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SUMMARY AUDIT REPORT

AUSTRALIAN GOLD REAGENTS PTY LTD
SODIUM CYANIDE PRODUCTION FACILITY
CSBP KWINANA WORKS

ICMI CYANIDE PRODUCTION VERIFICATION PROTOCOL RECERTIFICATION AUDIT

September 2013

CONTENTS

APPROVAL & CHANGE HISTORY

Approval and Change History					
Rev	Description	Approval			
		Date	By		
			MSA	MSA	CSBP
0	Issued for AGR & ICMI Concurrence	18 September 2013	MS	SAZ	GB
1	ICMI review comments incorporated. Issued for Information	31 December 2013	MS	SAZ	GB
2	Additional ICMI review comments incorporated. Issued for Information	28 January 2014	MS	SAZ	GB

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1. DESCRIPTION OF FACILITIES

Name of Cyanide Production Facility:	Kwinana Sodium Cyanide Facility
Name of Facility Owner:	Australian Gold Reagents Pty. Ltd. (AGR)
Name of Facility Operator:	CSBP Limited
Name of Responsible Manager:	Leigh Meyers
Address:	Kwinana Beach Road, Kwinana,
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Location detail and description of operation:

Australian Gold reagents Pty. Ltd. (AGR) is the management company of the unincorporated joint venture between CSBP Limited (CSBP) (75%) and Coogee Chemicals Pty. Ltd. (Coogee) (25%). CSBP, forms part of the Wesfarmers Ltd. group of companies and is the major participant in the venture and acts as both plant operator and sales agent. Coogee is a local manufacturer and distributor of industrial chemicals.

The AGR cyanide production facility is located within CSBP's fertiliser and chemicals complex at Kwinana, some 40Km south of Perth within the state of Western Australia.

AGR manufactures and transports two different forms of sodium cyanide from its Kwinana production facility, namely solution and solids. Sodium cyanide solution is produced as a 30%w/w liquid and solid sodium cyanide as >97% white briquette.

Sodium cyanide manufactured at the Kwinana site is used in gold mining operations within Australia, South East Asia, Africa and South America.

2. AUDIT TEAM FINDINGS

This operation is

☐ in full compliance
☑ **in substantial compliance with the International Cyanide Management Code**
☐ not in compliance

A copy of the agreed Corrective Action Plan to bring the production facility into full compliance with the protocol is included within this Summary Audit Report. The Corrective Action Plan must be fully implemented within one year of the date on which ICMI recertifies the operation.

It was confirmed that the AGR facility did not experience any significant cyanide incidents, exposures or releases during the preceding audit cycle.

Audit Company:	Michael Sputore & Associates Pty. Ltd
Date(s) of the Audit	2nd to 6th September 2013 inclusive
Audit Team Leader:	Michael Sputore
E-mail:	msa@iinet.net.au
Names and Signatures of Other Auditors:	Santino Zanotti

28 January 2014

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 Cyanide Production Operations and using standard and accepted practices for health, safety and environmental audits.

Signature of Lead Auditor: Michael Sputore

28 January 2014

3. EXPOSURE & ENVIROMENTAL INCIDENTS

The AGR facility did not experience any significant cyanide incidents, exposures or releases during the preceding audit cycle.

However, four incidents had occurred which involved exposure of personnel to cyanide. All of these were of a minor nature and did not result in hospitalisation.

Two environmental incidents also occurred which were reported to the regulator, Department of Environment and Conservation (DoEC) as per the conditions of the DoEC licence.

The first reportable incident involved the loss of approximately 300L of liquid cyanide from an incorrectly fitted valve on a full isotainer which had been pressurised after it had been returned to AGR on completion of its periodic inspection and overhaul. The isotainer was not in a bunded area.

Measures to prevent recurrence included the pressure testing of the isotainer before returning to AGR and the inclusion of this requirement in the maintenance QA/QC documentation and a change to the operating procedure.

The second reportable incident involved the loss of approximately 100L of weak cyanide solution from a Reverse Osmosis (RO) unit gasket failure which resulted in weak cyanide solution spraying outside the bunded area.

