

INTERNATIONAL CYANIDE MANAGEMENT CODE CYANIDE TRANSPORTATION

SUMMARY AUDIT REPORT *WESTERN AUSTRALIA TRANSPORT OPERATIONS*



PREPARED FOR:
AUSTRALIAN GOLD REAGENTS PTY. LTD.

June 2006



SUMMARY AUDIT REPORT

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Auditor's Findings

Cyanide Transportation Facility Name: Western Australia Transport Operations

Name of Facility Owner: Australian Gold Reagents Pty. Ltd. (AGR)

Name of Facility Operator: CSBP Ltd.

Name of Responsible Manager: Mr. Peter Cooper, Manager Chemical Sales

Address: Kwinana Beach Road, Kwinana
Western Australia, Australia, 6966

Telephone/Fax: (+61 8) 9411 8660 / (+61 8) 9419 7070

Email: Peter.Cooper@csbp.com.au

Location and Description of Operation:

Australian Gold Reagents Pty. Ltd. (AGR) is the management company of the unincorporated joint venture between CSBP Ltd. and Coogee Chemicals Pty. Ltd. CSBP, part of Wesfarmers Ltd., is the major participant in the venture and acts as both plant operator and sales agent. Coogee Chemicals 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 40 km south of Perth within the state of Western Australia. AGR produces and transports two different forms of sodium cyanide from the Kwinana production facility, namely solution and solids. Sodium cyanide solution is produced as a 30%wt liquid and solid sodium cyanide as a >97%, white briquette.

CSBP, in its capacity as the sales agent for AGR, is responsible for the overall management of the sodium cyanide transportation activities including emergency response in accordance with the relevant statutory authorities, Ministerial conditions and the Western Australian Hazardous Emergency Management Plan. CSBP assumes the responsibility of "consignor" under the Western Australian Dangerous Goods Transport legislation.

The transportation of both liquid and solid sodium cyanide within Western Australia is undertaken by rail and/or road along recognised dangerous goods routes classified by the relevant authorities. The transport distribution network includes contracted transport providers servicing the Fremantle Port (for export) and various gold mining operations located within Western Australia, the overall management of which is provided by way of the CSBP Sodium Cyanide Transport Management Plan.

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Auditor's Findings

This operation is

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

* A copy of the Corrective Action Plan to bring the operation into full compliance is included with this Summary Audit Report. The plan must be fully implemented within one year of the date of this audit.

Audit Company: Independent Metallurgical Operations Pty. Ltd. (IMO)

Date(s) of Audit: Inclusive of the period April 24 to April 28, 2006

Audit Team Leader: Mark Thompson (mthomps3@bigpond.net.au)

Names and Signatures of Other Auditors:

<u>Name of Auditor</u>	<u>Signature</u>	<u>Date</u>
Raymond L. Biehl		June 30, 2006
Philip B. Loffman		June 30, 2006

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

Australian Gold Reagents Pty. Ltd.
Western Australia
Transport Operations
Facility:



Signature of Lead Auditor

June 30, 2006
Date:

AGR Western Australia
Transport Operations



Signature of Lead Auditor

June 30, 2006

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Auditor's Findings

1. TRANSPORT: *Transport cyanide in a manner that minimizes the potential for accidents and releases.*

Transport Practice 1.1: *Select cyanide transport routes to minimize the potential for accidents and releases.*

in full compliance with

The operation is in substantial compliance with **Transport Practice 1.1**
 not in compliance with

Basis for this Finding/Deficiencies Identified:

CSBP can demonstrate that cyanide is transported along recognised dangerous goods routes classified by the relevant authorities and in accordance with specific Western Australia Ministerial Conditions. AGR/CSBP and their specialist consultants have completed a range of specific route risk assessments since 1987 as part of the CSBP Cyanide Transport Management Plan approvals process. Periodic reviews of existing routes are undertaken and a risk review procedure documenting this requirement for existing (and for any additional) transport routes is included within the overall transport management plan.

Transport Practice 1.2: *Ensure that personnel operating cyanide handling and transport equipment can perform their jobs with minimum risk to communities and the environment.*

in full compliance with

The operation is in substantial compliance with **Transport Practice 1.2**
 not in compliance with

Basis for this Finding/Deficiencies Identified:

CSBP can demonstrate that a comprehensive competency based awareness and emergency response training management program is effectively in place which includes the transport service subcontractors. Records are available to demonstrate that both initial and annual refresher training is undertaken, with accreditation documents provided to all personnel upon successful completion of the training. Dangerous goods management training is also provided by the contracted transport service providers.

