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Orica Australia Transportation Recertification Audit

Summary Audit Report

wsp

September 2025

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Orica Australia Transportation Recertification Audit
Summary Audit Report

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	Name	Date	Signature
Prepared by:	Ed Clerk	10 September 2025	
Approved by:	Ed Clerk	10 September 2025	

WSP acknowledges that every project we work on takes place on First Peoples lands.
We recognise Aboriginal and Torres Strait Islander Peoples as the first scientists and engineers and pay our respects to Elders past and present.

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1 Introduction

1.1 Operational information

Name of Transportation Facility:	Orica Australia Pty Ltd
Name of Facility Owner:	Not Applicable
Name of Facility Operator:	Orica Australia Pty Ltd
Name of Responsible Manager:	Raghu Pathireddy
Address:	Level 2, 32 Southgate Avenue, Cannon Hill
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2 Cyanide transportation

2.1 Orica Australia Pty Limited

Orica was founded in 1874 as a supplier of explosives to the Victorian gold fields in Australia. Orica is one of the largest global producers of sodium cyanide with responsive global supply chain. The manufacturing facility in Yarwun, Queensland, supplies sodium cyanide to key mining regions in Latin America, Africa, and Oceania.

2.2 Cyanide production

2.2.1 Yarwun Production Facility

Orica operates the Yarwun Production Facility, which is located 9 km north-west of Gladstone, Queensland (QLD). The Site has been operational since 1990

Cyanide is manufactured at Yarwun using the Andrussow process. In this process, hydrogen cyanide (HCN) is produced by reacting ammonia, natural gas, and pre-heated process air over a platinum catalyst. The HCN is then absorbed with caustic soda to form a solution of sodium cyanide. This cyanide liquor can then be concentrated, crystallised, dried, and compacted into solid sodium cyanide.

Cyanide manufactured at Yarwun is used in gold mining operations within Australia, Asia, Africa, Papua New Guinea, New Zealand, and South America.

The Yarwun Facility was recertified by the International Cyanide Management Institute (ICMI) on 31 October 2023.

2.2.2 Port Klang Transfer Station

Orica operates the Port Klang Cyanide Transfer Station in Malaysia. Isotainers from this facility are occasionally shipped to customers in Western Australia via the Port of Fremantle. This Facility was recertified by ICMI on 29 November 2023.

2.3 Cyanide transportation

The transport of cyanide from the Yarwun Facility to customers is coordinated from the Yarwun Facility. Solid cyanide is packaged in either sparge isotainers, which have a maximum gross weight of 26 tonnes, or international bulk containers (IBCs), which are in turn packed into a container. A maximum of 20 IBCs can be packed into a freight container with a maximum gross weight of 28 tonnes. Liquid cyanide is contained into isotainers with a maximum gross weight of 26 tonnes. Orica packages and delivers all three products (sparge isotainers, liquid isotainers and IBCs) to gold mining customers in Queensland, and sparge isotainer and IBC products to customers in the Northern Territory, New South Wales and Western Australia.

The cyanide products are packaged and delivered using a combination of road and rail contractors. During the recertification period, Orica utilised the Toll Mining Services (TMS) and Centurion to undertake all its road transportation and the majority of its rail transportation within Australia. TMS is a signatory to the Code and has a certified Australian Supply Chain.

Orica contracts Linfox, formerly Aurizon Rail, outside of the TMS Australian Supply Chain to transport product from Mt Miller Rail Terminal and Kwinana Rail. All Pacific National Rail is contracted through TMS.

Isotainers from the Port Klang Cyanide Transfer Station facility are occasionally shipped to customers in Western Australia via the Port of Fremantle. At this point they are loaded onto an Aurizon train and railed to Kalgoorlie. TMS then transports the product to mine sites in Western Australia.

2.3.1 Toll Mining Services

TMS is a subcontractor to Orica for the transportation of cyanide within Orica's Australian Supply Chain, through the use of various divisions and subcontractors.

TMS provides road transportation to customers in Queensland and the Northern Territory, and to customers in New South Wales and Western Australia via other Toll divisions. TMS also utilises rail operators Aurizon Rail/Linfox, and Pacific National within its International Cyanide Management Code (ICMC) Certified Australian Supply Chain.

TMS was recertified as being in compliance with the ICMC on 17 July 2025. During the time of this audit the TMS Australian Supply Chain was audited and is in the process of being recertified.

2.3.2 Centurion

Centurion Transport Company acquired the cyanide transport operation of Lake Fox Limited, a Cyanide Code Signatory since 2017. Lake Fox's cyanide transport operation has been certified twice previously, with the most recent certification being May 10, 2022. Centurion transports sodium cyanide from the Yarwun Facility to mine sites in New South Wales. Centurion is a sole transporter and currently does not use any third parties. The transporter is a signatory to the ICMC and was in the process of being Certified at the time of this audit.

2.4 Cyanide storage

2.4.1 TMS Laverton Facility

The TMS 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 warehouse and in a number of external storage locations. A Proportion of the products stored and handled on the 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.

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 IBCs are transferred temporarily from the arrival containers to site owned containers. Prior to leaving the facility, the IBCs are repackaged in containers for export. No cyanide in IBCs is stored outside of a container.

Orica stores cyanide product at TMSs Laverton Major Hazard Facility in Victoria. This Facility is considered a cyanide production facility under the ICMC as cyanide product is stored in IBCs a warehouse in addition to the storage of containers or isotainers. A production ICMC Certification Audit of the TMSs Laverton Major Hazard Facility was undertaken in 2025 and is documented in a separate ICMC Certification Audit Report.

2.4.2 Lytton Warehouse Facility

The TMS Lytton Major Hazard Facility at 19 Osprey Road, Lytton, 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 a two-compartment warehouse and in a number of external storage locations. A Proportion of the products stored and handled on the 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,

The Lytton facility provides interim storage of cyanide under a contract arrangement for Orica. Shipping container arriving at the facility from Orica's Yarwun Facility are only stored in an external area, designated for cyanide storage. Ad-hoc repackaging of containers (i.e., moving intermediate bulk containers from one container to another) is undertaken when needed to enable onward transport. Otherwise, the cyanide product remains inside the containers for storage. No IBCs are stored outside of shipping containers.

This Facility is considered a cyanide production facility under the ICMC as cyanide product is stored in IBCs a warehouse in addition to the storage of containers or isotainers. A production ICMC Certification Audit of the TMSs Laverton Major Hazard Facility was undertaken in 2025 and is documented in a separate ICMC Certification Audit Report. There were no cyanide exposure incidents or releases recorded as occurring during the audit period.

2.4.3 *Transit storage*

Trans-shipping depots or interim storage sites are located at the Mt Miller and Townsville Rail Terminals.

2.5 Audit scope

The Orica Australia Supply Chain includes the transportation of solid and liquid cyanide from Orica's manufacturing facility in Yarwun, Queensland to customers and ports within Australia via road and rail networks. The Supply Chain also includes solid cyanide supplied from Orica's Malaysian transfer station to customers in Western Australia via road and rail (after importing through the Port of Fremantle).

The 2025 Australian Supply Chain Audit is comprised of:

Road transport

- Orica
- Subcontractor: Toll Mining Services (TMS)
- Subcontractor: Centurion (previously Rocky's Own Transport)

Rail Terminals:

The majority of rail terminals used by Orica are included within the scope of the TMS Australian Supply Chain Recertification Audit as the transportation of the product is coordinated and managed by TMS. The terminals below are included within the scope of Orica's Australian Supply Chain as Orica directly coordinates the transport of cyanide full or in part, through these facilities, independently of TMS.

- Mt Miller Rail Terminal (Qld). The product under the direct control of Orica transported through the Mt Miller Terminal (approximately 70%) is destined to the Port of Brisbane (BMT) for overseas customers. Approximately 30% of the product is managed on behalf of Orica by TMS and is addressed within the TMS Australian Supply Chain Recertification Audit.
- Townsville Rail Terminal (Qld). The product under the direct control of Orica transported through the Townsville Rail Terminal siding (approximately 100%) is destined to the port of Townsville for overseas customers and for customers within north Queensland.

Rail operators:

The majority of rail operators used by Orica are included within the scope of the TMS Australian Supply Chain Recertification Audit as the transportation of the product is coordinated and managed by TMS. Aurizon is included within the scope of Orica's Australian Supply Chain as Orica directly coordinates the transport of full and empty cyanide containers between the port of Fremantle and Kalgoorlie Rail Terminal. The Port of Fremantle (including the rail loading area) is addressed the Orica Global Marine Supply Chain and the Kalgoorlie Rail Terminal is addressed within the TMS Australian Supply Chain.

