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MEMBER OF WSP

REPORT

International Cyanide Management Code Recertification Audit

Orica Australia Pty Ltd – Laverton Warehouse Facility (Toll Global Logistics) – Production Facility ICMC Recertification Audit – Summary Audit Report

Submitted to:

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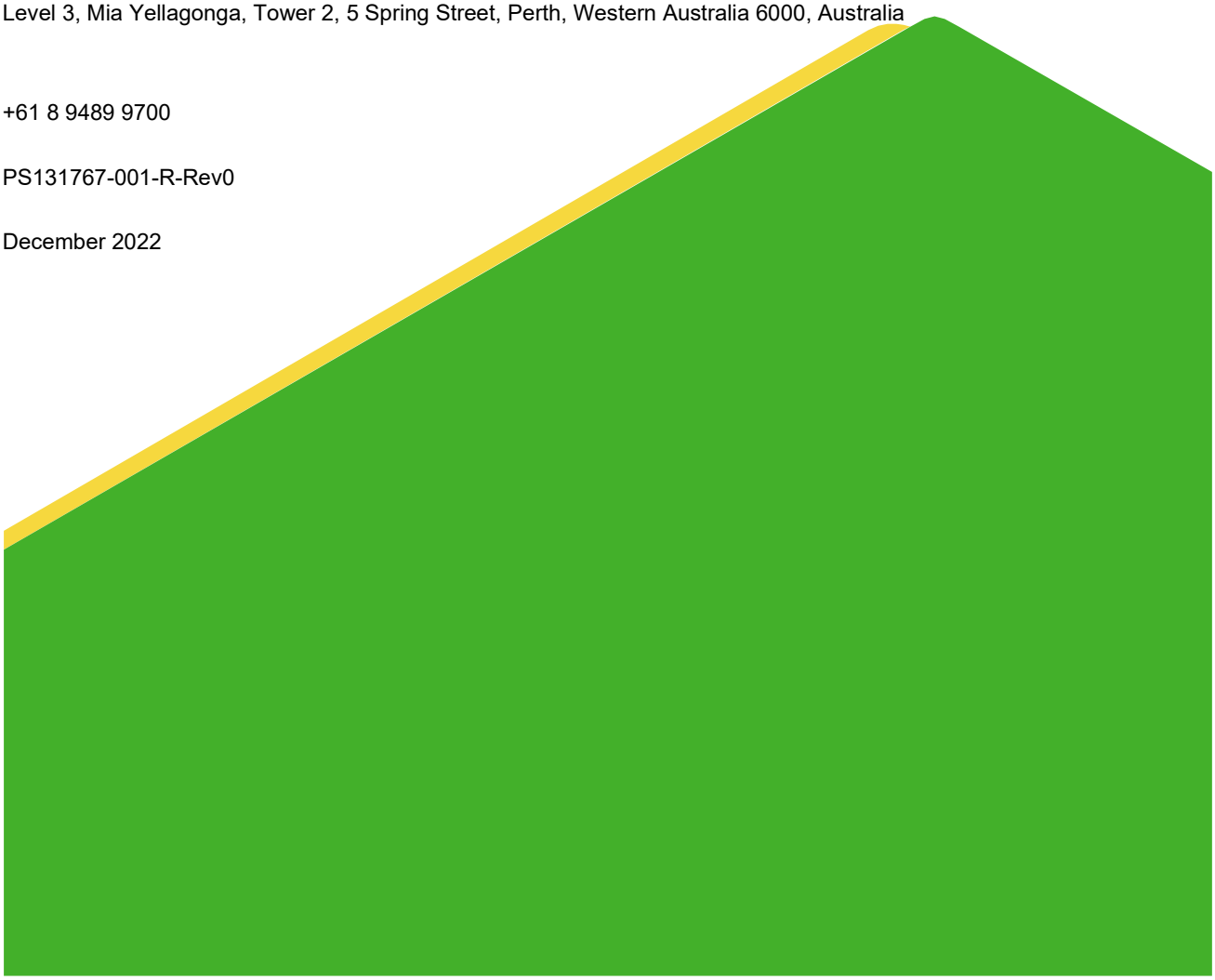

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APPENDICES

APPENDIX A
Important Information

1.0 INTRODUCTION

1.1 Operational Information

Name of Production Facility:	Laverton Warehouse Facility
Name of Facility Owner:	Toll Global Logistics
Name of Facility Operator:	Toll Global Logistics
Name of Responsible Manager:	Raghu Pathireddy, Lead warehouse and distribution
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1.2 Description of Operations

1.2.1 Orica Australia Pty Ltd

Orica is an Australian-owned, publicly listed company with global operations. Orica is managed as discrete business units that produce a wide variety of products and services. The Mining Chemicals unit is based in Australia and exports products to Asia, Africa and the Americas, as well as supplying the local Australian industry. This unit's main product is sodium cyanide, which is manufactured at Orica's Yarwun Production Facility (Yarwun Facility) in Queensland, Australia.