Measures to prevent recurrence included replacement of the gasket and checking of all other gaskets and the raising of a Work Order to fit a plastic shield in the area to prevent any leaks spraying outside the bunded area.

1. OPERATIONS: ***Design, construct and operate cyanide production facilities to prevent release of cyanide.***

Production Practice1.1: *Design and construct cyanide production facilities consistent with sound, accepted engineering practices and quality control/quality assurance procedures.*

The operation is
- ☐ in full compliance with
- ✓ **in substantial compliance with Production Practice 1.1**
- ☐ not in compliance with

Basis for this Finding:

The two sodium cyanide liquid plants and the solids cyanide plant were designed by Shedden - UDHE. The liquid plants were commissioned in 1988 and 1996 respectively with the solids plant being commissioned in 2002. Since commissioning, modifications and upgrades have been undertaken in all three plants to increase plant throughput. Comprehensive QA/QC documentation for all three plants was available for review in the Sodium Cyanide Business Unit and Project Engineering libraries.

AGR can demonstrate via documents held in these libraries that quality control and quality assurance programmes had been implemented during the construction of its cyanide production and storage facilities. Suitable engineering documents were available for review by the auditors.

Quality control and quality assurance programmes had been implemented for the most recent process updates undertaken since the last audit which included:

- Plant control system upgrades.
- Debottlenecking of both liquid plants
- Capacity expansion of the solids plant.

Materials of construction used in the facilities, including the upgrades cited above, were considered to be adequate, both in terms of those facilities used for the manufacture, storage and movement of cyanide as well as those facilities used to catch and trap cyanide spills.

Potential routes of release of cyanide from the plant are from mechanical failure of process equipment, the incinerator stack, solids plant stack, through waste water, through storm water from the liquids plant and from the solids plant.

The plants are protected by Emergency Shut Down Systems (ESD) and a comprehensive alarm system to prevent damage to process equipment and to prevent releases due to power failures, equipment failures and overfilling of storage tanks.

Waste water is captured and recycled into the process and/or treated in the process to destroy any contained cyanide before being discharged off the plant boundaries under strict Department of Environment and Conservation (DoEC) licence conditions to the CSBP site water management facilities.

The cyanide storage and process tanks are fitted with devices to prevent overfilling which include ultra-sonic level indicators and high level alarms.

Spill containment measures were in place at the production facility and include concrete lined bunds for cyanide storage tanks and process vessels containing cyanide.

However, inspection of the concrete lined bunds for Cyanide Storage Tanks 1 and 2 revealed that caulking repairs to cracks in the concrete had lifted in some areas. Whilst CSBP had generated a Work Order to repair the lifted caulking, the work had not yet been completed. The auditors assessed that there was no immediate or substantial risk to health, safety or the environment due to delays in arranging repairs for the following reasons:

- **Closer examination revealed that not all the caulking had lifted, but only an upper layer. The amount of remaining caulking was considered sufficient to prevent any significant loss of cyanide to the subsurface in the event of loss of containment.**
- **Weekly plant inspections of bunded areas are conducted by operators.**
- **CSBP would be alerted of any cyanide loss to the subsurface by their ground water monitoring programme as described in Protocol 3.**

Production Practice 1.2: *Develop and implement plans and procedures to operate cyanide production facilities in a manner that prevents accidental releases.*

✓ **in full compliance with Production Practice 1.2**

The operation is
□ in substantial compliance with
□ not in compliance with

Basis for this Finding

The facility has extensive documentation in place for the operation of the facility in the form of operating procedures and system manuals. These are controlled documents available within an electronic document management system.

Suitable preventative maintenance programmes were in place for the maintenance of process equipment and of calibration of process and plant laboratory test equipment and instrumentation.

Procedures were in place to prevent unauthorised or unregulated discharge to the environment. All water discharged from the AGR boundary must comply with DoEC licence conditions. The water is discharged to the CSBPs waste water collection system where further monitoring is undertaken to ensure no unregulated discharges occur.

In addition, a management of change process was in place to ensure that any changes to the facilities are subject to appropriate risk assessment, review and authorisation.

Cyanide is stored in suitable locations with appropriate security controls to prevent public access.