Interim/trans-shipping storage facilities:

Trans-shipping depots or interim storages are located at the following locations:

- Mt Miller Rail Terminal (Qld)
- Townsville Rail Terminal (Qld).

Warehouse facilities:

Storage facilities are located at the following locations:

- Toll Global Logistics (TMS) Laverton Facility (Vic).
- TMS Lytton Warehouse Facility (Qld).

2.6 Auditors findings and attestation

Orica is:	☒ **in full compliance with** ☐ in substantial compliance with ☐ not in compliance with	**The International Cyanide Management Code**
Audit Company:	WSP Australia Pty Limited	
Audit Team Leader:	Ed Clerk, Exemplar Global	
Email:	ed.clerk@wsp.com	

2.7 Name and signatures of other auditors

Name	Position	Signature	Date
Lauren Sandon	Lead Auditor		September 2025

2.8 Dates of audit

The field component of the audit was undertaken on 3 February 2025. An extension for the submission of the report to 14 June 2025 was sought and granted by the International Cyanide Management Institute (ICMI).

I attest that I meet the criteria for knowledge, experience, and conflict of interest for Code Verification Audit Team Leader, established by the ICMI and that all members of the audit team meet the applicable criteria established by the ICMI 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 *Cyanide Transportation Verification Protocol for the International Cyanide Management Code* and using standard and accepted practices for health, safety and environmental audits.

3 Consignor summary

3.1 Principle 1 – Transport

Transport Cyanide in a manner that minimises the potential for accidents and releases.

3.1.1 Transport Practice 1.1

Select cyanide transport routes to minimise the potential for accidents and releases.

	☒ **in full compliance with**	
Orica is:	☐ in substantial compliance with	**Transport Practice 1.1**
	☐ not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

Orica is in FULL COMPLIANCE with Transport Practice 1.1 requiring cyanide transport routes to be selected to minimise the potential for accidents and releases.

Orica selects the overall transport routes (road and rail components) following its *Selection of Transport Routes* procedure and has implemented these on its Australian Supply Chain. The procedure is intended to minimise the potential for accidents and releases and to minimise the impacts if one does occur.

The *Selection of Transport Routes* procedure notes that the selection of a route is to be based on the following:

- Where practicable, minimisation of the road component of the route.
- Where practicable, maximum utilisation of rail, dependent on risk.
- Regulatory requirements.
- Competent Authority instructions and recommendations (where applicable).
- Reliability of supply to the customer site or stock point.
- Availability of routes through to the end user.
- Assessment of risk and identification of appropriate control measures, where applicable, for the route to be utilised and the product to be transported.
- Any prohibited practices that may be identified.
- Cost of supply to the customer site or stock point.
- Advice from local transport contractors to be utilised.
- Any variation to the above is at the sole discretion of the Distribution Lead in the applicable region based on advice from contracted carriers, regulatory bodies and Competent Authorities as appropriate.

The *Transport Management Procedure* requires that routes be assessed from the perspective of:

- Impacts of product losses on the environment.
- High pedestrian activity areas.
- Pitch and grade of roads (in particular with regards to rail crossings and similar crossings).
- Quality and general condition of roads, location of areas.

Orica notes that the procedure applies to the selection of delivery routes for sodium cyanide and to its contracted transportation subcontractors.

Orica has undertaken an overarching assessment of the transport routes within Australasia that include consideration of the road transport components and infrastructure, communications, security and storage.

Orica has implemented procedures to evaluate risks of selected cyanide transport routes and takes the measures necessary to manage these risks.

Orica implements a Risk Assessment of Cyanide Transportation Routes procedure. This procedure details the route risk assessment procedures and is used to identify the areas of risk along a particular route. Risks that are identified as extreme are to be addressed as a priority. Orica has undertaken an overarching assessment of the transport routes within Australia that include consideration of the road and covers infrastructure, communications, Security and Storage.

Orica has implemented a process to periodically re-evaluate routes for cyanide deliveries. Orica periodically reviews the overarching transport risk analysis that covers road transportation within Australia.

Orica works with their subcontractors to review the routes as required. The Asset Management Lead has responsibility for the review of key transport routes following the receipt of information from local councils, subcontractor updates and subcontractor audits.

No significant issues have been observed over the past three years that have warranted the need to vary routes.

Orica, through its engagement of TMS and Centurion, has a process to document measures to address risks identified with the selected routes.

Orica has developed procedures to evaluate the risks of selected cyanide transport routes and take the measures necessary to manage these risks.

The evaluation and selection of the routes is undertaken through a risk assessment process conducted in accordance with Australian Standard AS 4360: 2004 Risk Management.

Orica has a process that seeks input from communities, other stakeholders and applicable governmental agencies as necessary in the selection of routes and development of risk management measures.

Orica's *Transport Management Procedure* notes that the selection of the transportation methods to be utilised on a route are to consider:

- Regulatory requirements (this is interpreted to include the use of designated dangerous goods routes).
- Competent authority instructions and recommendations (where applicable).

Direct engagement of communities by Orica within Australia did not occur for the following reasons:

- The community has the opportunity to comment during the designation of dangerous goods routes.
- The community was not designated a role as part of the planned response to an emergency involving cyanide negating the need for community consultation on this issue.

The risk management measures implemented for the cyanide transportation negate the need for community consultation in the development of such measures. An example of measures required by Orica include:

- Daylight-only travel restrictions.
- Speed limitations in built up areas.
- Security measures including the use of locked and sealed containers.
- Constant monitoring of the progress of the shipment using a global positioning system (GPS) tracking and alert system (e.g., duress alarm and harsh breaking alert).
- Audit schedules.
- Detailed risk assessment of the designated route to identify other management measures.

Orica has assessed Australia as having no significant safety or security concerns and consequently does not require cyanide to be transported in convoy. Standard security measures are implemented by Orica for transportation of cyanide within Australia using locked and sealed containers and chain of custody controls.

The Orica Carrier Assessment Procedure is used to verify that contractors are aware of the applicable Code requirements and to ensure their compliance. It is applicable to all carriers and their subcontractors utilised for deliveries of sodium cyanide to customers of Orica. Carriers and subcontractors are assessed using the *Carrier Assessment Questionnaire*. They are assessed for compliance with Orica's requirements on a two-yearly basis at a minimum with additional assessments conducted following changes in operational requirements or as new risks are identified.

TMS

TMS was recertified as being in compliance with the ICMC on 17 July 2025.

Centurion

Centurion, via Lake Fox Limited, was recertified as being in compliance with the ICMC on 10 May 2022. Centurion was in the process of being certified at the time of the audit.

Due Diligences

Mt Miller Rail Terminal

WSP conducted a due diligence review of the rail terminal in April 2025. The review was based on the Orica Australia site visit, historical visits, and a desktop review. This review against the ICMC requirements concluded that its operations were aligned to the requirements of the ICMC and additional management measures by Orica were not considered necessary. The review is included in Section 4.

Townsville Rail Terminal

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Aurizon

WSP conducted a due diligence review of the carrier in June 2025. The review was based on the Orica Australia site visit, historical visits, and a desktop review. This review against the ICMC requirements concluded that its operations were aligned to the requirements of the ICMC and additional management measures by Orica were not considered necessary. The review is included in Section 4.

3.1.2 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**	
Orica is:	☐ in substantial compliance with	**Transport Practice 1.2**
	☐ not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

Orica is in FULL COMPLIANCE with Transport Practice 1.2 requiring personnel operating cyanide handling and transport equipment can perform their jobs with minimum risk to communities and the environment.

Orica, through its subcontractor management system has a process in place for the use of only trained, qualified and licensed operators in operating transport vehicles during the transportation of its cyanide.

Orica does not employ transport drivers and equipment operators or directly operate transport vehicles and equipment; this is undertaken by ICMC certified transporters TMS and Centurion.