1.2.2 Yarwun Production Facility

Orica's Yarwun Facility, which is located approximately 8 km by road from Gladstone, Queensland, commenced operations in 1989 and is engaged in the manufacture of cyanide (both solid and liquid forms), ammonium nitrate, nitric acid, chlorine, sodium hydroxide, sodium hypochlorite, hydrochloric acid and expanded polystyrene balls.

1.2.3 TGL Laverton Facility

Toll Global Logstics (TGL) is one of Australia's largest suppliers of outsourced logistics services to the chemical and plastics sector. TGL has a network of dangerous goods warehouses, operating in mainland capitals and selected regional centres with specialised warehousing and distribution capabilities.

The TGL Laverton Facility at 180 Fitzgerald Road, Laverton North, is a dangerous goods warehousing and distribution facility. The primary function of the Facility is the storage and handling of packaged and intermediate bulk chemical products in eight on-site warehouses and in a number of external storage locations. A proportion of the products stored and handled on site are dangerous goods, with food grade materials and non-dangerous goods also being stored and handled on the site. Storage of goods on site is controlled by an electronic management system (PWMS).

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The Laverton Facility provides interim storage of cyanide under a contract arrangement for Orica. Shipping containers arriving at the Facility from Orica's Yarwun Facility are destuffed and dehired. The cyanide intermediate bilk containers (IBC) are transferred temporarily from the arrival containers to site owned containers. Prior to leaving the facility, the IBCs are repacked in containers for export. No cyanide in IBCs is stored outside of a container.

Sparge isocontainers are stored in a dedicated bunded area (Area 7).

Cyanide is only stored outside in either isotainers or in IBCs within sea containers.

1.3 Auditors Findings and Attestation

Laverton Warehouse Facility is:	☒ **in full compliance with**	**The International Cyanide Management Code**
	☐ in substantial compliance with	
	☐ not in compliance with	
Audit Company:	Golder Associates Pty Ltd	
Audit Team Leader:	Ed Clerk (Exemplar Global - 105995)	
Email:	ed.clerk@wsp.com	

This operation has not experienced any compliance issues during the previous three-year audit cycle. No cyanide exposure incidents were noted as occurring during the audit period.

Name and Signatures of Auditors:

Name	Position	Signature	Date
Ed Clerk	Lead Auditor and Technical Specialist		7 December 2022

1.4 Dates of Audit

The warehouse (production) audit and reporting were undertaken between May and September 2022. The field component of the audit was undertaken on 24 May 2022.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.

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Signature of Lead Auditor

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Date

2.0 PRINCIPLES

2.1 Principle 1 – Operations

Design, construct and operate cyanide production facilities to prevent release of cyanide.

2.1.1 Production Practice 1.1

Design and construct cyanide production facilities consistent with sound, accepted engineering practices and quality control/quality assurance procedures.

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

Summarise the basis for this Finding/Deficiencies Identified:

The Facility is in FULL COMPLIANCE with Production Practice 1.1 requiring cyanide production facilities to be designed, constructed and operated to prevent releases of cyanide.

The Facility was built as a dedicated dangerous goods storage facility in the 1980s and was extended in 2000. Toll purchased the Facility in 2007. No material cyanide changes to the warehouse facilities have been undertaken during the audit period.

The facility is regulated under the Victorian Occupational Health and Safety Regulations 2007 as a major hazardous facilities (MHF) and is subject to a Licence to Operate a Major Hazard Facility. The licence application process involves the submission of a Safety Case which was under review for re-submission at the time of the audit as part of the normal licence renewal process.

The issuing of a Licence to Operate a Major Hazard Facility by the regulatory authority, which followed an assessment of the safety and reliability aspects of the design and construction of the Facility, implies that the continued operation of the Facility within established parameters will protect against cyanide releases and exposures.

The Facility does not produce cyanide or directly handle cyanide product. The Facility is a warehousing operation that receives shipping containers and isocontainers of cyanide which are compatible with the materials stored.

The Facility is a warehousing operation. As such, the requirement for automatic systems or “interlocks” to shut down production systems and prevent releases due to power outages or equipment failures is not applicable. The requirements for methods to prevent the overfilling of cyanide process and storage vessels is also not applicable.

Cyanide contained within shipping containers and isocontainers was observed to be stored on a concrete surface that was likely to prevent seepage to the subsurface.

The secondary containment requirement for process and storage tanks is not applicable. Despite this, solid cyanide within isocontainers and shipping containers is stored on an external concreted bunded area. The volume of the bund exceeds the volume of an isocontainer or shipping and the product is in solid form.

The Facility does not have cyanide solution pipelines.

