



SUSTAINABILITY
FUTURE GROWTH

**INTERNATIONAL CYANIDE MANAGEMENT CODE
GOLD MINING OPERATIONS**

GOLD FIELDS LIMITED: GRANNY SMITH GOLD MINE

**Granny Smith Gold Mine Recertification Audit
Summary Audit Report**

March 2017



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SUMMARY AUDIT REPORT

Name of Mine

Granny Smith Gold Mine

Name of Mine Owner

Gold Fields Australia

Name of Mine Operator

Gold Fields Australia

Name of Responsible Manager

Stuart Mathews, General Manager

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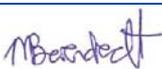
LOCATION DETAIL AND DESCRIPTION OF OPERATION

Granny Smith Gold mine is located 720 km east – north-east of Perth in Western Australia and 23 km south-west of Laverton, Western Australia near Mount Weld.

Granny Smith Gold Mine was commissioned in 1989 and at the time the mine was expected to have an eight year mine life but has remained in continual operation since commissioning and has produced over 6 million ounces of gold.

Granny Smith Gold Mine was one of the three Yilgarn South Assets acquired from Barrick Gold of Australia by Gold Fields in October 2013.

Granny Smith Gold Mine
Name of Mine


Signature of Lead Auditor

22nd March 2017
Date

The processing plant consists of two-stage fresh ore crushing circuit with closed circuit screening and a single-stage oxide ore crushing circuit, a semi-autogenous grinding mill in closed circuit with a cone crusher, an agitation leaching and carbon-in-pulp circuit, tailings gravity re-treatment plant with fine grind, a gold recovery plant with carbon reactivation, and a tailings thickener.

Granny Smith is a fly in – fly out site from Perth, Western Australia.

AUDITOR'S FINDING

This operation is:

- in full compliance
- in substantial compliance
- not in compliance

with the International Cyanide Management Code.

This operation has maintained full compliance with the International Cyanide Management Code throughout the previous three-year audit cycle.

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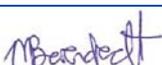
Audit Team Leader

Marc Barendrecht (marc.barendrecht@sustainability.net.au)



22nd March 2017

Granny Smith Gold Mine
Name of Mine



Signature of Lead Auditor

22nd March 2017
Date

Names and Signatures of Other Auditors



John Miragliotta

11th January 2017

Date(s) of Audit

Inclusive of the period from 24th – 27th October 2016.

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.

PRINCIPLE 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 in substantial compliance with Standard of Practice 1.1

not in compliance with

Basis for this Finding/Deficiencies Identified:

Granny Smith is in Full Compliance with Standard of Practice 1.1.

The operation's contract with its cyanide supplier (and manufacturer) requires that the cyanide be produced at a facility that has been certified as being in compliance with the Code.

Gold Fields entered into a contract for supply of sodium cyanide with Australian Gold Reagents (AGR) on the 7th January 2014 which expires on the 31st January 2017. This contract has been extended until April 17th 2017 to allow for the finalisation of a new contract.

Section 18 of the contract refers to ICMI requirements.

A specific contract amendment was put in place in September 2016 to further specify additional Code requirements. The amendment states that at all times AGR must comply with the current version of the ICMI Code for production and transport of cyanide. It also states that AGR must provide a copy of their audit reports to Granny Smith as well as advise of any change in certification status.

AGR was most recently recertified with the Code on March 13th 2014 as fully compliant. AGR's full certification status has been in place for the entirety of this audit period and as such Granny Smith is considered fully compliant with this Standard of Practice.

PRINCIPLE 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.

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:

Granny Smith is in Full Compliance with Standard of Practice 2.1.

Agreement between the operation and the cyanide producer (and transporter) designating transportation-related responsibilities has been established through the recertification of AGR's West Australian Supply Chain and its Production Facility.

AGR's West Australian Supply Chain was recertified with the Code on 26th September 2016 as fully compliant. Previously to this most recent recertification, the supply chain was recertified in March 2013, meaning that the supply chain was certified as fully compliant with the Code during the entire audit period.

Despite the contract not specifying all aspects of this question, they are addressed through AGR's supply chain being fully certified and as such Granny Smith is compliant with this Standard of Practice.

Standard of Practice 2.2

Require that cyanide transporters implement appropriate emergency response plans and capabilities and employ adequate measures for cyanide management.

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:

Granny Smith is in Full Compliance with Standard of Practice 2.2.

The operation's contracts with the cyanide transporter(s) require that the transporter(s) be certified under the Code.

Gold Fields entered into a contract for supply of sodium cyanide with AGR on the 7th January 2014 which expires on the 31st January 2017.

Section 18 of the contract refers to ICMI requirements.

A specific contract amendment was put in place in September 2016 to further specify additional Code requirements. The amendment states that at all times AGR must comply with the current version of the ICMI Code for production and transport of cyanide. It also states that AGR must provide a copy of their audit reports to Granny Smith as well as advise of any change in certification status.

AGR's West Australian Supply Chain was recertified with the Code on 26th September 2016 as fully compliant. Previously to this most recent recertification, the supply chain was recertified in March 2013, meaning that the supply chain was certified as fully compliant with the Code during the entire audit period.

The operation has chain of custody records identifying all elements of the supply chain (producer, transporter(s), interim storage facilities) that handle the cyanide brought to its site.

Within AGR's West Australian Supply Chain, cyanide is transported by rail from the CSBP's (AGR) loading station to the West Kalgoorlie Container Terminal by Aurizon. Toll Mining Services then transports the isotainers from the container terminal to Granny Smith.

PRINCIPLE 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.

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:

Granny Smith is in Full Compliance with Standard of Practice 3.1.

Facilities for unloading and storing cyanide have been designed and constructed in accordance with the cyanide producers' guidelines. Routine maintenance inspections identified the need for the cyanide storage tank to be replaced. This task was completed during the audit period. General arrangement drawings of the tank design and specifications were reviewed, drafted by an external contractor. These drawings were reviewed and signed off by a structural engineer. Granny Smith conducted Non Destructive Testing (NDT) on the welds of the tank prior to use. The tank material is compatible with storage of high strength cyanide.