The basic training that Orica mandates and offers is summarised in the below matrix:

Training Element	Target	Comments
Sodium Cyanide Safety Awareness	All road drivers All storage personnel All road transport administration personnel	Mandatory
Sodium Cyanide Safety Awareness	All other supply chain personnel	Offered
Emergency Response	All road drivers All storage personnel All road transport administration personnel	Mandatory
Emergency Response	All other supply chain personnel	Offered
Solution Unload	Drivers involved with unload of solution	Mandatory
Sparge Unload	Drivers involved with sparge delivery	Mandatory
Sparge Unload	Customers where the customer is responsible for unload process	Mandatory
Mini-sparge operations	Customers supplied by min-sparge	Mandatory

Procedures and guidelines are provided to subcontractors. These are incorporated into subcontractor procedures and training is based on that. Checkpoint audits are used to assess compliance.

Orica through its subcontractor management system has a process in place requiring all personnel operating cyanide handling and transport equipment been trained to perform their jobs in a manner that minimises the potential for cyanide releases and exposures.

The Orica Transport Management Plan details the required training for all contractors and notes if subcontractors are utilised by prime contracted agencies, the prime contractor is to have an appropriate procedure to ensure that all relevant subcontractor personnel meet the above detailed training requirements. Road transport of cyanide during the audit period was conducted by ICMC certified transporter TMS and Centurion.

The Orica Carrier Assessment Procedure is used to verify that contractors are aware of the applicable Code requirements and to ensure their compliance. It is applicable to all carriers and their subcontractors utilised for deliveries of sodium cyanide to customers of Orica. Carriers and subcontractors are assessed using the *Carrier Assessment Questionnaire*. They are assessed for compliance with Orica's requirements on a two-yearly basis at a minimum with additional assessments conducted following changes in operational requirements or as new risks are identified.

TMS

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Centurion

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Due Diligences

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Townsville Rail Terminal

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Aurizon

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3.1.3 Transport Practice 1.3

Ensure that transport equipment is suitable for the cyanide shipment.

	☒ **in full compliance with**	
Orica is:	☐ in substantial compliance with	**Transport Practice 1.3**
	☐ not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

Orica is in FULL COMPLIANCE with Transport Practice 1.3 requiring that transport equipment is suitable for the cyanide shipment.

Orica has a process in place requiring that only equipment designed and maintained to operate within the loads it will be handling is used.

Orica does not employ transport drivers and equipment operators or directly operate transport vehicles and equipment; this is undertaken by ICMC certified transporters TMS and Centurion.

Orica has developed a *Transport of Sodium Cyanide – Carrier Safety Program* that details the minimum safety requirements and programmes that Orica requires its prime contractor and associated subcontractors to implement. This includes specifications on equipment design, maintenance requirements and preventative maintenance programs. Transport of cyanide during the audit period was conducted by ICMC certified transporters TMS and Centurion.

Orica has a process in place to verify the adequacy of the equipment for the load it must bear. Sparge isotanks used to transport solids are owned by Orica and subject to a maintenance and certification program. Orica is responsible for flushing the isotanks at a customer site close to its Yarwun facility prior to maintenance and inspections.

Liquid isotainers are both owned and leased by Orica and the testing and certification process is the same as sparge isotanks. The flushing of the isotainers prior to maintenance and inspections is conducted at the Yarwun facility.

Shipping containers are owned by the shipping line and used on a one-way basis. The shipping line provides containers with valid CSC (Convention for Safe Containers) plates and in a good condition.

Orica through its subcontractor management system has procedures to prevent overloading of the transport vehicle being used for handling cyanide. The *Sodium Cyanide Transport Management Procedure* requires that all transport assets are load capable within the regulatory requirements and that only one container/isotainer/isotank is to ever be transported (with the exception of specifically designed rail wagons). Transport of cyanide during the audit period was conducted by ICMC certified transporters TMS and Centurion where this is further verified that they are compliant with Orica's requirements.

The Orica *Carrier Assessment Procedure* is used to verify that contractors are aware of the applicable Code requirements and to ensure their compliance. It is applicable to all carriers and their subcontractors utilised for deliveries of sodium cyanide to customers of Orica. Carriers and subcontractors are assessed using the Carrier Assessment Questionnaire. They are assessed for compliance with Orica's requirements on a two-yearly basis at a minimum with additional assessments conducted following changes in operational requirements or as new risks are identified.

TMS

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Aurizon

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3.1.4 Transport Practice 1.4

Develop and implement a safety program for transport of cyanide.

Orica is:	☒ **in full compliance with**	**Transport Practice 1.4**
	☐ in substantial compliance with	
	☐ not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

Orica is in FULL COMPLIANCE with Transport Practice 1.4 requiring the operation develop and implement a safety programme for transport of cyanide.

Orica, through its subcontractor management system, does have procedures to ensure that cyanide is transported in a manner that maintains the integrity of the producer's packaging. Cyanide is transported within a purpose-built isotainer and uniquely identified seals are placed on the camlocks to the isotainer. These are checked by the transport company upon collection and delivery to the mine.

Orica does not employ transport drivers and equipment operators or directly operate transport vehicles and equipment; this is undertaken by ICMC certified transporters TMS and Centurion.

Orica has a process to ensure that placards or other signage is used to identify the shipment as cyanide, as required by local regulations or international standards.

The *Transport Management Procedure* requires that all packing is labelled and placarded in accordance with the applicable legislative requirements. This means that, as a minimum, the packaging meets the requirements of the current versions of the *United Nations Dangerous Goods Transport Guidelines*, the *Australian Code for the Transport of Dangerous Goods by Road and Rail* and the *International Maritime Dangerous Goods Code*.

Orica has a process to ensure that the transporters implement a safety program for cyanide transport. Orica's *Transport Management Plan* states "*Agents, distributors and transportation agencies have a responsibility to ensure that a safe workplace is provided for its personnel and that of the contractors utilised*." It then lists the requirements related to:

- Implementation of vehicle inspections prior to each shipment.
- A preventative maintenance program is in place.
- Consideration of fatigue management.
- Isotainer transportation and design.
- Procedures by which transportation can be modified or suspended if conditions such as severe weather or civil unrest are encountered.
- A drug abuse prevention program (including over the counter medication) is in plan.
- Retention of records documenting that the above activities have been conducted.

Orica's carrier assessment process includes periodic assessment of its subcontractors' processes to verify that procedures are implemented.

The Orica *Carrier Assessment Procedure* is used to verify that contractors are aware of the applicable Code requirements and to ensure their compliance. It is applicable to all carriers and their subcontractors utilised for deliveries of sodium cyanide to customers of Orica. Carriers and subcontractors are assessed using the *Carrier Assessment Questionnaire*. They are assessed for compliance with Orica's requirements on a two-yearly basis at a minimum with additional assessments conducted following changes in operational requirements or as new risks are identified.

TMS

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Centurion

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Aurizon

WSP conducted a due diligence review of the carrier in June 2025. The review was based on the Orica Australia site visit, historical visits, and a desktop review. This review against the ICMC requirements concluded that its operations were aligned to the requirements of the ICMC and additional management measures by Orica were not considered necessary. The review is included in Section 4.

3.1.5 Transport Practice 1.5

Follow international standards for transportation of cyanide by sea and air.

	☒ **in full compliance with**	
Orica is:	☐ in substantial compliance with	**Transport Practice 1.5**
	☐ not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

Transport Practice 1.5 requiring the operation follow international standards for transportation of cyanide by sea and air is NOT APPLICABLE to Orica.

Orica does not transport consignments of cyanide by sea within the scope of this audit.

3.1.6 Transport Practice 1.6

Track cyanide shipments to prevent losses during transport.

	☒ **in full compliance with**	
Orica is:	☐ in substantial compliance with	**Transport Practice 1.6**
	☐ not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

Orica is in FULL COMPLIANCE with Transport Practice 1.6 requiring the operation track cyanide shipments to prevent losses during transport.

Orica, through its subcontractor management system, has a process to ensure there are means to communicate with the transport company, the mining operation, the cyanide producer or distributor and/or emergency responders.

Orica's *Tracking of Cyanide Shipments* procedure details the communication requirements. This procedure is not applicable to any route which is less than 25 km and is conducted in an area with consistent mobile coverage. The procedure ensures that transporters within the supply chain are always able to communicate with Orica and emergency responders as appropriate during transport.

Orica has a process to ensure that communication equipment is periodically tested to ensure it functions properly.

Orica has a newly installed tracking system where all isotainer and domestic shipping containers have a GPS installed as part of the GPS tracking system. Checkpoint audits are used to check the presence and serviceability of the tracking equipment. Orica's line managers are each responsible for ensuring that the *Tracking of Cyanide Shipments* procedure is followed. The equipment is further verified as functioning by the constant use of it during transportation routes.