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Cyanide is stored with adequate ventilation to prevent the build-up of hydrogen cyanide gas, avoid the potential for exposure to moisture, and in a secure area where public access is prohibited. The Facility stores cyanide in sea containers and isocontainers. The Facility is a secured MHF Facility, with strictly controlled public access. The shipping containers and isocontainers are locked and sealed. containing cyanide are also locked and sealed. Cyanide storage areas are separated from incompatible materials using berms, walls or other appropriate barriers that will prevent mixing.

TGL have access to calibrated HCN monitor that can be used to check HCN levels if needed and for emergency response.

2.1.2 Production Practice 1.2

Develop and implement plans and procedures to operate cyanide production facilities in a manner that prevents accidental releases.

The operation is

☒ **in full compliance with**

☐ in substantial compliance with

☐ not in compliance with

Production Practice 1.2

Summarise the basis for this Finding/Deficiencies Identified:

The Facility is in FULL COMPLIANCE with Production Practice 1.2 requiring the development and implementation of plans and procedures to operate cyanide production facilities in a manner that prevents accidental releases.

The Facility has developed formal procedures that describe the standard practices necessary for its safe and environmentally sound operation.

The Facility is a MHF and there is a Safety Case that provides the basis for the safe operation of the Facility. The Facility has procedures for unpacking, packing, and loading of shipping containers, which is the primary function of the Facility. The Facility does not handle raw materials or unpackaged cyanide.

The Facility has developed formal procedures for contingencies during upsets in its activities that may result in cyanide exposures or releases. The emergency response plan (ERP) does consider potential failure scenarios appropriate for its site-specific environmental and operating circumstances.

The Facility has a Management of Change (MOC) procedure that outlines the assessment of change. The flow chart within the procedure requires a risk assessment to be completed for safety and environment issues. Persons knowledgeable in safety and environmental aspects provide input into the risk assessment process.

No material MOC relevant to cyanide storage was completed during the audit period.

The Facility does not produce cyanide or directly handle cyanide product. Preventative maintenance programmes are only relevant for container, isocontainer and IBC lifting equipment (forklift and straddle units).

Operators are required to conduct pre-operational checks on all lifting equipment each morning prior to use. The daily checks, along with engine hours are recorded on a weekly check sheet. Any deficiencies noted are required to be signed off as completed by the mechanic and the repair date also noted. All units are also serviced by external mechanics as part of a structured maintenance program.

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The Facility does not produce cyanide or directly handle cyanide product. The requirement for monitoring process parameters with necessary instrumentation is not applicable.

The design of the warehousing drainage system prevents unauthorised/unregulated discharge to the environment of any cyanide solution or cyanide-contaminated water that is collected in a secondary containment area.

The Facility has environmentally sound procedures for disposal of cyanide or cyanide-contaminated solids. Cyanide waste streams are typically limited to damaged IBC strapping during normal warehousing operations. Materials are disposed using a licensed waste contractor.

There are procedural arrangements to ensure that the cyanide produced by Orica is packaged and labelled as required by the political jurisdictions through which loads will pass. The packaging is undertaken at Orica's production facility in Yarwun and is not modified by TGL at the warehouse facility. Toll does require a check on the labelling of the product and drivers are trained in correct dangerous good labelling for products leaving the site.

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2.1.3 Production Practice 1.3

Inspect cyanide production facilities to ensure their integrity and prevent accidental releases.

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

Summarise the basis for this Finding/Deficiencies Identified:

The Facility is in FULL COMPLIANCE with Production Practice 1.3 requiring the inspection of cyanide production facilities to ensure their integrity and prevent accidental releases.

The Facility does not produce cyanide or directly handle cyanide product. The requirement for routine inspections of tanks holding cyanide solutions and pipelines, pumps and valves for structural integrity and signs of corrosion and leakage is not applicable.

Secondary containments are inspected for their integrity and sumps are checked for the presence of fluids. The Unpacking & Packing of Shipping Containers procedure does require a visual inspection of the shipping containers and isocontainers used and stored at the site.Inspection frequencies for the secondary containments, containers, isocontainers and sump collection systems appear sufficient to assure that equipment is functioning within design parameters..

Inspections are documented.

The documentation identifies specific items to be observed and includes the date of the inspection, the name of the inspector, and observed deficiencies. The nature and date of corrective actions were noted as being documented, and records are retained. They are signed by the inspector and the business manager.

2.2 Principle 2 – Worker Safety

Protect workers' health and safety from exposure to cyanide

2.2.1 Production Practice 2.1

Develop and implement procedures to protect plant personnel fromexposure to cyanide.

	☒ **in full compliance with**	
The Transfer Facility is	☐ in substantial compliance with	**Production Practice 2.1**
	☐ not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

The Facility is in FULL COMPLIANCE with Production Practice 2.1 requiring the Facility to develop and implement procedures to protect plant personnel from exposure to cyanide.

The Facility is a MHF and there is a Safety Case that provides the basis for the safe operation of the Facility. The Facility has developed formal procedures to minimise worker exposure during normal plant operations (unpacking and loading shipping containers and storing isocontainers and sea containers) and non-routine and emergency operations. The Facility does not produce cyanide or directly handle cyanide product. The requirement for procedures to minimise worker exposure during maintenance activities is not required.