Unloading and storage areas for liquid cyanide are located away from people and surface waters. The nearest surface water is Windich, a former open pit that now forms part of Granny Smith's raw water system. Windich is more than 200 m from the reagent cyanide area to the south-east. The nearest surface water body outside Granny Smith's control is Lake Carey located 13 km to the south-west. AGR has assessed that the distance between the reagent cyanide installation and Office buildings, warehouses, processing area, workshops and amenities areas is greater than 15 m as required by Dangerous Goods regulations.

The unloading facility at Granny Smith is located on an impermeable concrete slab to minimise seepage of spilt liquid cyanide to the subsurface. The slab is slightly graded to drain preferentially into a sump that can be pumped to the Cyanide Reagent Storage Bund.

The cyanide unloading area at Granny Smith is designed and constructed to contain, recover or allow remediation of any leakage from the tanker truck. The facility consists of an isotainer unloading bay sufficient for one isotainer at a time to be accessed from an unloading tower immediately above it. Whilst the isotainer is aligned to the unloading tower immediately above it, the isotainer is inherently located on a graded slab of concrete that will catch any drips of reagent cyanide that may be released during the operation and prevent minor drips and spills from reaching the ground. Rollover bund walls at the entrance and exit to the pad, a kerb wall on the edge remote from the existing bund wall and bollards to help prevent passing traffic tracking dirt onto the pad were installed. A sump and pump are also present to remove liquid to the Cyanide Reagent Storage Bund.

Several methods exist to prevent overfilling of the cyanide storage tank at Granny Smith. Prior to unloading, the tank level is checked to ensure it has the required capacity to receive the cyanide delivery. Multiple level alarms have been established and the high level alarm triggered at 91% stops the unloading process by isolating the air flow. In the event that the observer is not capable of manual shutoff should a further visual and audible alarm is triggered and a solenoid-activated valve isolates and vents the air line.

Cyanide mixing and storage tanks are located on a bunded concrete surface which acts as a competent barrier to leakage.

Cyanide is stored:

- With adequate ventilation to prevent the build up of HCN gas. AGR has assessed the unloading facility as configured in compliance with Dangerous Goods regulations to ensure that it is protective of personnel working on the drivers' platform during unloading
- Only as a liquid so there is no need for measures to minimise the potential for contact of solid cyanide with water
- In a secure area where public access is prohibited via a gated fence around the cyanide storage area
- Separately from incompatible materials. There is a facility for unloading and storage of hydrochloric acid adjacent to the cyanide reagent unloading and storage facility. This facility is separated from the cyanide reagent area by a bund wall.

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.

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:

Granny Smith is in Full Compliance with Standard of Practice 3.2.

Only liquid reagent cyanide is used at Granny Smith, which is unloaded from truck-mounted isotainers into a Cyanide Storage Tank. The isotainers remain on the truck throughout delivery and remain under the control of the supplier at all times.

Standard operating procedures have been developed and are implemented to manage cyanide unloading and storage activities effectively and safely. Clear attention has been paid to the role of the Granny Smith representative whose role in unloading is complementary to the AGR truck driver. The Granny Smith representative observes the delivery Driver from a safe location throughout the unloading operation and ensures that appropriate personal protective equipment is used by the driver.

PRINCIPLE 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.

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:

Granny Smith is in Full Compliance with Standard of Practice 4.1.

Written procedures, plans and manuals have been developed and implemented for the following areas and activities of operation that involve cyanide solutions greater than 0.5 mg/L WAD cyanide. Key procedures include:

- Working in Cyanide Areas
- Confined Space
- Liquid Cyanide Unloading
- HCN Area Monitoring
- Cyanide Titrations and pH Measurement
- Tank Operator Sampling
- Cleaning Tools and PPE after Cyanide Work
- Decontamination of Plant/Equipment to be Removed or Maintained
- Cleaning of Trash and Carbon Screens
- Acid Wash
- Cyanide Management Plan
- Crushing Circuit Process Technician Training Manual
- Leach-CIP Training Manual

- Thickener and Water Systems Process Technician Training Manual
- Tails Retreatment Circuit Process Technician Training Manual
- Tailings Storage Facility Operating Manual
- Cyanide Management Plan

The TSF Operations Manual describes the Hypersaline injection system and controls. Mill Flow process flow diagrams do not show any other cyanide treatment systems on site.

SAP software is used to administer schedules, requirements and records of routine preventive maintenance activities.

Some processing operations such as pumping systems to pump water collected in secondary containments back into the process are automated. These are controlled via a CITECT distributed control system (DCS).

Important design assumptions and regulatory parameters are documented and explained in manuals, plans and key procedures. These specifically include:

- Working in Cyanide Areas
- HCN Area Monitoring
- Cyanide Management Plan
- Crushing Circuit Process Technician Training Manual
- Leach-CIP Training Manual
- Thickener and Water Systems Process Technician Training Manual
- Tails Retreatment Circuit Process Technician Training Manual
- Tailings Storage Facility Operating Manual
- Cyanide Management Plan

The plans and procedures describe the practices necessary for the safe and environmentally sound operation of the facility including the specific measures needed for compliance with the Code, such as inspections and preventative maintenance activities.

The manuals used for training include directions on specific requirements for implementing practices required including operational inspections in the reagent storage, leaching and tailings areas with focus on leaks from pumps and piping and readiness of secondary containments to handle such leaks.

There are also specific standard operating procedures that support the safe and environmentally sound operation of the facility.

SAP software is used to administer routine (daily, weekly and monthly) inspections of operational areas and routine preventive maintenance activities. A review of documented inspections and preventative maintenance schedules of cyanide critical equipment and discussions with Maintenance confirmed these are occurring for cyanide facilities.

The operation has procedures to review proposed process and operational changes and modifications for their potential impacts on worker health and safety, and incorporate the necessary worker protection measures.

The operation has developed formal cyanide management documents that address contingency procedures for situations when inspections and monitoring identify a deviation from design or standard operating procedures.