Evidence was also available to indicate that procedures were in place to ensure that cyanide is packaged and transported in a manner that is consistent with the requirements of the destination jurisdiction.

The cyanide production and storage facilities have dedicated procedures to deal with specific plant events which may result in cyanide exposure or release.

Production Practice 1.3: *Inspect cyanide production facilities to ensure their integrity and prevent accidental releases.*

The operation is
- ☐ in full compliance with
- ✓ **in substantial compliance with Production Practice 1.3**
- ☐ not in compliance with

Basis for this Finding:

Preventive Maintenance routines are established for servicing, inspection and testing of process equipment including storage tanks, pipelines, and associated pumps and valves in accordance with maintenance planning procedures to ensure their integrity and containment properties.

Plant inspection frequencies are based on statutory requirements, Australian Standards, Risk Based Inspection Analysis and as-found condition of equipment.

Preventive Maintenance routines are determined using Reliability Centred Maintenance Philosophy and may be reviewed and updated in response to as-found condition of equipment. Equipment inspections are also based on manufacturer's requirements and manuals.

For pressure equipment and pipelines containing hazardous substances, comprehensive Plant Inspection Reports and test records are maintained for each plant item. When corrective actions are identified, *Plant Inspection Recommendations* are generated and tracked through a *PIR Register.* These recommendations are followed up and closed out. For other equipment, Work Orders define what work is required and what records are to be generated. Records are retained in the *Work History.*

However, the timing of the "Thorough Inspection" of Sodium Cyanide Liquid Storage Tank #1, Equipment No 1168 T0601 is not in accordance with the Risk Based Investigation conducted in April 2009 which confirmed that the "Thorough Inspection" period was to remain at 120 months from this date, and was due in April 2012. This inspection was postponed and is currently scheduled for February 2014, resulting in the inspection being 22 months overdue.

The auditors assessed that there was no immediate or substantial risk to health, safety or the environment due to this postponement for the following reasons:

- **A review of the "Plant Inspection Report" and associated ultra-sonic thickness test report for #1 Sodium Cyanide Tank endorsed by CSBP's Senior Plant Inspector revealed that while there was some localised thinning of the shell, these areas are unlikely to leak prior to the proposed inspection date.**

CSBP had implemented a daily inspection of the tank by sodium cyanide plant operators and had developed and approved a leak control/patch method to rapidly deal with any leak should it develop. Such a leak would not lead to rapid loss of containment.

2. WORKER SAFETY: ***Protect workers' health and safety from exposure to cyanide.***

Production Practice 2.1: *Develop and implement procedures to protect plant personnel from exposure to cyanide.*

The operation is
- ✓ **in full compliance with Production Practice 2.1**
- ☐ in substantial compliance
- ☐ not in compliance with

Basis for this Finding:

Standard operating procedures have been written for cyanide related tasks from receipt of ammonia, natural gas and caustic soda, the manufacture of liquid and solid sodium cyanide, through to packaging and storage of solid sodium cyanide to shipping of liquid and solid sodium cyanide. Emergency procedures have also been developed.

Worker input and involvement in developing and evaluating health and safety procedures is achieved through consultation, participation in safety committees, development of Job Safety Analyses, representation in process improvement teams and participation in Team Based Risk Assessments.

The 'Project Change Request' process defined in a procedure provides the primary mechanism for review of safety and environmental impacts associated with proposed modifications, which may impact on worker health and safety or the environment.

Portable and personal gas detection equipment was available in the control room. Fixed gas detectors are also installed in the solid sodium cyanide plant. The personal and portable units have docking stations where the calibration and the instrument condition are monitored and an electronic log is maintained. Personal monitoring of the workforce in relation to cyanide exposure is undertaken and suitable evidence was available. Additionally a programme of testing working surfaces in offices, control rooms and lunchrooms was being undertaken to ensure that there was no contamination by sodium cyanide.

Controls and communications systems have been incorporated to include requirements for an observer to be present during loading of liquid cyanide into rail and road isotainers, man down alarms located throughout the two liquid plants, safety shower alarms installed throughout the facility, two-way radio communication between workers, control room and first aid post, and the confined space permit system.

All new employees undergo mandatory health assessments.