The Facility does solicit and considers worker input in developing and evaluating health and safety procedures. Procedures are issued to personnel who undertake reviews on an annual basis. This process is facilitated by the Compliance Officer. Worker and Heath and Safety Representative reviews are conducted every 3 years. There are also elected health and safety representatives who have a dedicated role under Victoria's work safety legislation and are part of the formalised consultation arrangements at the site.

No activities have been identified during normal operations where workers are likely to be exposed to hydrogen cyanide gas and/or cyanide dust exceeding 10 parts per million (ppm) on an instantaneous basis or 4.7 parts per million continuously over an 8-hour period. In the event of a 4.7 ppm alarm or 10 ppm alarm, the Monitoring of Cyanide Procedure requires workers to immediately exit the area and raise the alarm, ensuring no personnel enter the contaminated area.

The Facility has 2 Drager X-am 8000-meter units with HCN sensors. Calibration records are retained for at least one year. 6-monthly testing is conducted on site by Drager.

The Facility has provisions to ensure that a buddy system is used, or workers can otherwise notify or communicate with other personnel for assistance, help or aid where necessary.

The Facility does assess the health of employees to determine their fitness to perform their specified tasks. The Facility has a pre-employment medical process to assess worker capability and check that they are medically fit to undertake the inherent requirements of their role.

The Facility does not require personnel to change clothing for accessing the cyanide storage areas. The storage of cyanide contained within IBCs does not present a risk to employees that necessitates a clothing change policy.

Warning signs advising workers that cyanide is present and that, if necessary, suitable PPE must be worn, are located around the Facility.

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Warning signs are located on the outside of the warehouse buildings and on the outside of the IBCs.

The site is a designated MHF under Victorian legislation as it is a dangerous goods storage Facility. Personnel are prohibited from smoking, eating and drinking, and having open flames within the site, including the facilities used to warehouse Orica's cyanide product. Designated smoking areas and a lunch room are provided.

Signage is displayed at the main gate and at the access point to the site office to communicate these prohibitions. These messages are reinforced in the Site Induction and in the training materials for the various warehouses.

2.2.2 Production Practice 2.2

Develop and implement plans and procedures for rapid and effective response to cyanide exposure.

	☒ **in full compliance with**	
The operation is	☐ in substantial compliance with	**Production Practice 2.2**
	☐ not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

The Facility is in FULL COMPLIANCE with Production Practice 2.2 requiring the development and implementation of plans and procedures for rapid and effective response to cyanide exposure.

The Facility has developed specific written emergency response plans for cyanide exposures at the warehouse Facility. The site ERP for the site outlines the emergency management framework and includes basic instructions on responding to cyanide related incidents. The emergency response plans and procedures detail the necessary responses to the cyanide exposure scenarios anticipated.

Showers, low-pressure eye wash stations and non-acidic fire extinguishers are located at strategic locations throughout the Facility. They are maintained and inspected on a regular basis. Dry powder fire extinguishers were observed throughout the Facility. No carbon dioxide fire extinguishers were observed.A two-way radio system that is used in the event of an emergency.

The Facility has 1 cyanide antidote kit (dicobalt edetate). Oxygen and a resuscitator are stored in the First Aid room in the main office. The use of cyanide antidotes will be determined and administered by doctors at the nearby hospital or medical centre.

The Facility inspects its first aid equipment regularly to assure that it is available when needed. The first aid and emergency response equipment is stored and tested as directed by their manufacturer and replaced on a schedule that assures they will be effective when used.

Safety data sheets (SDS) and first aid procedures on cyanide safety are in the language of the workforce (English) and are available to workers at the site. All the signs and procedures are in English, which is the official language. The IBC external packaging also provides information on cyanide hazards.

Cyanide is only present on site in solid form within IBCs or isocontainers at the site. There are no tanks, pipes or other infrastructure that contains cyanide. Orica IBCs and isocontainers are labelled in accordance with Australian Dangerous Goods (ADG) and International Maritime Dangerous Goods (IMDG) standards, which identify and alert workers to the contents of the package.

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the Facility provides warehousing services for cyanide packaged in IBCs, accordingly there is not a clothing change policy or formalised decontamination procedure applicable for the site.

Notwithstanding, information and instruction is provided on good hygiene practices when working around chemicals.

The Facility has its own on-site capability to provide first aid, but not higher level medical assistance to workers exposed to cyanide. The Facility has first aid equipment located at the main office.

The Facility has developed a process to transport exposed workers to locally qualified, off-site medical facilities.

In the event that transport of exposed workers is required to offsite medical facilities the transport would be undertaken by the Victorian Ambulance Service. The Victorian Ambulance Service is a dedicated provider that provides services across the community and is linked to Australia's national 000 telephone emergency services phone number.