The operation has also developed and implemented a Cyanide Emergency Response Plan to address potential accidental releases of cyanide. The Cyanide Emergency Response Plan considers a number of cyanide failure scenarios appropriate for its site-specific environmental and operating circumstances. The GSM processing facility operates on batch processing scenarios which require the plant to be shut-down and started-up on a regular cycle. As such, all plans and procedures developed and in use at Granny Smith include cyanide management requirements in the event of temporary closure or cessation of processing activities at the operation.

The operation does inspect cyanide facilities on an established frequency sufficient to assure and document that they are functioning within design parameters.

Inspections of cyanide facility areas are conducted daily, weekly and monthly by Process staff. The inspections are recorded and signed off by Supervisors. Work orders are raised for issues identified during the inspections. Process Technicians also are trained in conditions to look for as part of their inspections and daily activities, as detailed in training manuals such as the Leach-CIP Training Manual.

The monthly inspections are Plant General Inspections (PGIs) carried out for 18 defined areas. Responsibility for inspections is rostered amongst 18 mill inspection groups within the organisation.

Inspections conducted by maintenance personnel provide emphasis on the physical integrity of equipment. Such inspections are undertaken according to the frequencies scheduled in Oracle, which are specific to the risks associated with individual equipment types. For example, pumps are inspected weekly, slurry pipelines are inspected every two months.

SAP software is used to administer schedules, requirements and records of routine preventive maintenance activities. A review of preventative maintenance schedules of cyanide critical equipment and discussions with the Maintenance staff confirmed that preventative maintenance inspection reports had been developed and scheduled for all cyanide critical equipment.

GSM inspects the following at unloading, storage, mixing and process areas:

- Tanks holding cyanide solutions for structural integrity and signs of corrosion and leakage through a combination of daily and monthly inspections and a preventative maintenance schedule that conforms with a risk based inspection programme.
- Secondary containments for their integrity, the presence of fluids and their available capacity, and to ensure that any drains are closed and, if necessary, locked, to prevent accidental releases to the environment
- Leak detection beneath the Process Water Storage Pond on a monthly basis
- Pipelines, pumps and valves for deterioration and leakage
- Ponds and impoundments for the parameters identified in their design documents as critical to their containment of cyanide and solutions and maintenance of the water balance, through per shift, monthly and six monthly inspection regimes

Inspections are documented, including the date of the inspection, the name of the inspector and observed deficiencies. The nature and date of corrective actions are documented.

Records kept of PGIs demonstrated that those inspections are documented including the date of inspection, the name of the inspector and the observed issues. Records were also available for other months.

Preventative maintenance records also note date of the inspection, the name of the inspector, and any observed deficiencies. The use of work orders for observed deficiencies allows the nature and date of corrective actions documented to be documented.

Preventive maintenance programmes are implemented and activities documented to ensure that equipment and devices function as necessary for safe cyanide management.

The operation does not require emergency power resources to operate pumps and other equipment to prevent unintentional releases and exposures in the event its primary source of power is interrupted.

Standard of Practice 4.2

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

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:

Granny Smith is in Full Compliance with Standard of Practice 4.2.

The operation conducts a programme to determine appropriate cyanide addition rates in the mill and evaluate and adjust addition rates as necessary when ore types or processing practices change cyanide requirements.

Cyanide addition is typically in the range 0.27 kg/tonne of ore.

Daily bottle roll tests/leach tests are conducted to verify recoveries and provide support for the rate of cyanide addition nominated.

GSM are currently undertaking pre-feasibility tests in ore from the Wallaby zone, with test work commencing in 2015. The metallurgical testwork completed using Gold Fields methodology and test programmes by independent laboratories (ALS). The test program looked at identification of optimum cyanide addition rates for the new ore body and the ability for GSM to meet ICMI compliance with discharges to the TSF.

The operation has evaluated various control strategies for cyanide additions.

Over time, the operation has sought to reduce the rate of cyanide addition to the Leach Feed. Cyanide concentrations in LT1 during the Certification period had been reduced from an average of 200mg/L in 2014 to 120-150mg/L.

GSM control CN addition using a series of online analysers and supported by 4 hourly free cyanide titrations to identify optimised CN addition rates. These analysers provide real time information to the CN dosing system to Leach tank 1 or 0, depending on tanks usage. The dosing rates are informed by the online Free CN concentration measured at Leach Tank 6 and at the 1st Leach tank. 4 hourly titrations provide additional control (double check) on the instruments. GSM has been able to continue to reduce cyanide addition rates through the application of the CN Leach Circuit Controls Strategy, which is monitored reported on a regular basis using the Cyanide Cube Report.

Standard of Practice 4.3

Implement a comprehensive water management program to protect against unintentional releases.

The operation is in full compliance with
 in substantial compliance with Standard of Practice 4.3
 not in compliance with

Basis for this Finding/Deficiencies Identified:

Granny Smith is in Full Compliance with Standard of Practice 4.3.

GSM has revised its comprehensive water management program with the use of a “GoldSim” as a probabilistic water balance model since Q1 2016. The GoldSim model provides a probabilistic model for the management of water storage, supply and containments structures at GSM.

The probabilistic water model considers; the rate of tailings deposition; the design storm event for a 1:100 year 24 hr event; the updated climate data provided by Australian Enhanced Climate Database; the catchments for the TSF and process plant event ponds; the solution losses from seepage and evaporation; the consideration of power outages and the current campaign production status at GSM; and, the water demand requirements for the mine process in consideration of available water supplies.

Granny Smith’s operating procedures incorporate inspection and monitoring activities to implement the water balance and prevent overtopping of ponds and impoundments and unplanned discharge of cyanide solutions to the environment.

Ponds and impoundments are designed and operated with adequate freeboard above the maximum design storage capacity determined to be necessary from water balance calculations.

Standard of Practice 4.4

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

The operation is in full compliance with
 in substantial compliance with Standard of Practice 4.4
 not in compliance with

Basis for this Finding/Deficiencies Identified:

Granny Smith is in Full Compliance with Standard of Practice 4.4.

A peer reviewed protective mechanism via the injection of hypersaline water into the tailings stream has been established at Granny Smith and was in affect during the recertification period.