Orica's *Tracking of Cyanide Shipments* procedure ensures that all transporters have a means of communication at all times which is implemented by Orica's line managers. The *Sodium Cyanide Transport Management Procedure* requires that where communications outage areas are identified, procedures are in place to maintain control of transportation assets at all times. The Orica *Carrier Assessment Questionnaire* enables self and external assessment and is used to verify that carriers have a safe, effective and efficient transportation system. It includes assessment of procedures for communications and management of blackout areas.

Orica has a detailed process to track the progress of cyanide shipments within the scope of this audit. Orica also has a procedure for the tracking of shipments. It details the use of an electronic tracking system and the procedure to take if there is no electronic system available.

All isotainers and domestic shipping containers have an installed GPS tracking system.

Orica, through subcontractor management system, has a process for chain of custody/inventory control to prevent loss of cyanide during shipment. Transport of cyanide is undertaken by Orica's ICMC Certified subcontractors TMS and Centurion.

At a consignor level, Orica also conducts daily meetings on inventory and prepares monthly stocktake reports on its product.

Orica has a process to ensure that shipping records indicating the amount of cyanide in transit and Safety Data Sheets available during transport. Transport of cyanide is undertaken by Orica's ICMC Certified subcontractors TMS and Centurion.

Orica implements procedures to make contractors aware of applicable Code requirements and ensures their compliance. Orica's *Tracking of Cyanide Shipments* and *Sodium Cyanide Transport Management Procedures* consider contracted entities and ensures awareness and compliance with all procedures through Line Managers and the Orica *Carrier Assessment*.

TMS

TMS was recertified as being in compliance with the ICMC on 17 July 2025.

Centurion

Centurion, via Lake Fox Limited, was recertified as being in compliance with the ICMC on 10 May 2022. Centurion was in the process of being certified at the time of the audit.

Due Diligences

Mt Miller Rail Terminal

WSP conducted a due diligence review of the rail terminal in April 2025. The review was based on the Orica Australia site visit, historical visits, and a desktop review. This review against the ICMC requirements concluded that its operations were aligned to the requirements of the ICMC and additional management measures by Orica were not considered necessary. The review is included in Section 4.

Townsville Rail Terminal

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Aurizon

WSP conducted a due diligence review of the carrier in June 2025. The review was based on the Orica Australia site visit, historical visits, and a desktop review. This review against the ICMC requirements concluded that its operations were aligned to the requirements of the ICMC and additional management measures by Orica were not considered necessary. The review is included in Section 4.

3.2 Principle 2 – Interim storage

Design, construct and operate cyanide trans-shipping depots and interim storage sites to prevent release and exposures.

3.2.1 Transport practice 2.1

Store cyanide in a manner that minimises the potential for accidental releases.

	☒ **in full compliance with**	
Orica is:	☐ in substantial compliance with	**Transport Practice 2.1**
	☐ not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

Orica is in FULL COMPLIANCE with Transport Practice 2.1 requiring transporters design, construct and operate cyanide trans-shipping depots and interim storage sites to prevent release and exposures.

Orica does not directly operate cyanide trans-shipping depots and interim storage sites within the scope of this Audit. Interim storage is conducted under the direction of its subcontractors, TMS and Centurion and does occur at the Townsville and Mt Miller Rail Terminals.

Orica does use warehouse facilities at TGL's Laverton Major Hazard Facility in Victoria and Lytton Major Hazard Facility in Queensland. Assessments of these facilities against the ICMC were conducted in 2025 and reported separately.

TMS

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Centurion

Centurion, via Lake Fox Limited, was recertified as being in compliance with the ICMC on 10 May 2022. Centurion was in the process of being certified at the time of the audit.

Due Diligences

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Aurizon

WSP conducted a due diligence review of the carrier in June 2025. The review was based on the Orica Australia site visit, historical visits, and a desktop review. This review against the ICMC requirements concluded that its operations were aligned to the requirements of the ICMC and additional management measures by Orica were not considered necessary. The review is included in Section 4.

3.3 Principle 3 – Emergency response

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

3.3.1 Transport practice 3.1

Prepare detailed Emergency Response Plans for potential cyanide releases.

	☒ **in full compliance with**	
Orica is:	☐ in substantial compliance with	**Transport Practice 3.1**
	☐ not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

Orica is in FULL COMPLIANCE with Transport Practice 3.1 requiring the operation prepare detailed Emergency Response Plans for potential cyanide releases.

Orica has developed a detailed sodium cyanide *Emergency Response Guide* (ERG) to provide emergency response guidance for specific mine sites, storage facilities and transport incidents involving spillage of Orica product. The ERG has written plans for responding to emergencies that may occur during their cyanide transport activities including:

- Dry Sodium Cyanide Spill – Inside Building/Storage Facility.
- Dry Sodium Cyanide Spill – Outside Building/Storage Facility.
- Dry Sodium Cyanide Spill – Inside a Shipping Container.
- Shipping Container Decontamination.
- Handling Wet Sodium Cyanide.
- Sodium Cyanide Spill to Waterway.
- Response to a Fire in the Vicinity of Stored Cyanide.
- Roll-over of Shipping Container.

Orica would provide technical advice and subject matter experts to assist as needed/authorised by the authority in charge of the emergency.

Orica's subcontracted transporters are required to develop emergency response plans that interface with Orica's. Orica uses ICMC certified transporter TMS and Centurion, both of which are required to contact emergency services and Orica in the event of an emergency.

Orica has appropriate emergency response plans for the transport of its cyanide within the scope of this audit. The ERG has been developed to provide emergency response guidance for specific mine sites, storage facilities and transport incidents involving spillage of Orica product. Orica would provide technical advice and subject matter experts to assist as needed/authorised by the authority in charge of the emergency. Orica has clearly assigned responsibilities for emergency response. The role of Orica is largely limited to one of product stewardship through notification and provision of technical advice rather than physical containment and management of any release. This is particularly relevant where rail and port authorities are involved.

Orica's transport subcontractors are required to develop emergency response plans that consider the transport route and storage facility requirements. Orica's carrier assessment process is used to verify that plans are in place.

The ERG includes response actions to different emergency situations arising from sodium cyanide accidents. It details a basic incident response plan, responsibilities and strategies and then provides detailed response actions for specific scenarios that could arise throughout Orica's supply chain.

Orica's subcontracted transporters are required to develop emergency response plans that interface with Orica's. The plans are required to describe specific actions to be taken in response to the cyanide emergencies that they have identified. Orica's carrier assessment process is used to verify that plans are in place.

Orica's ERG delineates the responsibilities for different types of spills and states where external entities are required to be contacted. Orica's subcontractors are required to develop emergency response plans that align with Orica's and the *Carrier Assessment Procedure* requires Orica to verify them every two years.

TMS

TMS was recertified as being in compliance with the ICMC on 17 July 2025.

Centurion

Centurion, via Lake Fox Limited, was recertified as being in compliance with the ICMC on 10 May 2022. Centurion was in the process of being certified at the time of the audit.

Due Diligences

Mt Miller Rail Terminal

WSP conducted a due diligence review of the rail terminal in April 2025. The review was based on the Orica Australia site visit, historical visits, and a desktop review. This review against the ICMC requirements concluded that its operations were aligned to the requirements of the ICMC and additional management measures by Orica were not considered necessary. The review is included in Section 4.

Townsville Rail Terminal

WSP conducted a due diligence review of the rail terminal in April 2025. The review was based on the Orica Australia site visit, historical visits, and a desktop review. This review against the ICMC requirements concluded that its operations were aligned to the requirements of the ICMC and additional management measures by Orica were not considered necessary. The review is included in Section 4.

Aurizon

WSP conducted a due diligence review of the carrier in June 2025. The review was based on the Orica Australia site visit, historical visits, and a desktop review. This review against the ICMC requirements concluded that its operations were aligned to the requirements of the ICMC and additional management measures by Orica were not considered necessary. The review is included in Section 4.

3.3.2 Transport practice 3.2

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

	☒ **in full compliance with**	
Orica is:	☐ in substantial compliance with	**Transport Practice 3.2**
	☐ not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

Orica is in FULL COMPLIANCE with Transport Practice 3.2 requiring they designate appropriate response personnel and commit necessary resources for emergency response.

Orica has ensured that emergency response training is provided to appropriate personnel.

The *Transport Management Procedure* states that emergency response training is mandatory for all road drivers, storage personnel and road transport administration personnel. It is also offered to all other personnel involved in the cyanide supply chain.