Emergency shower use is required when exposed to chemicals and this forms part of the decontamination process prior to transportation.

The Facility has alerted local hospitals, clinics, etc. of the potential need to treat patients for cyanide exposure, and the Facility is confident that the medical provider has adequate, qualified staff, equipment and expertise to respond to cyanide exposures.

Procedures are in place to investigate and evaluate cyanide exposure incidents to determine if the operations programmes and procedures, to protect worker health and safety and to respond to cyanide exposures, are adequate or need to be revised. The Facility has a formalised incident reporting procedure. TGL has an Incident Management System, which is a computerised database for collection of incident related data. The Facility uses the "5 Why" incident investigation tool for incidents and ICAM for higher risk/serious incidents.

2.3 Principle 3 – Monitoring

Conduct environmental monitoring to confirm that planned or unplanned releases of cyanide do not result in adverse impacts.

2.3.1 Production Practice 3.1

Conduct environmental monitoring to confirm that planned or unplanned releases of cyanide do not result in adverse impacts.

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

Summarise the basis for this Finding/Deficiencies Identified:

The Facility is in FULL COMPLIANCE with Production Practice 3.1 requiring environmental monitoring to be conducted to confirm that planned or unplanned releases of cyanide do not result in adverse impacts.

The facility does not have a direct or indirect discharge to surface water under normal operating conditions. This statement is based on the fact that liquid cyanide is not stored, the impermeable nature of the storage areas and a site inspection of the facility and surrounding area.

The Facility does not produce cyanide or directly handle raw cyanide product. TGL and the Victorian Environmental Protection Authority have not identified groundwater contamination by cyanide (or other chemicals) as an issue for the site. Accordingly, groundwater monitoring is not applicable to the facility.

The Facility has developed and submitted a Safety Case to the regulator under major hazard legislation and HCN generation was assessed in this process and was not considered a risk unless in the event of an incident. The Facility does have a multigas meter available on site should HCN monitoring or assessment be needed in the event of damaged packaging or emergency situation.

The Facility does not utilise environmental monitoring devices under normal conditions due to the nature of the task and conditions of storage.

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2.4 Principle 4 – Training

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

2.4.1 Production Practice 4.1

Train employees to operate the plant in a manner that minimises the potential for cyanide exposures and releases.

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

Summarise the basis for this Finding/Deficiencies Identified:

The Facility is in FULL COMPLIANCE with Production Practice 4.1 requiring employees to be trained to operate the plant in a manner that minimises the potential for cyanide exposures and releases.

The Facility trains workers to understand the hazards of cyanide and refresher training is periodically conducted. The cyanide awareness presentation concludes with a knowledge test that is used to assess comprehension of the training. This cyanide awareness course is incorporated into the Facility's training process, which also provides a three yearly refresher schedule for task and induction training.

Site training materials introduce the items of personal protective equipment that are used at the Facility (both basic PPE and supplementary PPE for more hazardous tasks). Practical training in the correct use of PPE is provided by the Health Safety and Environment (HSE) Advisor on the site. The Facility has a site induction programme that provides the overview of site safety rules and requirements. Workers are then trained through the site passport system, where they are trained up on areas of the Facility. Workers can only work in areas where they have been trained and they are trained prior to undertaking cyanide tasks.

The cyanide awareness course is incorporated into the Facility's training process and is refreshed every 3 years along with the induction training.

The training elements necessary for each job are identified in training materials.

Appropriately qualified personnel provide the training. Induction training is provided by the HSE advisor who is familiar with the site operations and associated hazards.

Training on forklift operation and use is provided by nationally recognised training organisations in accordance with the Australian Qualifications framework. Organisations providing certified training meet training qualifications requirements.

Sodium cyanide training is provided through a DVD and questionnaire. This is supplemented by site rules and on the job training, which is provided by the site supervisors.

The Facility evaluates the effectiveness of cyanide training by testing. The documentation on which these evaluations have been based is filed in individual staff files.

2.4.2 Production Practice 4.2

Train employees to respond to cyanide exposures and releases.

	☒ **in full compliance with**	
The operation is	☐ in substantial compliance with	**Production Practice 4.2**
	☐ not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

The Facility is in FULL COMPLIANCE with Production Practice 4.2 requiring employees to be trained to respond to cyanide exposures and releases.

The Facility does train workers in the procedures to be followed if a cyanide release is discovered. Generally, workers are trained to raise the alarm and notify their supervisor. The cyanide awareness training provides guidance on the action to be taken and these are detailed within the site ERP. In case of an emergency, they are trained to call ISS (Emergency Response Provider) for recovery and clearance.

The Facility does train workers to respond to worker exposure to cyanide and cyanide releases. Routine drills are used to test and improve their response skills for both scenarios (exposure and release).

The Facility has developed pre-incident plans for cyanide that form part of the emergency planning process and have conducted mock drills in relation to cyanide spills, exposure and site evacuation. The Facility has a training programme for responders that includes emergency response exercises and skills training. SCBA training is conducted every two years in accordance with industry certification requirements.