It is noted that during this audit period only three exceedances of the WAD cyanide open water limit of 50 mg/L occurred at the TSF spigot discharge. This is due to the operation having a strong understanding of its processing and ore types, as well as improving cyanide addition methodologies in this time.

To maintain the protective measure and to address any perceived limitations with the study, the study authors made several recommendations that had to be adhered to by Granny Smith. Despite the minimal occurrences of WAD cyanide levels exceeding the open water limit, an assessment of adherence to these recommendations during the recertification period was made. The assessment concluded that all protective mechanisms had been implemented appropriately during the audit period when the hypersaline mechanism was in use.

Ongoing wildlife monitoring has been ongoing during this time in order to demonstrate that significant wildlife mortality is not occurring. Daily wildlife observations undertaken by site personnel and detailed quarterly observations and surveys by Donato Environment Services (DES) have been conducted.

Balloon trials intended to replicate carcasses are conducted by the Environment Department at random times to test the TSF observers ability to spot carcasses on the TSF surface. Operators are trained by Environment Department staff who have in turn been trained by DES staff.

There was one confirmed instance of wildlife mortality as a result of cyanide ingestion during this audit period. An investigation was conducted and it was determined that during a shutdown event some valves were left open that allowed cyanide bearing solutions from the ILR to directly discharge to the TSF via sump pumps. As a result, five Redcapped Plovers were found deceased on the TSF beach surface. The Redcapped Plover is a common bird and generally resident on the Granny Smith TSF.

As a result, Granny Smith implemented a range of corrective actions to prevent this outcome from occurring in the future, including locks on drain valves and modifications to procedures to ensure checks of valves.

Despite the death of 5 birds, it is the conclusion of DES and this audit, that this event is not deemed as significant and should not have ramifications on Code compliance, as the incident was isolated, short lived and corrective actions have been implemented to prevent such an occurrence from happening again. The implementation of these corrective actions was confirmed during the site visit.

Standard of Practice 4.5

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

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:

Granny Smith is in Full Compliance with Standard of Practice 4.5.

The operation does not have a direct discharge to surface water. The nearest surface water bodies are the Windich Creek (ephemeral) and the disused Windich Pit. The Windich Pit receives water via aquifer recharge and through a diversion channel from the creek. No process water is discharged into either water body.

Groundwater and surface water monitoring does not indicate that the operation is indirectly discharging to these surface water bodies.

Standard of Practice 4.6

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

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:

Granny Smith is in Full Compliance with Standard of Practice 4.6.

The TSF was constructed with no underdrainage or internal toe drains. A perimeter drain has been constructed around most of the TSF to collect seepage water issuing from the foundation sediments on which the TSF are constructed. The drain commences near the run-of-mine access ramp and continues right around the south-eastern side of Cells 2 and 1, until it reaches a the Runoff Collection Sump located at the intersection of Cells 1 and 3. Cell 3 has had seepage mitigation features included in its design in an attempt to attain effective seepage control.

A downstream seepage interception system has been constructed around the toe of the TSF to intercept near surface seepage from the facility, which is then directed to reclaim sumps. A further seepage interception trench was commissioned in 2012 along the southern wall of Cell 3. The seepage interception trench runs approximately from the Windich Creek under-drainage tower to just before the western extremity of the Cell 3 south wall.

Groundwater monitoring results from all bores have been below a maximum value of 0.22 mg/L WAD cyanide for the audit period.

During the audit period, the Department of Environment and Regulation (DER) modified the operation's environmental licence to include limits on WAD cyanide of 0.5 mg/L at 4 groundwater monitoring bores surrounding the TSF. Monitoring of these bores has shown that WAD cyanide concentrations in the groundwater during the audit period have been below the limits of detection (limit of detection is 0.004 mg/L WAD cyanide).

The operation does not use mill tailings as underground backfill.

Standard of Practice 4.7

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

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:

Granny Smith is in Full Compliance with Standard of Practice 4.7.

The March 2014 re-certification audit identified that Granny Smith Operations had engaged external engineers, Lycopodium, to undertake a review of the capacity of secondary containment for the Leach tanks and CIP in 2009. A programme of works was implemented in response to the review recommendations. All work had been closed out during this audit period. All new work conducted during this audit period had appropriate spill prevention and secondary containment measures. Secondary containments for cyanide unloading, storage, mixing and process tanks are 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.

Preventative maintenance inspections and programs are carried out for existing bunds and all cyanide critical equipment. All reagent bunds are inspected monthly as part of workplace inspection and cyanide storage area also has external annual audit by cyanide supplier (AGR).

A review of the SAP preventative maintenance schedules of cyanide critical equipment and discussions with the Maintenance staff confirmed that preventative maintenance inspection reports had been developed and scheduled for all cyanide critical equipment. Tank inspections include 1 year external inspection of CIL leach tanks and 2 yearly internal inspections. The inspection schedule has been achieved as the process plant has been operating on a campaign basis since 2013 which provides extended periods of shutdown for internal inspections to be completed. Completed work orders were reviewed to confirm that maintenance works have been carried out.

Granny Smith has undertaken groundwater monitoring of four monitoring bores installed up and down gradient from the mill to identify any seepage from cyanide bearing tanks and facilities (e.g. Process Water Storage Pond). The monitoring has not shown any indication of seepage associated with loss of containment.

Procedures are in place and being implemented to prevent discharge to the environment of any cyanide solution or cyanide-contaminated water that is collected in the secondary containment area. Remediation of contaminated soils is undertaken in accordance with Granny Smiths developed *Minor Cyanide Spill Clean Up* procedure to respond to cyanide spills within containment and outside of containment.

The process area at Granny Smith provides for containment of all cyanide pipelines associated with the ring main from the cyanide storage tank through concrete hardstand below pipelines and pipe trays to direct spillage to sealed ground. The Tailings pipeline and return water pipelines are placed within an earthen trench designed to contain any spills or leaks within the trench and allow removal of residual spilled material and any contaminated earth. The tailings pipeline and the tailings return water line include leak detection systems, based on differential flow and instruments that identify sudden loss in pressure, that alarm to the process control room.