Where subcontractors are utilised by contracted carriers, the Orica *Sodium Cyanide Transport Management Plan* notes no subcontractors are to be engaged by any prime contractor without the prior approval of Orica and an appropriate assessment of the proposed subcontractor's capabilities having been performed.

Orica retain technical and advisor roles in an emergency and can provide physical resources and personnel to assist emergency services in the response to an incident involving cyanide.

Orica's Asset Management Lead – Cyanide described Orica's process which utilises a buddy training system to maintain their panel of technical advisors in the event of an emergency. This is undertaken by mentoring new Emergency Response Service (ERS) coordinators by experienced ERS coordinators during drills and events.

To be part of the technical advisory panel the individual needs to have demonstrated in depth experience with product. This is normally based on their current and previous roles and years of experience.

The Logistics Lead Cyanide is on the advisory panel and has been involved with their subcontractors both in mock drills and incident response. During these he has had the role of providing expert knowledge and an interface between Orica and TMS.

Orica has descriptions of the specific emergency response duties and responsibilities of personnel in the ERG. The responsibilities depend on the level of emergency that has occurred. Orica has technical representatives that are to be contacted by the subcontractors in the event of an emergency so they can provide guidance. They also have an Emergency Response Team that can be used and complete training scenarios alongside the subcontractors.

Orica's transport subcontractors TMS and Centurion are required to develop emergency response plans that detail specific duties and responsibilities. The *Transport Management Procedure* states that Orica will work with all customers and assist where possible in maintaining an emergency plan. Orica's carrier assessment process is used to verify that plans are in place.

Emergency response plans developed by TMS and Centurian are periodically provided to Orica for comments and are assessed as part of Orica's subcontractor review processes.

Orica, through the subcontractor management process, has a list of all emergency response equipment that should be available during transport or along the transportation route.

The *Transport Management Procedure* states that emergency equipment may vary between locations and may be dependent on the type of transport, however it provides a list of what should be available at a minimum. The ERG also states that emergency response equipment is required to be located in strategic areas.

Orica's transport subcontractors TMS and Centurion are required to develop emergency response plans that detail response equipment during transport. Orica oversees all customers emergency response plans and ensures they have the right information detailed. Orica's carrier assessment process is also used to verify that plans are in place.

Orica, through the subcontractor management process, has a list of all emergency response equipment that should be available during transport or along the transportation route.

The *Transport Management Procedure* states that emergency equipment may vary between locations and may be dependent on the type of transport, however it provides a list of what should be available at a minimum. The ERG also states that emergency response equipment is required to be located in strategic areas.

Orica's transport subcontractors TMS and Centurion are required to develop emergency response plans that detail response equipment during transport. Orica oversees all customers emergency response plans and ensures they have the right information detailed. Orica's carrier assessment process is also used to verify that plans are in place.

Orica, through its subcontractor management process, ensures the necessary emergency response and health and safety equipment, including personal protective equipment, is available during the transport of its cyanide.

Orica's transport subcontractors TMS and Centurion are required to develop emergency response plans that detail processes for verifying the availability and serviceability of emergency response and personal protective equipment. Orica's carrier assessment process is used to verify that plans are in place.

Orica, through its subcontractor management process, has measures in place such that transport vehicle operators have procedures to inspect emergency response equipment and assure its availability when required. Contractors are required to carry out emergency exercises and equipment availability is verified during the process. The auditor sited documents from TMS that verified that the emergency response equipment was available during these exercises.

The *Orica Carrier Assessment Procedure* is used to verify that contractors are aware of the applicable Code requirements and to ensure their compliance. It is applicable to all carriers and their subcontractors utilised for deliveries of sodium cyanide to customers of Orica. Carriers and subcontractors are assessed using the *Carrier Assessment Questionnaire*. They are assessed for compliance with Orica's requirements on a two-yearly basis at a minimum with additional assessments conducted following changes in operational requirements or as new risks are identified.

Orica requires its customers to have appropriate emergency response plans that address sodium cyanide incidents. They are required to have regular emergency response exercises to ensure its adequacy in emergency response situations, part of which is having clear roles and responsibilities outlined.

TMS

TMS was recertified as being in compliance with the ICMC on 17 July 2025.

Centurion

Centurion, via Lake Fox Limited, was recertified as being in compliance with the ICMC on 10 May 2022. Centurion was in the process of being certified at the time of the audit.

Due Diligences

Mt Miller Rail Terminal

WSP conducted a due diligence review of the rail terminal in April 2025. The review was based on the Orica Australia site visit, historical visits, and a desktop review. This review against the ICMC requirements concluded that its operations were aligned to the requirements of the ICMC and additional management measures by Orica were not considered necessary. The review is included in Section 4.

Townsville Rail Terminal

WSP conducted a due diligence review of the rail terminal in April 2025. The review was based on the Orica Australia site visit, historical visits, and a desktop review. This review against the ICMC requirements concluded that its operations were aligned to the requirements of the ICMC and additional management measures by Orica were not considered necessary. The review is included in Section 4.

Aurizon

WSP conducted a due diligence review of the carrier in June 2025. The review was based on the Orica Australia site visit, historical visits, and a desktop review. This review against the ICMC requirements concluded that its operations were aligned to the requirements of the ICMC and additional management measures by Orica were not considered necessary. The review is included in Section 4.

3.3.3 Transport practice 3.3

Develop procedures for internal and external emergency notification and reporting.

	☒ **in full compliance with**	
Orica is:	☐ in substantial compliance with	**Transport Practice 3.3**
	☐ not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

Orica is in FULL COMPLIANCE with Transport Practice 3.3 requiring that it develops procedures for internal and external emergency notification and reporting.

Orica, through its subcontractor management system, has procedures and current contact information for notifying the shipper, the receiver/consignee, regulatory agencies, outside response providers, medical facilities and potentially affected communities of an emergency.

Within the *Emergency Response Guide* the role of Orica is one of communication. Orica provides an ERS that operates 24 hours a day providing telephone advice and assistance to the public, emergency services and others on incidents relating to the transport, storage and use of chemical products and raw materials in emergency situations. This contact information is made publicly available. Orica requires customers to identify all relevant parties in their emergency response plans which must include their process for notifying appropriate entities in the event of an emergency.

Orica has a system in place to ensure that internal and external emergency notification and reporting procedures are kept current.

Lists of emergency contact information for Orica chemical specialists and relevant subcontractors, including transport subcontractors, are detailed in Orica's Emergency Contact list which is managed within Orica's document control system.

The *Emergency Response Guide* contains a process for notifying the ICMI of any significant cyanide incidents, as defined in ICMI's Definitions and Acronyms document. No such incidents occurred during the audit period.

TMS

TMS was recertified as being in compliance with the ICMC on 17 July 2025.

Centurion

Centurion, via Lake Fox Limited, was recertified as being in compliance with the ICMC on 10 May 2022. Centurion was in the process of being certified at the time of the audit.

Due Diligences

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Aurizon

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3.3.4 *Transport practice 3.4*

Develop procedures for remediation of releases that recognise the additional hazards of cyanide treatment.

	☒ **in full compliance with**	
Orica is:	☐ in substantial compliance with	**Transport Practice 3.4**
	☐ not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

Orica is in FULL COMPLIANCE with Transport Practice 3.4 requiring that it develops procedures for remediation of releases that recognise the additional hazards of cyanide treatment.

Orica in conjunction with their subcontractor would undertake remediation or recovery of cyanide. In this situation subcontractors would contact Orica and Orica will provide their product specialists to assist as needed. Subcontractors are to provide first response. The *Emergency Response Guide Sodium Cyanide* includes procedures for remediation, such as recovery or neutralisation of solutions or solids, decontamination of soils or other contaminated media and management of spill clean-up debris.

Orica has procedures that 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 Orica *Emergency Response Guide Sodium Cyanide* provides the following warning in Section 3.6 (Sodium Cyanide Spill in a Waterway):

- Orica Mining Chemicals subscribes to the recommendations of the International Cyanide Management Code in that no chemicals are to be added to a flowing waterway in the event of a cyanide spill as these may only exacerbate the situation with their own toxicity characteristics.

TMS

TMS was recertified as being in compliance with the ICMC on 17 July 2025.