Training records are retained throughout an individual's employment, documenting the training they have received and including the names of the employee and the trainer, the date of training, the topics covered, and how the employee demonstrated an understanding of the training materials.

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2.5 Principle 5 – Emergency Response

Protect communities and the environment through the development of emergency response strategies and capabilities.

2.5.1 Production Practice 5.1

Prepare detailed emergency response plans for potential cyanide releases.

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

Summarise the basis for this Finding/Deficiencies Identified:

The Facility is in FULL COMPLIANCE with Production Practice 5.1 requiring a detailed emergency response plan for potential cyanide releases.

The Facility has developed an ERP for the management of emergencies associated with the storage of chemicals including cyanide.

The Facility is a designated MHF under Victorian legislation and is used for the storage and distribution of dangerous goods. The ERP has been developed to manage and mitigate emergencies likely to be encountered by the Major Incident Scenarios under the Occupational Health and Safety Regulations 2007.

The ERP does consider the potential failure scenarios appropriate for its site-specific environmental and operating circumstances. The ERP contains sufficient procedural information to allow these actions to be conducted and details persons responsible to undertake the actions. These actions have been specified for three scenarios potentially applicable to the storage of cyanide at the facility:

- Catastrophic release of HCN gas
- Releases during loading/unloading
- Releases during fires and explosions

Additional response procedure information is contained within the Emergency Response Guide Sodium Cyanide.

The ERP does describe specific response actions, as appropriate for the anticipated emergency situations, such as evacuating site personnel and potentially affected communities from the area of exposure.

The ERP does consider the site in context of neighbouring facilities and the process for evacuating the site and notifying regulatory authorities of emergency situations.

The Special Procedures section provides directions for managing cyanide related spills and emergencies and general first aid response. The Facility has developed pre-incident plans for potential cyanide events that include first aid response.

2.5.2 Production Practice 5.2

Involve site personnel and stakeholders in the planning process.

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

Summarise the basis for this Finding/Deficiencies Identified:

The Facility is in FULL COMPLIANCE with Production Practice 5.2 requiring the Facility to involving site personnel and stakeholders in the planning process.

The Facility has involved its workforce and stakeholders in the emergency response planning process.

Communities have not been consulted within regard to specific cyanide emergencies as no community or neighbouring business has been identified as likely to be affected (based on a review of potential releases from the Facility and the distances involved). Furthermore, as the Facility is MHF, the Safety Case assessment by the regulator can be considered to satisfy consultation with the community.

External medical and fire authorities conduct their response activities in accordance with their standard processes. The emergency plans and procedures for the Facility describe the role of outside responders and their interface with the Facility in an emergency.

Internal stakeholders have been involved in the emergency response planning process through initial document development, training exercises and periodic reviews of the ERP.

The Facility has not made potentially affected communities aware of the nature of their risks associated with accidental cyanide releases as the scenarios identified at the site are unlikely to affect or require actions by the community. The Facility is a MHF and there is a formal assessment of the Safety Case for the Facility, which includes emergency response. The assessment of the Safety Case by the regulator on behalf of the community in the initial assessment of the Facility can be considered consultation.

The most credible scenario of an incident at the Facility would involve dropping an IBC during a transfer, resulting in a spillage of approximately 1.1 tonnes of solid cyanide. The zone of influence of such a scenario is limited to the Warehouses and would not impact industrial receptors, which are located approximately 200 meters from the storage areas. There is no residential land use in close proximity to the Facility.

The Facility has involved local response agencies such as outside responders and medical facilities in the emergency planning and response process. External responders include Orica, medical facilities, police and fire brigade.

External medical, police and fire authorities conduct their response activities in accordance with their standard procedures.

Emergency response planning and response processes are primarily evaluated through the MHF Facility license and approval process. In addition, the regulator undertakes regular inspections of the Facility for compliance with license conditions including emergency response.

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Orica provide a technical advisory role in the emergency response process in the event of a cyanide release and would attend site as needed to provide technical guidance.

The Facility has engaged in regular consultation and communication with stakeholders to assure that the plan addresses current conditions and risks. The facility safety case was under review at the time of the audit and included revision and consultation with stakeholders. Orica are consulted with on response planning and regular consultation with internal stakeholders is undertaken via drills and debriefs in which they are involved.

2.5.3 Production Practice 5.3

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

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

Summarise the basis for this Finding/Deficiencies Identified:

The Facility is in FULL COMPLIANCE with Production Practice 5.3 requiring designated appropriate personnel and committed equipment and resources for emergency response.

The ERP does designate appropriate personnel and commit necessary equipment and resources. The Responsibilities and Duties section designates primary and assistant Incident Coordinators with explicit authority to commit the resources necessary to implement the Plan.

Wardens, First Aid Officers and the site emergency response team (ERT) are identified within the Plan. The ERT has a team leader and operates under the supervision of the Incident Coordinator.