All surface water is a sufficient distance from cyanide pipelines to not warrant special protection needs. Cyanide tanks and pipelines are constructed of materials compatible with cyanide and high pH conditions.

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.

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:

Granny Smith is in Full Compliance with Standard of Practice 4.8.

QA/QC programmes have been implemented during construction of new cyanide facilities since the last Recertification Audit. Since the Recertification Audit the following Projects have been undertaken at Granny Smith:

- Installation of Intensive Leach Reactor (ILR) circuit, including pregnant leach tank;
- Replacement of cyanide storage tank; and
- Lift on TSF Cell 1

Evidence was available for QA/QC programmes implemented in the form of Manufacture's Data Reports, Project Completion Reports and Project Files containing QA/QC documentation.

The QA/QC programmes for the replacement of the cyanide storage tank and ILR circuit have addressed the suitability of materials and adequacy of foundation materials.

The QA/QC documents were reviewed by appropriately qualified personnel. All capital projects at the site are managed by the site's Projects Manager, an appropriately qualified engineer.

Standard of Practice 4.9

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

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:

Granny Smith is in Full Compliance with Standard of Practice 4.9.

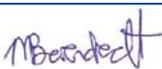
The operation has written standard procedures for monitoring activities for wildlife, carcass detection and surface and groundwater quality (internal and external analysis), which were prepared by appropriately qualified persons. The procedures and other complementary documentation contain information on how and where samples should be taken, sample preservation techniques, chain of custody procedures, shipping instructions, and cyanide species to be analysed.

Space is provided on the field datasheets for wildlife monitoring and surface and groundwater monitoring to record sampling conditions (e.g. weather, livestock/wildlife activity, anthropogenic influences, etc). A review of the field sheets confirmed that such observations were being made.

Granny Smith does not have a direct discharge to surface water. The operation monitors for potential indirect discharges of cyanide to Windich Pit from TSF seepage through quarterly pit water sampling. In addition, groundwater is monitored for cyanide via monitoring bores located around the site. Several of these are down gradient of the operation.

The operation inspects for and records wildlife mortalities related to contact with and ingestion of cyanide on a daily basis. A review of the wildlife observation data sheets for the audit period showed that daily monitoring was being conducted.

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Monitoring is conducted at frequencies adequate to characterise the medium being monitored and to identify changes in a timely manner. These frequencies include daily wildlife observations; daily, weekly and quarterly surface water monitoring; and quarterly groundwater monitoring.

PRINCIPLE 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 the cyanide facilities to protect human health, wildlife and livestock.

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:

Granny Smith is in Full Compliance with Standard of Practice 5.1.

The operation has developed a *Decontamination and Decommissioning Plan* detailing Granny Smith's decommissioning procedures, which was current at the time of the audit.

The plan includes an implementation schedule divided into monthly units and the planned tasks are scheduled up to 24 months prior to closure and continue for up to 24 months after closure.

The operation has established a system to review its decommissioning procedures for cyanide facilities during the life of the operation and revise them as needed, which involves biennial reviews of the document.

Standard of Practice 5.2

Establish an assurance mechanism capable of fully funding cyanide related decommissioning activities.

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:

Granny Smith is in Full Compliance with Standard of Practice 5.2.

The operation has developed an estimate of the cost to fully fund third party implementation of the cyanide-related decommissioning measures as identified in its decontamination and decommissioning plan. A tool known as the *Standardized Reclamation Cost Estimator* has been used to develop mine closure and decontamination and decommissioning costings for Granny Smith. The tool uses contractor rates provided by a third party.

The operation has established a financial mechanism approved by the applicable jurisdiction to cover the estimated costs for cyanide-related decommissioning activities as identified in its decommissioning and closure strategy.

The Department Minerals and Petroleum (DMP) has established the Mine Rehabilitation Fund (MRF). The MRF requires mining operations to pay an annual submission to the fund, which Granny Smith has complied with in the audit period.

The ICMI has assessed the MRF and found that it meets the intent of this Standard of Practice. As such, Granny Smith's participation in this fund is sufficient to demonstrate compliance.

PRINCIPLE 6 – WORKER SAFETY

Protect workers' health and safety from exposure to cyanide.

Standard of Practice 6.1

Identify potential cyanide exposure scenarios and take measures as necessary to eliminate, reduce and control them.

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:

Granny Smith is in Full Compliance with Standard of Practice 6.1.

The operation has developed procedures describing how cyanide-related tasks such as unloading, mixing, plant operations, entry into confined spaces, and equipment decontamination prior to maintenance should be conducted to minimise worker exposure.

These procedures identify the hazards associated with the task and utilise the hierarchy of controls to ensure personal safety. The site also utilises Job Safety Analysis (JSA) or a Field Level Risk Assessments (FLRAs) to define risks associated with a task to reduce worker risk.

The procedures require, where necessary, the use of personal protective equipment (PPE) and addresses pre-work inspections. A site specific processing induction is provided for access to the processing area and includes a discussion on specific PPE required on site. The hazards associated with the task and the PPE required form an integral part of the procedures and where necessary, individual procedures define additional PPE specific to the activity or task.

The operation has a Management of Change Procedure that describes the procedures the process for assessment and approvals operational changes and modifications and to identify the potential impacts on the environment, worker health and safety, and incorporate the necessary control measures. Completed management of change assessments were reviewed and had been assessed by supervisors, environment specialists and safety and health personnel. High-risk items identified in the management Change process require additional sign off above the supervisor level.

The operation solicits worker input through several means:

- PSI (Pre Shift Information) Meetings;
- Health and Safety Meetings; and

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- Review process integrated into procedures.

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.

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:

Granny Smith is in Full Compliance with Standard of Practice 6.2.

The site currently aims to maintain pH in the range of 9.7-10.0; this value is reviewed weekly by the Metallurgist who then updates the levels on the Reagent Whiteboard in the CIP Hut. Mill Operators manually test and adjust the process input to maintain the pH within the set range.

6 fixed alarms are in place at designated locations within the processing plant. All workers are also required to wear personal HCN monitors in the locations outlined below:

- All areas of Leaching and CIP tanks;
- All areas of Tails Retreatment;
- All Areas of the Thickener;
- In ILR area;
- Cyanide Reagent Area; and
- Elution and Goldroom Areas.