Centurion

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Due Diligences

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3.3.5 Transport practice 3.5

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

	☒ **in full compliance with**	
Orica is:	☐ in substantial compliance with	**Transport Practice 3.5**
	☐ not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

Orica is in FULL COMPLIANCE with Transport Practice 3.5 requiring the operation periodically evaluate response procedures and capabilities and revise them as needed.

Orica has provisions for periodically reviewing and evaluating the adequacy of emergency response documentation. Orica has developed a procedure that states that:

- Emergency Plans must be maintained under document control and the scope of the emergency response program and arrangements for responding to emergencies must be reviewed and audited annually.

Orica reviews their *Emergency Response Guide* on a biennial basis and following incidents where the Guide is utilised. The version reviewed was revision 12 (2025) and was last reviewed in 2024.

Orica has provisions for periodically conducting mock emergency drills.

Mock emergency drills are conducted periodically as part of the plan evaluation process. They are undertaken by Orica's transport subcontractor TMS who involves other parties as required, including Orica ERS; Orica Yarwun, Police, Fire and Emergency Services.

Orica was involved with several mock exercises during the audit period and written documentation of the exercises was viewed by the auditor.

Orica has procedures to evaluate the performance of emergency documentation after its implementation and revise it as needed.

The Orica *Sodium Cyanide Emergency Response Guide* includes a requirement to review the document on a biennial basis and following incidents where the Guide is utilised. The document was last reviewed in September 2024 and updated in February 2025.

TMS

TMS was recertified as being in compliance with the ICMC on 17 July 2025.

Centurion

Centurion, via Lake Fox Limited, was recertified as being in compliance with the ICMC on 10 May 2022. Centurion was in the process of being certified at the time of the audit.

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4 Due diligence

4.1 Introduction

Orica Australia recently engaged WSP to conduct due diligence assessments of Mt Miller Rail Terminal, Townsville Rail Terminal and Kwinana Rail in accordance with the International Cyanide Management Institute (ICMI). These entities form part of Orica's Australian Supply Chain.

4.2 Scope and method

The scope of these desktop due diligences includes the management, interim storage, and emergency response capacity in relation to cyanide transported by a carrier on a vessel. A due diligence assessment is provided for the carriers, rail lines and rail terminals listed.

As detailed in ICMI's *Guidance for Use of the Cyanide Transportation Verification Protocol* (Guidance) (ICMI, 2021b), the following items are addressed within each assessment:

- Overview of the company
- International Cyanide Management Code (ICMC) Transport Verification Protocol Assessment
- Conclusion
- References.

The ICMI's June 2021 version of the Cyanide Transportation Verification Protocol (CTVP); (ICMI, 2021a), was adopted to guide the Desktop Due Diligence process. The Guidance was used to interpret the CTVP questions and aid in evaluating the measures taken to meet the Transportation Practices. The assessment was conducted as a site visit and desktop process using publicly available online information.

4.3 ICMC Transport Verification Protocol assessment

- The ICMI's Auditor Guidance for Use of Cyanide Transportation Verification Protocol, General Guidance states:

  Supply chain components, in particular rail carriers, ports, and shipping lines, are not audited in the same manner as truck transporters and supply chain consigners. Full Code audits are not required for rail lines and rail terminals, shipping lines, or ports due to security issues, limited access, and the inability of consignors to affect changes in the operating practices of these transport operations. Rather than conduct Code audits of these entities, a Due Diligence Investigation must be conducted and documented for each rail carrier, shipping company, and port facility included in the supply chain. The Due Diligence Investigations must be documented in a written report generated by the consigner or by an auditor meeting ICMI requirements for a transport technical expert auditor.

  The provisions of Transport Practices 1.2 through 1.6, 2.1 and 3.1 through 3.5 of this Transportation Guidance can be applied in full or in part to rail transport, sea transport, and port activities as a guide for Due Diligence Investigations.

4.4 Mt Miller Rail Terminal

4.4.1 Rail Terminal due diligence executive summary

WSP Australia Pty Ltd (WSP) conducted a due diligence of Mt Miller Rail Terminal in Queensland during April 2025 on behalf of Orica Australia Pty Ltd (Orica). The assessment was reviewed by Ed Clerk who meets the International Cyanide Management Institute's (ICMI) requirements for a Transport Technical Specialist.

The following items, as detailed in the ICMI's *Auditor Guidance for Use of Cyanide Transportation Verification Protocol* (ICMI 2021), were addressed within the due diligence:

- Transport Practice 1.1 to 1.4
- Transport Practice 1.6
- Transport Practice 2.1
- Transport Practice 3.1. to 3.5.

The ICMI's *Auditor Guidance for Use of Cyanide Transportation Verification Protocol* (ICMI 2021) was used to conduct the due diligence assessment. It was not possible during this due diligence to physically inspect operations, as such the review was based on information obtained from previous due diligence reviews, ICMI audit reports and publicly available online information. Based on the evidence reviewed, this due diligence did not find issues of concern regarding the management of solid sodium cyanide product. This assessment should not be a final acceptance for future work. Instead, it is recommended that Orica continue to review and monitor performance periodically and implement an adaptive management process.

4.4.2 Overview of Mt Miller Rail Terminal

The Mt Miller facility is located approximately two kilometres from the main highway and just under two kilometres from the Yarwun manufacturing facility. It is situated away from residential areas to minimise the risk of the loading of dangerous goods and other industrial products, and their associated activities.

All cyanide product is in transit only and is not stored at Mt Miller. Containers holding the product are transported to Mt Miller by road from the Yarwun manufacturing facility. The product is then transported by rail for onward transportation to southern destinations. Empty containers are received and collected for return to the Yarwun plant.

Orica manages majority of the cyanide product at this location through Linfox. They then move the international export containers and sparges from Mt Miller to Brisbane Multimodal Terminal (BMT).

Transport Practice 1.1: Select cyanide transport routes to minimise the potential for accidents and releases

Orica uses reputable contractors for the transportation of sodium cyanide manufactured by Orica or manufactured by third parties on behalf of Orica (Orica, 2024a).

Orica's Sodium Cyanide Transport Management protocol (Orica, 2024a) states that all routes used for sodium cyanide transport must undergo a risk assessment to determine their suitability. If multiple routes are available, each one requires an individual risk assessment. These assessments are conducted in accordance with the Route Risk Assessment (Orica, 2024b) and AS 4360:2004 Risk Management standards. Any risks identified as "extreme" must be prioritised and addressed through the development of an action plan to mitigate these risks as much as possible. The process for documenting the risks associated with selected routes is outlined in the Route Risk Assessment (Orica, 2024b).

Feedback regarding the routes is taken into consideration and forwarded to the Health, Safety & Environment (HS&E) Officer for the necessary updates to the route assessment. This information is also shared with the Orica representative in the relevant region (Orica, 2024a). Mt Miller is located 2 km from the Yarwun facility, in an industrial area and away from residential areas, making it an ideal transit facility.

In situations where special safety measures or concerns are present, or where escorts are required, compliance with SUP-GLO-PRO-024 is mandatory. Additionally, Carrier Safety Programs should align with the requirements of SUP-GLO-PRO-005 (Orica, 2024a).

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

Orica, through its subcontractor management system, has a process in place for the use of only trained, qualified and licensed operators in operating transport vehicles during the transportation of its cyanide. The Orica Transport Management Procedure (Orica, 2024a) details the required training for all contractors and notes if subcontractors are utilised by prime contracted agencies, the prime contractor is to have an appropriate procedure to ensure that all relevant subcontractor personnel meet the detailed training requirements.

The Orica Carrier Assessment Procedure is used to verify that contractors are aware of the applicable Code requirements and to ensure their compliance. It is applicable to all carrier and their subcontractors utilised for deliveries of sodium cyanide to customers of Orica. Carriers and subcontractors are assessed using the Carrier Assessment Questionnaire. They are assessed for compliance with Orica's requirements on a two-yearly basis at a minimum with additional assessments conducted following changes in operational requirements or as new risks are identified.

Dangerous goods training at Mt Miller is provided by Queensland Rail and Queensland Rail approved external providers, and training records are maintained at corporate level.