The plan does require training for personnel including:

- Selection and use of firefighting equipment
- Selection and use of PPE
- Procedures for dealing with chemical spills and fires
- Management of medical emergencies and
- Evacuation procedures.

The ERP includes call-out procedures and 24-hour contact information for the coordinators and response team members. There is a 24 hour contact number and escalation process for contacting members for the incident management and emergency response team.

The Plan specifies the duties and responsibilities of the coordinators and team members. These internal and external stakeholders include:

- Person raising the alarm
- Incident Coordinator
- ERT Team Leader
- Team responders

- Medical Facilities
- Fire Service
- Police

The Company Premises and Equipment section lists emergency response equipment that should be available. The Facility does have procedures and checklists to inspect emergency response equipment and assure its availability when required. A review of emergency response equipment during the site inspection found the listed equipment to be present and in serviceable condition.

As the Facility is a MHF, the role of outside entities is mandated through the emergency response framework implemented by the government of Victoria. There is a formalised licensing and regulatory oversight of the Facility, including for emergency response.

The types of cyanide related emergencies identified are unlikely to require the assistance of outside responders with the exception of large scale fires, where the fire brigade become the lead agency and control the scene. Orica and TGL provide technical advice and support as requested. External responders have been involved in emergency response exercises conducted during the audit period.

2.5.4 Production Practice 5.4

Develop procedures for internal and external emergency notification and reporting.

	☒ **in full compliance with**	
The operation is	☐ in substantial compliance with	**Production Practice 5.4**
	☐ not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

The ERP does include procedures and contact information for notifying management, regulatory agencies, outside response providers and medical facilities of the emergency, as appropriate.

The Responsibilities and Duties section outlines the process for:

- Contacting Toll Customised Solutions Emergency Response Centre
- Reporting emergencies internally
- Reporting to the Environmental Protection Agency
- Notifying the emergency services
- Notifying WorkSafe Victoria

Contact information is contained within the relevant sections of the ERP and the Orica ERS 24 hour contact number is also provided.

The ERP does not include procedures and contact information for notifying potentially affected communities of incidents and/or response measures. As noted previously, cyanide related emergencies have been considered through the safety case process and offsite impacts scenarios have not been identified. As such, contact information and notification procedures have not been developed.

Responsibilities have been allocated within the ERP for communicating with the media. The ERP notes that it is the responsibility of the National Operations Manager to handle information releases, interviews and media visits.

The facility does have a written procedure for notifying ICMI of any significant cyanide incidents, as defined in ICMI's Definitions and Acronyms document. The facility has reported such significant cyanide incidents that have occurred in the past to ICMI.

The *ERP* and *Orica's Emergency Response Guide* outlines the procedure for notification to the external authorities in case of a significant cyanide incident. The procedure dictates that the Incident Response Team (IRT) assesses the situation and decides to notify external emergency services and authorities based on the level of risk involved. The need for evacuation of external neighbours is also addressed.

2.5.5 Production Practice 5.5

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	**Production Practice 5.5**
	☐ not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

The Facility is in FULL COMPLIANCE with Production Practice 5.5 requiring the Facility to incorporate monitoring elements that account for the additional hazards of using cyanide treatment chemicals into response plans and remediation measures.

The ERP does describe specific, appropriate remediation measures, such as recovery or neutralisation of solutions or solids, decontamination of soils or other contaminated media and management and/or disposal of spill clean-up debris, and provision of an alternate drinking water supply, as appropriate.

The pre-incident plans outline the response actions including containment and clean-up. These procedures are supported by further detail in the Orica Mining Chemicals Emergency Response Guide – Sodium Cyanide, Section 2.4 Decontamination of a Spill of Solid or Liquid Cyanide into Soil and Section 2.5 Use of Sodium Hypochlorite for Decontamination Purposes.

These procedures include descriptions on decontamination of soils or other contaminated media. Given the operation of the facility and location of cyanide on the site, contact of cyanide with soil or water is considered highly unlikely. Notwithstanding, the procedures require the responder to notify the relevant parties listed in the Guide. Orica ERS is listed as the prime contact and information concerning the management of spill clean-up debris is initiated through this service.

Provision of an alternative drinking water supply is not identified as being necessary as spills would be contained within the Facility and the area supplied by a potable water scheme that would not be impacted by a cyanide emergency on site.

The ERP does prohibit the use of chemicals such as sodium hypochlorite, ferrous sulfate and hydrogen peroxide to treat cyanide that has been released into surface water. The ERP states that contaminated residue is contained and disposed off-site by waste contractor and not be discharged to the environment.

The ERP does address the potential need for environmental monitoring to identify the extent and effects of a release. The sampling programme is focused on assessment of contaminants within the on-site containment and stormwater system to prevent offsite release through these systems.