The procedure outlines the actions required for cyanide levels at 4.7 ppm and 10 ppm. Specific requirements for entry into the cyanide storage area compound are described in this document, which includes additional PPE to be worn during cyanide unloading.

The requirement for calibration/monitoring is tracked by the Processing trainer and calibration is completed as required by the manufacturer. The operation has an onsite calibration station that records the units and calibration results in a database.

Warning signs have been placed at specific areas around the Mill advising workers that cyanide is present, and those smoking, open flames and eating and drinking are not allowed.

Signage is posted when cyanide deliveries are in progress to keep non-essential persons away. Showers, low-pressure eyewash stations and dry powder or non-acidic sodium bicarbonate fire extinguishers located at strategic locations throughout the operation and are maintained, inspected and tested on a regular basis.

The operation conducts regular inspections and the facility is split up into 18 areas and inspections are to be completed monthly for each area. These inspections cover all safety equipment. A review of these records showed that each inspection was undertaken as programmed.

Eyewash stations and emergency showers checked during the site tour were all in working order.

Fire extinguishers are also covered through six monthly checks by the supplier. All extinguishers are dry powder and were inspected in on a regular basis and confirmed via the site inspection.

The unloading, storage, mixing and process tanks are identified at Granny Smith with appropriate signage. In addition, the direction of cyanide flow in pipes is identified via labels with arrows indicating the flow direction.

MSDS' and first aid instructions were posted at the cyanide unloading area and in the CIP Control Hut. Workers also have access to MSDS and first aid instructions in the Mill Crib Room through computer access to the intranet. MSDS' are also available in the Health and Hygiene Centre, the Emergency Response area and the storage warehouse.

There is a system used for reporting and investigating incidents and an Incident Investigation Procedure. Once an incident has been observed, the incident report form is completed by the individual and their supervisor. This is then sent to the Occupational Health and Safety Department for review.

Standard of Practice 6.3

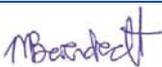
Develop and implement emergency response plans and procedures to respond to worker exposure to cyanide.

in full compliance with

The operation is in substantial compliance with Standard of Practice 6.3

not in compliance with

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Basis for this Finding/Deficiencies Identified:

Granny Smith is in Full Compliance with Standard of Practice 6.3.

The operation has water, oxygen, a resuscitator, antidote kits and a radio, telephone, alarm system or other means of communication or emergency notification readily available for use at cyanide unloading, storage and mixing locations and elsewhere in the processing area. There are safety showers with integrated eyewash stations located strategically throughout the plant supplied with fresh water. The showers were operational at the time of the site visit and are inspected on a regular basis through operator daily checks and monthly Planned General Inspections.

Medical oxygen resuscitators are available as Oxy Sok units located in mill control rooms, in the cyanide unloading area, mill maintenance office, medical clinic, administration facilities and in the Emergency Response Team (ERT) area where a number of oxygen units are located in the hazmat response trailer and in the ERT store. The operation has two ambulances which both have portable oxygen and oxygen fitted in the vehicles.

The operation has an on-site medical clinic which is staffed during dayshift by an OH & S Advisor that is a trained paramedic.

The ERT and Medical clinic equipment, including ambulances and response vehicles are checked weekly with hard copy records of the current year maintained by the ERT. Weekly checklists for the medical clinic are maintained in the clinic. Past year's inspection records are archived. The inspection of first aid equipment stored in operational areas including oxygen resuscitation units and defibrillators are inspected weekly by the medical clinic staff/ERT.

The operation has written plans and procedures to respond to emergency situations has its own on-site capability to provide First Aid or medical assistance to workers exposed to cyanide. Procedures to transport workers exposed to cyanide to locally available qualified off-site medical facilities have also been developed.

Mock emergency drills are conducted periodically to test response procedures for various cyanide exposure scenarios. Exercises are planned in accordance with the requirements of the Cyanide Emergency Response Plan.

PRINCIPLE 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.

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:

Granny Smith is in Full Compliance with Standard of Practice 7.1.

GSM has revised the Cyanide Emergency Response Plan (CERP) with the latest version approved 25/10/2016. The revised plans include concise pre-incident plans for identified cyanide emergency scenarios: Cyanide exposure related injury, fire and explosion, transport incident, sodium cyanide liquid spills and HCN gas release. The CERP is implemented within the framework of the GSM Site Emergency Management Plan and the Gold Fields Australia Crisis Management Plan.

The GSM CERP considers failure scenarios as appropriate for its site-specific environment and operating circumstances. The plan includes the following scenarios:

- Cyanide related injury including worker exposure to catastrophic release of gaseous HCN and /or liquid NaCN;
- Cyanide transport incident;
- Releases during unloading of liquid NaCN;
- Cyanide related fires and explosions
- Cyanide spills including pipe failures, tank ruptures, pumps and valve failures and overtopping of tanks

Emergencies involving potential release of cyanide from the GSM tailings storage facilities are contained in the TSF Training Manual. The manual includes response measures for emergencies at the TSF including:

- Earthquake;

- Evacuation;
- Embankment failure;
- Uncontrolled seepage;
- Extreme rainfall event/overtopping of TSF and associated ponds and sumps;
- Pipeline failure (tailings slurry and return water); and
- Power failure.

The CERP has addressed planning for the response to transport related emergencies on-site emergencies and transport incidents in close proximity to the mine site. Incidents away from the mine lease are determined to be the responsibility of the cyanide transporter AGR.

The Cyanide Emergency Response Plan describes specific response actions for each identified scenario.

Standard of Practice 7.2

Involve site personnel and stakeholders in the planning process.

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:

Granny Smith is in Full Compliance with Standard of Practice 7.2.