Decontamination facilities are available at the site and warning signs are present and information included in inductions in relation to the wearing of Personal Protective Equipment (PPE) and controls on smoking, eating and drinking.

All vessels and pipelines containing cyanide were suitably identified.

The facility has implemented a clothing change policy for operators, visitors and contractors.

Production Practice 2.2: *Develop and implement plans and procedures for rapid and effective response to cyanide exposure.*

The operation is

☐ in full compliance with
✓ **in substantial compliance with Production Practice 2.2**
☐ not in compliance with

Basis for this Finding:

The AGR sodium cyanide production facility is part of the larger CSBP production facility located at Kwinana. In addition to the production of sodium cyanide, a range of other chemicals classified as dangerous goods is produced at the works. The works, as the 'parent company', has formed a response team to deal with any emergency on the works site, and for any emergency involving ammonia and sodium cyanide off-site.

In addition to the overall emergency response procedures, combined safety showers and low-pressure eye wash stations are located throughout the facility. The procedures, reagents and apparatus required for cyanide poisoning are held at various locations on the facility. Oxyports are located throughout the plant site, which are maintained by an independent contractor. The units examined were found to be in good condition and maintenance records were available. Material Safety Data Sheets (MSDS) are available electronically and personnel are instructed on access to the MSDS at induction.

A permit to work system is in place to minimize the risk of exposure of personnel to cyanide and all storage tanks, process vessels and pipelines containing cyanide are suitably labelled.

The facility has a decontamination policy for employees and contractors.

There are two registered Occupational Health and Safety nurses, three occupational first aid personnel and designated trained personnel on call. Additional support is available from the Occupational Physician. The facility has processes in place to conduct primary triage on site for any cyanide exposure followed by ambulance transport to one of two designated hospitals.

A series of emergency scenarios is conducted to set Key Performance Indicators involving the facility operators and associated personnel.

Procedures are in place to thoroughly investigate incidents, determine their cause, determine corrective/preventive actions and close out the incident on confirmation of the effectiveness of the corrective/preventive actions.

However, there was one incident involving an exposure to hydrogen cyanide gas from vent knock-out pots when loading cyanide into isotainers, where the identified preventive actions to amend an operating procedure had not been fully completed. Only one of two proposed amendments had been included in the revised procedure, being the need to check that vent knock out pots are full of water prior to conducting loading operations. The second change, being the need to check that water in the knock out pots is changed weekly, had not been included in the revised procedure, nor had it been implemented.

The auditors assessed that there was no immediate or substantial risk to health, safety or the environment due to this omission for the following reasons:

- **Operators were checking vent knock out pots to ensure they are full of water prior to conducting loading operations as per the revised procedure.**
- **This practice was working well, thus minimising the risk of water saturation.**
- **There had not been a recurrence of a release from the knock out pots due to low level or saturation of the water.**
- **The incident appeared to have been an isolated case.**

3. MONITORING: Ensure that process controls are protective of the environment.

Production Practice 3.1: *Conduct environmental monitoring to confirm that planned or unplanned releases of cyanide do not result in adverse impacts.*

The operation is
- ✓ **in full compliance with Production Practice 3.1**
- ☐ in substantial compliance
- ☐ not in compliance with

Basis for this Finding:

There is no direct discharge to surface water. All water exiting the AGR boundary must comply with Department of Environment and Conservation licence limits. Discharges off the CSBP site are continuously monitored by in line monitors.
There are two discharge streams, effluent and stormwater. The stormwater is directed to a wet land system and is analysed daily. Waste water from the solids plant is processed in an ammonia stripper and then in a Reverse Osmosis plant. The concentrate is recycled back into the plant and the permeate is sent to a cyanide destruction process prior to ocean outfall discharge. All licence limits involving cyanide were being met.

All operations are conducted on concrete surfaces.

A comprehensive ground water monitoring programme has been in place since 1984 in compliance to licence conditions. The monitoring programme for the superficial aquifer includes quarterly monitoring

of water levels and ground water quality in both shallow and deep bores. Quarterly and six monthly sampling is undertaken for a suite of determinants which includes cyanide.