Additionally, Orica Mining Chemicals Emergency Response Guide – Sodium Cyanide also addresses the potential need for environmental monitoring to identify the extent and effects of a release. The Orica Guide contains qualitative tests for of environmental monitoring and the test methods for cyanide on surfaces, in water and soil.

Laverton Warehouse Facility		7 December 2022
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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 with	
	☐ not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

The Facility is in FULL COMPLIANCE with Production Practice 5.6 requiring the Facility to periodically evaluate response procedures and capabilities and revise them as needed.

The ERP does contain provisions for periodically reviewing and evaluating the plan's adequacy and they are being implemented.

The *ERP* does contain provisions for periodically reviewing and evaluating the plan's adequacy and they are being implemented. The ERP is at revision 35 (reviewed March 2022) and has also conducted a number of mock drills as part of the review and evaluation process.

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Mock emergency drills are conducted and they are used as an effective part of the ERP evaluation process. The mock drills include both spill and exposure scenarios as well as evacuation training. The drills also involve external responders and regulators. In addition to mock drills of this nature, the site ERT also receives practical training through maintaining qualifications such as SCBA and fire response. Training records are maintained in a training system.

The ERP does contain provisions to evaluate the Plan and revise as necessary after any emergency that required its implementation. There has not been an emergency involving cyanide during the audit period. Despite this the plan has been reviewed and updated.

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3.0 IMPORTANT INFORMATION

Your attention is drawn to the document titled – “Important Information Relating to this Report”, which is included in Appendix A of this report. The statements presented in that document are intended to inform a reader of the report about its proper use. There are important limitations as to who can use the report and how it can be used. It is important that a reader of the report understands and has realistic expectations about those matters. The Important Information document does not alter the obligations WSP Golder has under the contract between it and its client.

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Signature Page

WSP Golder

Ed Clerk
Principal & Division Lead APAC EMEA

MCW/EWC/hn

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APPENDIX A

Important Information

The document ("Report") to which this page is attached and which this page forms a part of, has been issued by Golder Associates Pty Ltd ("Golder") subject to the important limitations and other qualifications set out below.

This Report constitutes or is part of services ("Services") provided by Golder to its client ("Client") under and subject to a contract between Golder and its Client ("Contract"). The contents of this page are not intended to and do not alter Golder's obligations (including any limits on those obligations) to its Client under the Contract.

This Report is provided for use solely by Golder's Client and persons acting on the Client's behalf, such as its professional advisers. Golder is responsible only to its Client for this Report. Golder has no responsibility to any other person who relies or makes decisions based upon this Report or who makes any other use of this Report. Golder accepts no responsibility for any loss or damage suffered by any person other than its Client as a result of any reliance upon any part of this Report, decisions made based upon this Report or any other use of it.

This Report has been prepared in the context of the circumstances and purposes referred to in, or derived from, the Contract and Golder accepts no responsibility for use of the Report, in whole or in part, in any other context or circumstance or for any other purpose.

The scope of Golder's Services and the period of time they relate to are determined by the Contract and are subject to restrictions and limitations set out in the Contract. If a service or other work is not expressly referred to in this Report, do not assume that it has been provided or performed. If a matter is not addressed in this Report, do not assume that any determination has been made by Golder in regards to it.

At any location relevant to the Services conditions may exist which were not detected by Golder, in particular due to the specific scope of the investigation Golder has been engaged to undertake. Conditions can only be verified at the exact location of any tests undertaken. Variations in conditions may occur between tested locations and there may be conditions which have not been revealed by the investigation and which have not therefore been taken into account in this Report.

Golder accepts no responsibility for and makes no representation as to the accuracy or completeness of the information provided to it by or on behalf of the Client or sourced from any third party. Golder has assumed that such information is correct unless otherwise stated and no responsibility is accepted by Golder for incomplete or inaccurate data supplied by its Client or any other person for whom Golder is not responsible. Golder has not taken account of matters that may have existed when the Report was prepared but which were only later disclosed to Golder.

Having regard to the matters referred to in the previous paragraphs on this page in particular, carrying out the Services has allowed Golder to form no more than an opinion as to the actual conditions at any relevant location. That opinion is necessarily constrained by the extent of the information collected by Golder or otherwise made available to Golder. Further, the passage of time may affect the accuracy, applicability or usefulness of the opinions, assessments or other information in this Report. This Report is based upon the information and other circumstances that existed and were known to Golder when the Services were performed and this Report was prepared. Golder has not considered the effect of any possible future developments including physical changes to any relevant location or changes to any laws or regulations relevant to such location.

Where permitted by the Contract, Golder may have retained subconsultants affiliated with Golder to provide some or all of the Services. However, it is Golder which remains solely responsible for the Services and there is no legal recourse against any of Golder's affiliated companies or the employees, officers or directors of any of them.

By date, or revision, the Report supersedes any prior report or other document issued by Golder dealing with any matter that is addressed in the Report.

Any uncertainty as to the extent to which this Report can be used or relied upon in any respect should be referred to Golder for clarification

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