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

Orica has a process in place requiring that only equipment designed and maintained to operate within the loads it will be handling is used. They have developed a Transport of Sodium Cyanide – Carrier Safety Program (Orica, 2016a) that details the minimum safety requirements and programmes that Orica requires its prime contractor and associated subcontractors to implement. Through its subcontractor management system, Orica has procedures to prevent overloading of the transport vehicle being used for handling cyanide. The Sodium Cyanide Transport Management Procedure (Orica, 2024a) requires that all transport assets are load capable within the regulatory requirements and that only one container/isotainer/isotank is to ever be transported (with the exception of specifically designed rail wagons). Mt Miller receives cyanide packaged in bulk sparge isotanks and composite intermediate bulk containers (IBCs) contained within standard twenty-foot equivalent (TEU) shipping containers are transported through its facility. The facility uses top load forklifts and their equipment is subject to a routine maintenance program, carried out by external suppliers. All containers are inspected upon receival and as an integral facet of the train safety walk through, prior to a departure.

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

Orica, through its subcontractor management system, ensures that cyanide is transported in a manner that maintains the integrity of the producer's packaging. Cyanide is transported in solid form within a purpose-built isotainer and uniquely identified seals are placed on the camlocks to the isotainer.

The Transport Management Procedure requires that all packing is labelled and placarded in accordance with the applicable legislative requirements. This means that, as a minimum, the packaging meets the requirements of the current versions of the United Nations Dangerous Goods Transport Guidelines, the Australian Code for the Transport of Dangerous Goods by Road and Rail and the International Maritime Dangerous Goods Code.

The Mt Miller facility is fully fenced and locked after hours and CCTV cameras are installed. Warning and security signs are in place at the facility. All products are in transit only and are inspected upon receival to ensure compliance with Orica's Transport Management Procedure and Australia's Danger Goods Code. The facility is non-smoking and there are designated areas for eating and drinking.

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

Orica's Tracking of Cyanide Shipments procedure (Orica, 2016c) ensures that all transporters have a means of communication at all times which is implemented by Orica's line managers.

All isotainers and domestic shipping containers used by Orica have an installed GPS tracking system.

Checkpoint audits are used to check the presence and serviceability of the tracking equipment and Orica's line managers are responsible for ensuring that the Tracking of Cyanide Shipments procedure is followed. The equipment is further verified as functioning by the constant use of it during transportation routes. Orica also has a process for chain of custody/inventory control to prevent the loss of cyanide during shipment.

Transport Practice 2.1: Store cyanide in a manner that minimises the potential for accidental releases

Orica's Emergency Response Guide for Sodium Cyanide provides the storage requirements for Cyanide. Solid sodium cyanide is usually stored and transported in Composite Intermediate Bulk Containers (IBCs) that can hold between 800 and 1100 kilograms. The sodium cyanide is packed into a single-use woven polypropylene bulk bag, which is hermetically sealed within a polyethylene bag that lines the interior of the wooden IBC. This entire package (the composite IBC) has been thoroughly tested and approved according to the United Nations Recommendations for the Transport of Dangerous Goods, Model Regulations (Orica, 2025). As per the approval conditions, the sodium cyanide composite IBCs can only be transported inside a sealed 20-foot general-purpose shipping container. The sodium cyanide must stay within the shipping container throughout all stages of its distribution and can only be unpacked at the mine site.

Additionally, solid sodium cyanide can be transported in specially designed and constructed bulk sparge isotank containers. These containers can hold 20-24 tonnes of bulk solid cyanide. These isotanks are designed, built, and approved to international standards in line with the IMDG Code, making them suitable for transport by road, rail, and sea (Orica, 2025).

As per Orica's Emergency Response Guide for Sodium Cyanide, sodium cyanide should be stored in a dry, cool, and well-ventilated area, secured and under surveillance. Access to the storage area and the product should be limited to authorised personnel who have been trained in cyanide hazards.

Bulk sparge isotainers and shipping containers containing composite IBCs are placarded with and emergency information panel (EIP) detailing the proper shipping name, dangerous goods class number, UN number, HAZCHEM Code and emergency contact information. Containers are placarded with the environmentally hazardous substance markings (United Nations, 2021). Product labels are provided on the side of the IBC that allows forklift access via the pallet base. IBCs are placed into shipping containers so that the label is facing outwards.

Orica's Sodium Cyanide Transport Management Plan (Orica, 2024a) stipulates that agents, distributors, and transport companies are obligated to ensure compliance with all legal requirements related to the transport and storage of sodium cyanide. They are also tasked with notifying Orica of any violations or breaches of these legal requirements.

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

Orica has developed the Emergency Response Guide (ERG) for Sodium Cyanide (Orica, 2025). This guide stipulates that the first responders should immediately get in touch with trained personnel, such as local site management or emergency services, to establish a basic command structure for managing the situation and providing the necessary emergency response. This includes alerting others in the immediate vicinity of the spill, barricading the area if necessary to prevent exposure, and documenting key information about the scene (e.g., location, what happened, who is involved).

After these initial steps, first responders will need to apply their knowledge specific to sodium cyanide to effectively manage casualties, provide appropriate medical treatment, and carry out safe and proper product recovery, site remediation, and decontamination activities.

According to Orica's Transport Management Plan (Orica, 2024a), the emergency response plan should cover the entire delivery route. While Orica's responsibilities are limited to the aspects of supply for which it is contractually accountable, agents, distributors, and transport companies must have an appropriate emergency response plan to handle any sodium cyanide incidents within their contractual responsibilities.

The Mt Miller facility has an emergency response plan that is specific for its facility and is aligned with Orica's requirements.

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

In the event of an emergency situation, the Orica Yarwun plant is notified immediately for assistance and response. Orica has descriptions of the specific emergency response duties and responsibilities of personnel in the ERG. The responsibilities depend on the level of emergency that has occurred. Orica has technical representatives that are to be contacted by the subcontractors in the event of an emergency so they can provide guidance. They also have an Emergency Response Team that can be used and complete training scenarios alongside the subcontractors. Mt Miller has spill kits available and in the event of a spill, a channel gate can be closed to prevent escape of product or contaminated water via the site drainage system. Container bunds are also available for leaking containers.

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

Orica, through its subcontractor management system, has procedures and current contact information for notifying the shipper, the receiver/consignee, regulatory agencies, outside response providers, medical facilities and potentially affected communities of an emergency.

Within the Emergency Response Guide the role of Orica is one of communication. Orica provides an Emergency Response Service (ERS) that operates 24 hours a day providing telephone advice and assistance to the public, emergency services and others on incidents relating to the transport, storage and use of chemical products and raw materials in emergency situations. This contact information is made publicly available. Orica requires customers to identify all relevant parties in their emergency response plans which must include their process for notifying appropriate entities in the event of an emergency.

The Emergency Response Guide contains a process for notifying the ICMI of any significant cyanide incidents, as defined in ICMI's Definitions and Acronyms document. No such incidents occurred during the audit period.

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

Mt Miller in conjunction with Orica would undertake remediation or recovery of cyanide. In the situation of remediation of a release, Mt Miller would contact Orica and Orica will provide their product specialists to assist as needed. Subcontractors are to provide first response. The Emergency Response Guide Sodium Cyanide includes procedures for remediation, such as recovery or neutralisation of solutions or solids, decontamination of soils or other contaminated media and management of spill clean-up debris.

The use of chemicals such as sodium hypochlorite, ferrous sulfate and hydrogen peroxide to treat cyanide that has been released into surface water is forbidden by Orica.

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

Mock emergency drills have been conducted at Mt Miller. Orica requires its subcontractors to develop emergency response plans that interface with Orica's, meaning that Mt Miller is required to periodically evaluate their response procedures and capabilities and revise them as needed as detailed in Orica's Emergency Response Guide (Orica, 2025).

4.5 Conclusion

Based on the evidence reviewed, this due diligence did not find significant issues of concern regarding the management of solid sodium cyanide product at Mt Miller Rail Terminal. This assessment should not be a final acceptance for future work; rather it is recommended that Orica continue to review and monitor performance periodically and implement an adaptive management process.

4.6 Townsville Rail Terminal

4.6.1 Rail Terminal due diligence executive summary

WSP Australia Pty Ltd (WSP) conducted a due diligence of the Townsville Rail Terminal in Queensland during April 2025 on behalf of Orica Australia Pty Ltd (Orica). The assessment was reviewed by Ed Clerk who meets the International Cyanide Management Institute's (ICMI) requirements for a Transport Technical Specialist.

The following items, as detailed in the ICMI's *Auditor Guidance for Use of Cyanide Transportation Verification Protocol* (ICMI 2021), were addressed within the due diligence:

- Transport Practice 1.1 to 1.4
- Transport Practice 1.6
- Transport Practice 2.1
- Transport Practice 3.1. to 3.5.