Free cyanide levels are analysed in the production and monitor bores. The last monitoring results revealed that all free cyanide concentrations in groundwater were within jurisdictional compliance levels. The plant has a Water and Rivers Commission Licence to use ground water for irrigation and plant water.

The solids plant has scrubber and HCN monitors. The liquid plant emissions are from the unreacted gases. The energy potential of these gases is realized through combustion in incinerators. External consultants undertake stack monitoring every three months. All results involving cyanide were within compliance to the license limits.

4. TRAINING: Train workers and emergency response personnel to manage cyanide in a safe and environmentally protective manner.

Production Practice 4.1: *Train employees to operate the plant in a manner that minimizes the potential for cyanide exposures and releases.*

The operation is
- ✓ **in full compliance with Production Practice 4.1**
- ☐ in substantial compliance
- ☐ not in compliance with

Basis for this Finding:

AGR has is a structured training programme for all operators, despatchers and maintenance personnel. Plant based learning for process and maintenance technicians is based on three levels while despatch operators for solids and liquids despatch is based on completing designated training modules.

Operators are trained through induction and establishing a "Learner Agreement" to undergo training in a particular training module for a specific process. Assessment for competency is conducted according to a documented assessment process.

At lower competency levels, the operator is given less scope for activity and there is greater level of peer review, mentoring and "buddy system". In order to transition from one level to another, the operator must demonstrate competency at the level in which he is being trained, complete appropriate assessments and have the overall process reviewed and signed off by the Technical Superintendent.

Refresher training is also undertaken when operating procedures change.

Worker training with selection and use of Personal Protective Equipment (PPE) is achieved through local area inductions; on the job training associated with operator competency training programs; statutory training courses conducted including Self Contained Breathing Apparatus (SCBA), gas testing, forklift operation, confined space entry; and through tool box meetings.

Training records for each employee are generated from the time of employment. Paper records for specific skills and qualifications are held in Personnel Files by Human Resources.

Production Practice 4.2: *Train employees to respond to cyanide exposures and releases.*

The operation is
- ✓ **in full compliance with Production Practice 4.2**
- ☐ in substantial compliance
- ☐ not in compliance with
- ☐ not subject to

Basis for this Finding:

Plant operators are trained in an "initial response" to an emergency. The initial response concentrates on making the process safe and raising the alarm to initiate the works emergency plans. These requirements are addressed in operator training and emergency drills.

Operators are briefed on basic emergency response requirements as part of the site induction and completion of designated training modules in their learner agreement.

"Man down" alarms and alarms activated on the operation of a safety shower are installed in the plants and operators are expected to respond to these. Emergency drills have been undertaken to test the application of the "man down" alarms, exposure to cyanide and release of cyanide. An ongoing programme of emergency scenario drills is in place.

5. EMERGENCY RESPONSE: ***Protect communities and the environment through the development of emergency response strategies and capabilities.***

Production Practice 5.1: *Prepare detailed emergency response plans for potential cyanide releases.*

The operation is
- ✓ **in full compliance with Production Practice 5.1**
- ☐ in substantial compliance
- ☐ not in compliance with

Basis for this Finding:

The AGR sodium cyanide production facility is part of the larger CSBP production facility located at Kwinana. In addition to the production of sodium cyanide, a range of other chemicals classified as dangerous goods is produced at the works. The overall strategy in relation to emergency response is that there is an emergency response team formed by the works, i.e. by the parent company, and this response team is devoted to dealing with and addressing emergencies at any location in the works and for any of CSBP's and AGR's products off site involving ammonia and cyanide. CSBP is an accredited emergency responder with the Department of Minerals and Petroleum (DMP) for ammonia and sodium cyanide.

Overall the works operates a tiered emergency response system with an Emergency Response Team, Incident Management Team and a Crisis Management Team. Responsibilities, duties and emergency management methods are documented in corresponding documentation. All of these documents are controlled documents.

Potential hazardous releases have been addressed as part of the requirements of the Major Hazard Facility Legislation. In addition Standard Operating Procedures and the AGR Transport Emergency Response Plan address spillages of solid or liquid cyanide.