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Auditor's Findings

Transport Practice 1.3: *Ensure that transport equipment is suitable for the cyanide shipment.*

The operation is **in full compliance with**
 in substantial compliance with **Transport Practice 1.3**
 not in compliance with

Basis for this Finding/Deficiencies Identified:

The CSBP Transport Management Plan includes the use of purpose built “ruggidised” isotainers for the transport of liquid cyanide. Evidence of the isotainer certification and a preventative maintenance and replacement plan is available. Solid cyanide is transported within approved IBC packaging which is transported within sea-containers. Evidence was sighted during the audit that the contract road transport providers employ vehicle operators, prime movers and trailers licensed and approved by the relevant authorities, consistent with the AGR contract requirements. The contract rail service provider maintains a comprehensive Rail Safety Management System which includes procedures and manuals associated with locomotive and wagon inspections, maintenance, loading, transportation, unloading and interim storage in accordance with relevant statutory authority requirements and Western Australian Dangerous Goods Transport legislation. Equipment licensing and compliance with relevant authorities and Western Australian Dangerous Goods Transport legislation is a CSBP transport service provider contract requirement.

Transport Practice 1.4: *Develop and implement a safety program for transport of cyanide.*

The operation is **in full compliance with**
 in substantial compliance with **Transport Practice 1.4**
 not in compliance with

Basis for this Finding/Deficiencies Identified:

The CSBP Transport Management Plan describes the responsibilities, roles and procedures relating to placarding, handling, loading, load restraint, approved routes, transport, unloading, fatigue management, preventative maintenance, incident reporting and emergency response for the transport of both liquid and solid cyanide by rail and/or road including the contract transport service providers. Evidence was sighted during the audit that the contract road transport providers maintain heavy vehicle accreditation with the relevant authorities in relation to fatigue and preventative maintenance management. The contract rail service provider maintains a comprehensive rail safety management system which includes procedures, manuals, operating plans and records retention associated with personnel training, inspections, maintenance, fatigue management, scheduling, inventory control, loading, transportation, unloading and interim storage in accordance with relevant statutory authority requirements and legislation. Compliance with relevant authorities and Western Australian Dangerous Goods Transport legislation is a CSBP transport service provider contract requirement.

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Auditor's Findings

Transport Practice 1.5: *Follow international standards for transportation of cyanide by sea and air.*

The operation is

- in full compliance with
- in substantial compliance with **Transport Practice 1.5**
- not in compliance with
- not applicable in relation to**

Basis for this Finding/Deficiencies Identified:

Transportation by sea or air is not undertaken by AGR within Western Australia and therefore this transport practice was not assessed within the scope of the transportation certification audit.

Transport Practice 1.6: *Track cyanide shipments to prevent losses during transport.*

The operation is

- in full compliance with
- in substantial compliance with Transport Practice 1.6**
- not in compliance with

Basis for this Finding/Deficiencies Identified:

CSBP can demonstrate they have developed and maintain a comprehensive system, including procedures, required shipping documentation, records and communications to track the progress of cyanide shipments, which includes the contract transport providers. Contract road transport vehicles are provided with a range of communications including mobile phones, radios and real time GPS tracking systems, which can be accessed by CSBP scheduling personnel. Rail locomotives are provided with mobile phones and radios and are tracked continuously by the train management and control centres. The availability of effective communications is a CSBP transport service provider contract requirement, however there does not appear to be a procedure to formally identify any potential blackout areas along the transport routes, although some blackout areas for mobile phones have been identified.

Reference to the Australian Dangerous Goods Initial Emergency Response Guide (a copy of which is required to be included in the cab of a road vehicle or leading railway locomotive) indicates MSDS are not specifically required. MSDS do not accompany the shipping documents and the CSBP management plan and procedures does not require MSDS to be available within the cabin of the road vehicle or leading railway locomotive. Notwithstanding this superseded out of date MSDS sheets were sighted within the cabin of some prime mover vehicles, transshipping and interim storage facilities during the audit.

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Auditor's Findings

2. INTERIM STORAGE: *Design, construct and operate cyanide trans-shipping depots and interim storage sites to prevent releases and exposures.*

Transport Practice 2.1: *Store cyanide in a manner that minimizes the potential for accidental releases.*

The operation is in full compliance with
 in substantial compliance with Transport Practice 2.1
 not in compliance with

Basis for this Finding/Deficiencies Identified:

A draft security plan was sighted during the audit for the railway contractors transshipping and interim storage facilities. Due to the sensitivity of security issues regarding the interim storage of cyanide, no description of this aspect is provided in accordance with the Code reporting guidelines.

