to 240 ppm as free NaCN, duplicate samples were sent to different laboratories to confirm cyanide speciation results and there was removal of the Redeemer green ore from the feed blend. The need for on line WAD CN measurement was highlighted as WAD CN sample turnaround was 2 to 3 weeks. It was concluded that insufficient ore characterisation was done before the ore was fed to the mill.

- Similarly, from 10 August to the end November 2011, WAD Cyanide values with an average of approximately 100 ppm were noted in the pool of the TSF. During that period, a number of bird mortalities were noted, some of which could be attributed to cyanide poisoning and some to suspected elevated Arsenic levels in the fresh water. An investigation report on the exceedances indicated the main cause of the increase was due to a batch of Toll treated ore with excessive copper content. The prior ore characterisation test work done on samples from the toll treatment did not indicate any copper issues, but some of the ore test work received indicated excessive copper. The toll treatment agreement was subsequently terminated October 2011 and site ore was resumed and WAD cyanide levels returned to normal below 50 ppm.
- WAD cyanide levels are still varying, at times above 50 ppm, and it cannot yet be confirmed that levels of 50 ppm WAD Cyanide or below can be sustained using the current corrective actions.

Corrective Actions

- A period of at least six months' worth of WAD Cyanide monitoring data is required to confirm that implemented corrective actions have successfully corrected the maintenance of 50ppm or less WAD Cyanide at the compliance point in the pool.

  These actions include:
  - Installation of an on line WAD CN analyser on adsorption tank no 6
  - Installation of an on line free cyanide analyser and control system on leach tank no 1
  - Cyanide reduction program including plant scale reduction tests
  - Optimisation of the use and calibration of the on-line cyanide analysers
  - Revision of the cyanide "metallurgical test work procedure for ores" procedure detailing and defining ore characterisation requirements as well as procedures to follow before new ore sources are utilised
  - Additional TSF deposition points were installed around the TSF pit to maximise volatilisation down the pit walls leading to the beach and increase cyanide breakdown opportunities.

Evidence Sighted by the Auditors

Evidence sighted by auditors to confirm the corrective actions was as follows:-

- Photographs and written confirmation that the site has a "The Cyantist" cyanide analyser analysing from leach tank #1 and a second "The WAD Cyantist" WAD analyser analysing from adsorption tank #6.
- Although no cyanide reduction plant scale tests were conducted, the plant reduced the CIL circuit feed cyanide to 200ppm and the gravity circuit ILR by 10% to suit the less than 50mg/l required WAD cyanide. Any new ore introduced to the Agnew mill will be tested at 200ppm as a benchmark to

determine its leachability and gold recovery as per the Lawlers gold ore external testwork protocol which was reviewed.

- Revised Task Instruction "Metallurgical Testwork Procedure for Ores" (AGO-PRO-TILAB006) requiring testwork be done on all new ores.
- WAD cyanide monitoring data report covering the period from October 2013 to March 2014 which showed consistent WAD Cyanide levels of 50ppm or less.

Conclusion

The Lead Auditor, following discussions within the audit team, is satisfied that the corrective actions taken, meet the requirements of the corrective action plans and thus enable substantial compliance in the Operations Practices to be revised to Full Compliance.

Arend Hoogervorst
Lead Auditor

Date: 17th March 2014