The operation has involved its workforce and stakeholders in the cyanide emergency response planning process. The CERP has been approved by the GSM Sustainability Unit Manager. The Plan describes that it was developed through evidence and collaboration from the following:

- Relevant state and national legislation, standards, codes of practice, and guidelines where applicable
- Orica Mining Chemicals
- CSBP Limited
- Australian Gold Reagents (AGR)
- GSM Safety Department
- GSM Environmental Department

- Gold Fields Employees (Lawlers, Darlot, Granny Smith, St Ives, Agnew)

The operation has made potentially affected communities aware of nature of their risks associated with accidental cyanide releases. Although the nearest community is located 23 km away from the site in Laverton. The operation participates in regular meetings with the Laverton LEMC and presents information on its emergency response plans, capabilities and emergency risks. The LEMC includes representatives of the Laverton Shire, Police, Laverton Hospital, The Department of Fire and Emergency Services, Volunteer Ambulance Service and other mines in the local area.

The operation has involved local response agencies such as outside responders and medical facilities in the cyanide emergency planning and response process.

The operation has engaged in consultation or communication with stakeholders to keep the Cyanide Emergency Response Plan current, through internal engagement with their employees and externally primarily through the LEMC process.

Standard of Practice 7.3

Designate appropriate personnel and commit necessary equipment and resources for emergency response.

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:

Granny Smith is in Full Compliance with Standard of Practice 7.3.

The CERP designates primary and alternate emergency response coordinators who have explicit authority to commit the resources necessary to implement the plan. It also defines responsibilities for responsible persons and emergency response personnel. The ERT and responsible persons are rostered for on call availability through a memo issued to personnel and advised on noticeboards and is updated every Tuesday by the Emergency Response Coordinator (ERC).

The CERP lists the ERT members and their contact details including mobile phone number and room number. It details the required qualifications for the key site personnel that would be included in responding to an emergency. A matrix is provided detailing training requirements for each of the key roles in emergency response. It lists emergency response equipment, including personal protection gear, available along transportation routes and/or on-site and requires regular inspection of the equipment. It describes the role of outside responders, medical facilities and communities in the emergency response procedures.

The operation has made outside entities included in the emergency response plan aware of their involvement and has included them as necessary in mock drills or implementation exercises.

Standard of Practice 7.4

Develop procedures for internal and external emergency notification and reporting.

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:

Granny Smith is in Full Compliance with Standard of Practice 7.4.

The CERP includes procedures and contact information for notifying management, regulatory agencies, outside response providers and medical facilities of the cyanide emergency. It also includes procedures and contact information for notifying potentially affected communities of the cyanide related incident and any necessary response measures, and for communication with the media.

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.

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:

Granny Smith is in Full Compliance with Standard of Practice 7.5.

The CERP addresses post-incident neutralisation and decontamination. The section notes that for all events, there will be a requirement to clean up and decontaminate the equipment and personnel used in the response, as well as any affected soils. A monitoring programme is to be completed in conjunction with the site Environmental Department.

It prohibits the use of chemicals such as sodium hypochlorite, ferrous sulphate and hydrogen peroxide to treat cyanide that has been released into surface water. The training materials for emergency response reference the CERP and the Emergency Response Team are responsible for responding to and cleaning up spills.

It addresses the potential need for environmental monitoring to identify the extent and effects of a cyanide release, and include sampling methods, parameters and, where practical, possible sampling locations. It covers:

- Testing for cyanide in the atmosphere and on solid surfaces
- Testing for cyanide in water
- Sampling locations

Standard of Practice 7.6

Periodically evaluate response procedures and capabilities and revise them as needed.

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:

Granny Smith is in Full Compliance with Standard of Practice 7.6.

The operation does review and evaluate the cyanide related elements of its Emergency Response Plan on a regular basis. The CERP requires review of the plans following mock drills, or following a cyanide incident or at least annually if no reviews were otherwise required. The GSM CERP was last reviewed in October 2016.

Mock emergency drills are conducted periodically to test response procedures for various cyanide exposure scenarios as part of the Emergency Response Plan evaluation process. Exercises are planned in accordance with the requirements of the Cyanide Emergency Response Plan which include:

- 6 monthly - Cyanide Emergency Response with ERT Response

- Annual site evacuation exercise
- Annual Crisis exercise with shift and crisis team response

This schedule was being adhered to at the time of the audit. Provisions are in place to evaluate and revise the emergency response plan after any cyanide related emergency.

PRINCIPLE 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.

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:

Granny Smith is in Full Compliance with Standard of Practice 8.1.

The operation does train all personnel who may encounter cyanide in cyanide hazard recognition. Granny Smith has a structured induction process that includes area inductions and a cyanide awareness training program.

The operation utilises the cyanide awareness training produced and provided by AGR, the sites cyanide producer and transporter. The Cyanide Awareness Course is a requirement for all personnel who have the potential to be exposed to cyanide in their role. This includes employees and contractors. The cyanide awareness course covers hazard recognition, cyanide use, response and personal protective equipment. The course includes a knowledge assessment that is completed by each participant and recorded on their training file.

The Cyanide Hazard Awareness Induction is conducted for contractors and employees who may encounter cyanide. This training is only valid for two years and is a requirement for contractors and employees to complete the course within two years.

The INX database highlights when training is nearing its expiry date. It sends an automated email to the person requiring training as well as the process trainer that refresher training should be conducted. The process trainer reviews the database and training matrix on a weekly basis to ensure training requirements are captured.

Hardcopies of training assessment (understanding and competence) and other training are also kept on an employee's personal training file in the Process Processing Safety & Training Coordinator in a locked filing cabinet.

All training records requested during the audit could be provided.

Standard of Practice 8.2

Train appropriate personnel to operate the facility according to systems and procedures that protect human health, the community and the environment.

in full compliance with

The operation is in substantial compliance with Standard of Practice 8.2

not in compliance with

Basis for this Finding/Deficiencies Identified:

Granny Smith is in Full Compliance with Standard of Practice 8.2.

The training received by new starters covers site inductions, cyanide awareness, operational training manuals and task specific procedures. The operational training manuals and procedures cover training related to normal production tasks.

A Training Matrix specific for Processing and Maintenance has been completed by the Process Training Advisor, who coordinates appropriate cyanide training and tracks completion for the whole site. The matrix identifies the cyanide related roles and responsibilities and related these each to cyanide awareness, training manual or a procedure.