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

Transport Practice 3.1: *Prepare detailed emergency response plans for potential cyanide releases.*

The operation is **in full compliance with**
 in substantial compliance with **Transport Practice 3.1**
 not in compliance with

Basis for this Finding/Deficiencies Identified:

CSBP is responsible for the overall management of the sodium cyanide transportation activities including emergency response in accordance with the relevant statutory authorities, Ministerial conditions and the Western Australian Hazardous Emergency Management Plan. Details of the CSBP emergency response plan are included within the CSBP Transport Management Plan and related CSBP emergency response documents (Crisis Management Plan, First Response Procedures, Vehicle Operators Handbook, etc). The CSBP Transport Management Plan (and Vehicle Operators Handbook) identifies the roles, responsibilities and the response actions for outside responders and contract transport providers for both road and rail scenarios.

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Transport Practice 3.2: *Designate appropriate response personnel and commit necessary resources for emergency response.*

The operation is

- in full compliance with
- in substantial compliance with Transport Practice 3.2**
- not in compliance with

Basis for this Finding/Deficiencies Identified:

Details of the roles, duties and responsibilities of emergency response personnel are described within the CSBP Transport Management Plan and related emergency response procedures. CSBP maintain two 12 person response teams (to provide 24 hr, 365 day coverage) who have access to a comprehensive range of emergency response equipment at Kwinana. The CSBP Transport Management Plan includes a list of the available equipment at Kwinana, equipment provided with the transport vehicles and details of the ferrous sulphate stocks located strategically along the transport routes and the interim storage facilities. Emergency response team training is provided by a combination of internal personnel, accredited external trainers and participation in mock drill exercises. Emergency response team training records are available, however no systematic procedure exists to ensure that all team members have received the appropriate initial/refresher training, particularly for key competency items. CSBP provide cyanide awareness and initial response training for contract transport provider personnel, except for the rail contractor who maintain their own training program.

Transport Practice 3.3: *Develop procedures for internal and external emergency notification and reporting.*

The operation is

- in full compliance with**
- in substantial compliance with **Transport Practice 3.3**
- not in compliance with

Basis for this Finding/Deficiencies Identified:

CSBP maintain a dedicated 1800 emergency contact telephone number which reports direct to the Kwinana Emergency Control Centre (manned 24 hours, 365 days). Controlled hard copy versions of the emergency response contact lists (including but not limited to AGR and CSBP management and emergency response personnel, outside responders such as the Fire and Emergency Services Authority of Western Australia (FESA), port and customer mine site emergency personnel, and other response and contract transport personnel along the transport network) are maintained at the Kwinana Emergency Control and Response Centres. Emergency contact details are also provided within the CSBP Transport Management Plan and Vehicle Operators Handbook. CSBP have developed and maintain an intranet based management system, withinin which document controlled versions of existing plans, procedures, forms, contact and checklists are available.

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Transport Practice 3.4: *Develop procedures for remediation of releases that recognize the additional hazards of cyanide treatment chemicals.*

The operation is **in full compliance with**
 in substantial compliance with **Transport Practice 3.4**
 not in compliance with

Basis for this Finding/Deficiencies Identified:

The CSBP Transport Management Plan includes procedures for the handling, containment, recovery, treatment, neutralisation and clean up for a range of liquid and solid cyanide scenarios associated with both road and rail transport. This includes specific procedures in relation to the use of cleanup chemicals for both surface water and underground water scenarios.

Transport Practice 3.5: *Periodically evaluate response procedures and capabilities and revise them as needed.*

The operation is **in full compliance with**
 in substantial compliance with **Transport Practice 3.5**
 not in compliance with

Basis for this Finding/Deficiencies Identified:

The CSBP Transport Management Plan includes the requirement for emergency response planning, training and exercises, and a specific procedure has been developed for emergency scenario development and training. Emergency exercises have been undertaken annually since 1997, which include participation by personnel from AGR, CSBP, transport contractors and outside responders. Records of the emergency mock drill exercises are maintained by the CSBP Emergency Response Manager including the details of the exercise planning, review, findings and identified action items. Dangerous goods transport audits are undertaken annually by an independent company. Evidence exists the CSBP Transport Management Plan and associated emergency response documents and capabilities are periodically reviewed and updated.