The suite of documented procedures, Standard Operating Procedures and AGR Transport Emergency Response Plan are referenced by the CSBP Emergency Response Documentation and is used for responding to both on site and off site emergencies.

Site emergency response plans and procedures define specific response actions including site evacuation, notification of neighbouring industries, control, containment and mitigation of any cyanide release, first aid and the use of cyanide antidote, investigation and determining corrective actions to prevent future releases.

Production Practice 5.2: *Involve site personnel and stakeholders in the planning process.*

The operation is
- ✓**in full compliance with Production Practice 5.2**
- ☐ in substantial compliance
- ☐ not in compliance with

Basis for this Finding:

Consultation is a mandatory requirement under the Major Hazard Facility Legislation. This has occurred in several ways; inclusion of product specialists in the emergency response process, attendance and participation in the Kwinana Mutual Aid Group, liaison with the State Emergency Services and presentation of safety reports to relevant stakeholders. Communities have been made aware and consulted as per mechanisms noted above and through the CSBP involvement in the Kwinana Industries Council.

Production Practice 5.3: Designate appropriate personnel and commit necessary equipment and resources for emergency response.

The operation is
✓**in full compliance with Production Practice 5.3**
☐ in substantial compliance
☐ not in compliance with

Basis for this Finding:

CSBP has defined emergency response teams and incident controllers. Rosters are available and were sighted as part of the audit. Emergency response documentation was also available.

Emergency responders are trained and a training programme for each team was sighted. This training includes application of the Standard Operating Procedures and AGR Transport Emergency Response Plan, which, as noted previously, together with a suite of procedures defining the Emergency Response Plan are the primary reference point for responding to an onsite and offsite cyanide emergency.

Equipment lists were available. Testing of emergency response and communications equipment also occurs and records were sighted.

Production Practice 5.4: Develop procedures for internal and external emergency notification and reporting.

The operation is
✓**in full compliance with Production practice 5.4**
☐ in substantial compliance
☐ not in compliance with

Basis for this Finding:

Emergency response documentation contains specific flow charts, detailed checklists and contact numbers. A mutual aid system is also in place for Kwinana Industries, and radio communication tests between the various parties are conducted and documented.
A system is in place to alert affected communities as a result of an incident via the Department of Fire and Emergency Services.

Production Practice 5.5: Incorporate into response plans and remediation measures monitoring elements that account for the additional hazards of using cyanide treatment chemicals.

The operation is
✓ **in full compliance with Production Practice 5.5**
☐ in substantial compliance
☐ not in compliance with

Basis for this Finding:

Neutralisation, recovery and treatment of sodium cyanide spills is covered in three Standard Operating Procedures and the AGR Transport Emergency Response Plan for sodium cyanide products.

AGR has defined emergency operating procedures prohibiting the use of sodium hypochlorite, ferrous sulphate and hydrogen peroxide to treat cyanide in surface waters.

The requirements outlined in these documents apply equally to the Kwinana manufacturing and storage facilities and so provide specific guidance for dealing with cyanide related situations. The Standard Operating Procedures and the Plan addresses use of chemicals for remediation and ongoing monitoring.

Production Practice 5.6: Periodically evaluate response procedures and capabilities and revise them as needed.

The operation is
✓**in full compliance with Production Practice 5.6**
☐ in substantial compliance
☐ not in compliance with

Basis for this Finding:

The Emergency Response Plan is reviewed at least once every 24 months triggered by CSBPs Electronic Document Management System. Reviews of the above document can also arise from lessons learnt from emergency exercises and attendances to actual emergencies.

Post incident analysis are conducted as part of mock emergency drills in accordance with defined procedures and any improvement actions are entered in a tracking system to ensure implementation.

Post incident analysis for an actual incident is conducted by the Emergency Services Team Leader using the "Post Incident Analysis Form" and any actions arising from the review is entered in a tracking system to ensure implementation.

Incident management team drills are generally conducted on a monthly basis for the CSBP Emergency Response Teams. Crisis management drills have also been conducted.

Tests of the AGR Transport Emergency Response Plan are undertaken on an annual basis.