The manuals and procedures identify specific areas where cyanide specific training is required.

The training and assessment system is mentoring based whereby a senior operator demonstrates and trains personnel in all relevant tasks. This is followed by a competency based practical assessment process which is completed by the Process Training Advisor (for cyanide areas).

The training and assessment system is mentoring based whereby a senior operator demonstrates and trains personnel in all relevant tasks. This is followed by a competency based practical assessment process which is completed by the Processing Safety & Training Coordinator (for cyanide areas). During this audit period, reviews of assorted training records indicated this training process was occurring as described. A new Buddy System was introduced and proceduralised to formalise the requirements for new starters to work alongside experienced personnel for an established minimum period.

The Processing Safety & Training Coordinator has suitable mineral processing experience, and formal training qualifications including Certificate IV in Workplace Training and Assessment under the Australian National Training and Assessment Scheme.

Senior staffs conduct mentoring by shadowing and then supervision and on the job direction. The senior staff at the site are sufficiently experienced and have completed all the required training for their role.

The Cyanide Awareness course provides the knowledge for all personnel who will work in cyanide areas or on cyanide related tasks. This must be completed before gaining access unsupervised to areas where there are cyanide risks.

Granny Smith records completion of employee training in their training database InTuition. Additionally paper copies of training assessment sheets are kept in each employee's personal file in the Process Training Advisors Office.

Standard of Practice 8.3

Train appropriate workers and personnel to respond to worker exposures and environmental releases of cyanide.

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:

Granny Smith is in Full Compliance with Standard of Practice 8.3.

Cyanide unloading, mixing, production and maintenance personnel trained in the procedures to be followed if cyanide is released.

The required response for a cyanide release is detailed in the Cyanide Hazard Awareness training which is required to be completed every two years. Additionally, Appendix 7 of the CERP and the Mill Emergency Evacuation Plan –detail the evacuation process in case of an emergency. Relevant staff (mainly Mill personnel) are also trained in the clean-up of minor spills. Interviews with process technicians confirmed they knew what to do in the event of a cyanide release.

Site cyanide response personnel, including unloading, mixing, production and maintenance workers are required to complete the full cyanide awareness induction package (required to be complete every 2 years) and are trained in decontamination and first aid procedures. The cyanide training through Hazmat and Cyanide inductions is a mandatory ERT training requirement included in the ERT Training Needs Matrix.

The operation has made off-site Emergency Responders, such as community members, local responders and medical providers, familiar with those elements of the Emergency Response Plan related to cyanide. Refresher training for response to cyanide exposures and releases is conducted regularly.

Simulated cyanide emergency drills are periodically conducted for training purposes. Drills have covered worker safety and environmental release. The operation has conducted a number of cyanide specific mock exercises in addition to practical exercises as part of routine training. The mock drills have addressed worker exposure and spill response. The operation has also conducted a mill evacuation exercise and provided training to personnel on how to evacuate and wardens on how to check and clear areas of the facility.

Cyanide emergency drills are periodically conducted for training purposes. The exercises are evaluated from a training perspective to assess in personnel have the knowledge and skills required.

Records are retained throughout an individual's employment documenting the training they receive. The records include the names of the employee and the trainer, the date of training, the topics covered, and if the employee demonstrated an understanding of the training materials.

PRINCIPLE 9 – DIALOGUE

Engage in public consultation and disclosure.

Standard of Practice 9.1

Provide stakeholders the opportunity to communicate issues of concern.

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:

Granny Smith is in Full Compliance with Standard of Practice 9.1.

Granny Smith is located approximately 23 km south of Laverton, which is the closest community. The operation has established a comprehensive list of stakeholders relevant to Granny Smith.

The Environment and Community Superintendent is responsible for managing the interactions between the local community and Granny Smith. Routine interactions where members of the local community can raise issues of concern, including those associated with cyanide, include attendance at the:

- Leonora-Laverton Cultural Awareness Group (LLCAG, an awareness group set up and run by the local indigenous community)
- LEMC.

The operation implements a Community Grievance Procedure. The purpose of this procedure is to define the process used by Granny Smith to manage complaints / grievances from communities and local stakeholders in a systematic and transparent manner.

Information on cyanide is located on notice boards at the mine site administration and Shire of Laverton community notice board. It includes contact information for the operation.

Standard of Practice 9.2

Initiate dialogue describing cyanide management procedures and responsively address identified concerns.

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:

Granny Smith is in Full Compliance with Standard of Practice 9.2.

At an operational level, Granny Smith utilises site inductions and cyanide awareness training to create opportunities for the operation to communicate with the workforce and provide them with information regarding cyanide management practices and procedures.

With respect to the local community, the operation has a database with the contact information for relevant external stakeholders. Granny Smith representatives attend the local shire, Leonora Laverton Cultural Awareness Group and Local Emergency Management Committee meetings, where cyanide management at Granny Smith has been discussed.

Records are available to confirm these interactions are taking place.

Standard of Practice 9.3

Make appropriate operational and environmental information regarding cyanide available to stakeholders.

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:

Granny Smith is in Full Compliance with Standard of Practice 9.3.

Granny Smith has a written description of how their activities are conducted and how cyanide is managed at the site. This description is in the form of a flyer, which is posted on the notice board in the site administration building. Additionally, copies of this flyer have been provided to the President of the Laverton Shire Council for posting at prominent locations in the town (e.g. library and council chambers). The President of the Shire Council is also employed by Granny Smith to manage the pastoral activities within the site's tenements

Based on the close proximity of the mine to the town of Laverton, and discussions with the Environment and Community Superintendent, it was considered that the illiterate proportion of the local population did not constitute a significant percentage. Consequently, verbal dissemination of material was not considered warranted.

The operation has some mechanisms to make information publicly available on the cyanide release or exposure incidents, where applicable.

Granny Smith is required to submit an *Annual Environmental Report* (AER) to the DER and DMP on an annual basis. The AER details all environmental incidents that occurred on-site during the reporting period. Cyanide releases, including tailings spills are reported in the AER and this was confirmed in a review of the document. AER's are available on the regulators website or through request.