APPENDIX A CORRECTIVE ACTION PLAN

CA 01	CORRECTIVE ACTION PLAN

VERIFICATION PROTOCOL REQUIREMENT

1.1.5 Is cyanide managed on a concrete or other surface that can minimize seepage to the subsurface?

AUDIT FINDING SUMMARY

Inspection of the concrete lined bund for Sodium Cyanide Storage Tanks T0601 and T0602 revealed that caulking repairs to cracks in the concrete had lifted in some areas. Work Order 1004687 to repair these cracks had been generated but repair work had not yet been completed.

CSBP was in the process of arranging repairs to the caulking as per Work Order 1004687.

AGREED CORRECTIVE ACTION

AGR to complete repairs to the caulking that has lifted.

EVIDENCE REQUIRED

- Inspection by the auditors of bunded area to confirm completion of repairs to the caulking.
- Evidence of close out of Work Order WO 1004687.

AGREED COMPLETION DATE

28 February 2014

REVIEW OF PRESENTED EVIDENCE

CORRECTIVE ACTION CLOSED DATE

CA 02	CORRECTIVE ACTION PLAN

VERIFICATION PROTOCOL REQUIREMENT

1.3.1 *Does the facility conduct routine inspections of tanks, valves pipelines, containments and other cyanide production and storage facilities, including:*

a) Tanks holding cyanide solutions for structural integrity and signs of corrosion and leakage?

b) 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 release to the environment?

c) Pipelines, pumps, and valves for deterioration and leakage?

AUDIT FINDING SUMMARY

The timing of the "Thorough Inspection" of Sodium Cyanide Liquid Storage Tank #1, Equipment No 1168 T0601, is not in accordance with the Risk Based Investigation conducted in April 2009 which confirmed that the "Thorough Inspection" period was to remain at 120 months from this date and was due in April 2012.

This inspection was postponed and is currently scheduled for February 2014, resulting in the inspection being 22 months overdue.

It is acknowledged that justification for this postponement has recently been accepted by the Plant Inspection Group using CSBP procedure DP-05-095-02 *Deferment of a Scheduled Inspection*. Maintenance Work Order WO1003356 is established in the maintenance system to conduct the "Thorough Inspection" of Sodium Cyanide Storage Tank #1 by February 2014.

AGREED CORRECTIVE ACTION

AGR to complete the "Thorough Inspection" on Sodium Cyanide Tank #1 by April 2014 as currently planned.

EVIDENCE REQUIRED

- Copy of the "Thorough Inspection" Report on Sodium Cyanide Tank #1 conducted by the Plant Inspection Group.
- Copy of the completed Work Order.

AGREED COMPLETION DATE

30 April 2014

REVIEW OF PRESENTED EVIDENCE

CORRECTIVE ACTION CLOSED DATE

CA 03	CORRECTIVE ACTION PLAN

VERIFICATION PROTOCOL REQUIREMENT

2.2.12 *Are procedures in place and being implemented to investigate and evaluate cyanide exposure incidents to determine if the facility's programmes and procedures to protect worker health and safety and to respond to cyanide exposures are adequate or need to be revised?*

AUDIT FINDING SUMMARY

Reported Incident INC 49053 of 6/09/2011 – Exposure to Hydrogen Cyanide Gas

The corrective/preventative action identified for this incident was to amend the procedure, OP-KT-000-08 *Sodium Cyanide Solution Isotainer Loading at CSBP Kwinana Loading Station* to ensure that water in the knock out pots is checked daily and changed weekly.

The procedure had been amended to require the knock out pots to be checked daily, but no reference was made to the new requirement to change the water in the knock out pots weekly...

AGREED CORRECTIVE ACTION

AGR to:

1. Amend procedure(s) as proposed.
2. Ensure changes to OP-KT-000-08 are communicated to relevant personnel.
3. Review incident management process to ensure that incidents are not closed out unless verified as complete.

EVIDENCE REQUIRED

- Copy of amended procedure(s).
- Evidence of communication of amendments to OP-KT-000-08 to the relevant personnel.
- Outcomes and recommendations of review of the close out process for incidents in the "Cintellate" incident management process.

AGREED COMPLETION DATE

28 February 2014.

REVIEW OF PRESENTED EVIDENCE

CORRECTIVE ACTION CLOSED DATE