The ICMI's *Auditor Guidance for Use of Cyanide Transportation Verification Protocol* (ICMI 2021) was used to conduct the due diligence assessment. It was not possible during this due diligence to physically inspect operations, as such the review was based on information obtained from previous due diligence reviews, ICMI audit reports and publicly available online information. Based on the evidence reviewed, this due diligence did not find issues of concern regarding the management of solid sodium cyanide product. This assessment should not be a final acceptance for future work. Instead, it is recommended that Orica continue to review and monitor performance periodically and implement an adaptive management process.

4.6.2 Overview of Townsville Rail Terminal

The Townsville Rail Terminal was built by Aurizon in 2022 to support the growth of the Port of Townsville. The multi-modal rail terminal has a 10,000 square metre concrete pad and has the capacity for 1,200 shipping containers. It is a direct rail corridor into Aurizon Port Services' container and handling park and has almost 2 kilometres of track across three rail lines. Orica manages cyanide bookings with Linfox to send cyanide product from Mt Miller Rail Terminal to the Townsville Rail Terminal. Full sparges and containers are received at this terminal and empty ones are returned via the same route.

Transport Practice 1.1: Select cyanide transport routes to minimise the potential for accidents and releases

Orica uses reputable contractors for the transportation of sodium cyanide manufactured by Orica or manufactured by third parties on behalf of Orica (Orica, 2024a).

Orica's Sodium Cyanide Transport Management protocol (Orica, 2024a) states that all routes used for sodium cyanide transport must undergo a risk assessment to determine their suitability. If multiple routes are available, each one requires an individual risk assessment. These assessments are conducted in accordance with the Route Risk Assessment (Orica, 2024b) and AS 4360:2004 Risk Management standards. Any risks identified as "extreme" must be prioritised and addressed through the development of an action plan to mitigate these risks as much as possible. The process for documenting the risks associated with selected routes is outlined in the Route Risk Assessment (Orica, 2024b).

Feedback regarding the routes is taken into consideration and forwarded to the Health, Safety & Environment (HS&E) Officer for the necessary updates to the route assessment. This information is also shared with the Orica representative in the relevant region (Orica, 2024a). The Townsville Rail Terminal is located by the Port of Townsville, an industrial area.

In situations where special safety measures or concerns are present, or where escorts are required, compliance with SUP-GLO-PRO-024 is mandatory. Additionally, Carrier Safety Programs should align with the requirements of SUP-GLO-PRO-005 (Orica, 2024a).

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

Orica, through its subcontractor management system, has a process in place for the use of only trained, qualified and licensed operators in operating transport vehicles during the transportation of its cyanide. The Orica Transport Management Procedure (Orica, 2024a) details the required training for all contractors and notes if subcontractors are utilised by prime contracted agencies, the prime contractor is to have an appropriate procedure to ensure that all relevant subcontractor personnel meet the detailed training requirements.

The Orica Carrier Assessment Procedure (Orica, 2016b) is used to verify that contractors are aware of the applicable Code requirements and to ensure their compliance. It is applicable to all carrier and their subcontractors utilised for deliveries of sodium cyanide to customers of Orica. Carriers and subcontractors are assessed using the Carrier Assessment Questionnaire. They are assessed for compliance with Orica's requirements on a two-yearly basis at a minimum with additional assessments conducted following changes in operational requirements or as new risks are identified.

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

Orica has a process in place requiring that only equipment designed and maintained to operate within the loads it will be handling is used. They have developed a Transport of Sodium Cyanide – Carrier Safety Program (Orica, 2016a) that details the minimum safety requirements and programmes that Orica requires its prime contractor and associated subcontractors to implement. Through its subcontractor management system, Orica has procedures to prevent overloading of the transport vehicle being used for handling cyanide. The Sodium Cyanide Transport Management Procedure (Orica, 2024a) requires that all transport assets are load capable within the regulatory requirements and that only one container/isotainer/isotank is to ever be transported (with the exception of specifically designed rail wagons).

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

Orica, through its subcontractor management system, ensures that cyanide is transported in a manner that maintains the integrity of the producer's packaging. Cyanide is transported in solid form within a purpose-built isotainer and uniquely identified seals are placed on the camlocks to the isotainer.

The Transport Management Procedure requires that all packing is labelled and placarded in accordance with the applicable legislative requirements. This means that, as a minimum, the packaging meets the requirements of the current versions of the United Nations Dangerous Goods Transport Guidelines, the Australian Code for the Transport of Dangerous Goods by Road and Rail and the International Maritime Dangerous Goods Code.

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

Orica's Tracking of Cyanide Shipments procedure (Orica, 2016c) ensures that all transporters have a means of communication at all times which is implemented by Orica's line managers.

All isotainers and domestic shipping containers used by Orica have an installed GPS tracking system.

Checkpoint audits are used to check the presence and serviceability of the tracking equipment and Orica's line managers are responsible for ensuring that the Tracking of Cyanide Shipments procedure is followed. The equipment is further verified as functioning by the constant use of it during transportation routes. Orica also has a process for chain of custody/inventory control to prevent the loss of cyanide during shipment.

Transport Practice 2.1: Store cyanide in a manner that minimises the potential for accidental releases

Orica's Emergency Response Guide for Sodium Cyanide provides the storage requirements for Cyanide. Solid sodium cyanide is usually stored and transported in Composite Intermediate Bulk Containers (IBCs) that can hold between 800 and 1100 kilograms. The sodium cyanide is packed into a single-use woven polypropylene bulk bag, which is hermetically sealed within a polyethylene bag that lines the interior of the wooden IBC. This entire package (the composite IBC) has been thoroughly tested and approved according to the United Nations Recommendations for the Transport of Dangerous Goods, Model Regulations (Orica, 2025). As per the approval conditions, the sodium cyanide composite IBCs can only be transported inside a sealed 20-foot general-purpose shipping container. The sodium cyanide must stay within the shipping container throughout all stages of its distribution and can only be unpacked at the mine site.

Additionally, solid sodium cyanide can be transported in specially designed and constructed bulk sparge isotank containers. These containers can hold 20-24 tonnes of bulk solid cyanide. These isotanks are designed, built, and approved to international standards in line with the IMDG Code, making them suitable for transport by road, rail, and sea (Orica, 2025).

As per Orica's Emergency Response Guide for Sodium Cyanide, sodium cyanide should be stored in a dry, cool, and well-ventilated area, secured and under surveillance. Access to the storage area and the product should be limited to authorised personnel who have been trained in cyanide hazards.

Bulk sparge isotainers and shipping containers containing composite IBCs are placarded with and emergency information panel (EIP) detailing the proper shipping name, dangerous goods class number, UN number, HAZCHEM Code and emergency contact information. Containers are placarded with the environmentally hazardous substance markings (United Nations, 2021). Product labels are provided on the side of the IBC that allows forklift access via the pallet base. IBCs are placed into shipping containers so that the label is facing outwards.

Orica's Sodium Cyanide Transport Management Plan (Orica, 2024a) stipulates that agents, distributors, and transport companies are obligated to ensure compliance with all legal requirements related to the transport and storage of sodium cyanide. They are also tasked with notifying Orica of any violations or breaches of these legal requirements.

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

Orica has developed the Emergency Response Guide (ERG) for Sodium Cyanide (Orica, 2025). This guide stipulates that the first responders should immediately get in touch with trained personnel, such as local site management or emergency services, to establish a basic command structure for managing the situation and providing the necessary emergency response. This includes alerting others in the immediate vicinity of the spill, barricading the area if necessary to prevent exposure, and documenting key information about the scene (e.g., location, what happened, who is involved).

After these initial steps, first responders will need to apply their knowledge specific to sodium cyanide to effectively manage casualties, provide appropriate medical treatment, and carry out safe and proper product recovery, site remediation, and decontamination activities.

According to Orica's Transport Management Plan (Orica, 2024a), the emergency response plan should cover the entire delivery route. While Orica's responsibilities are limited to the aspects of supply for which it is contractually accountable, agents, distributors, and transport companies must have an appropriate emergency response plan to handle any sodium cyanide incidents within their contractual responsibilities.

The Port of Townsville is certified under the IMO's International Convention on Oil Pollution Preparedness, Response and Cooperation 1990 (OPRC 90) (United Nations, 1995). States which are party to OPRC 90 protocol are required to establish a national system for responding to oil and hazardous/noxious substances pollution incidents, including a designated national authority, a national operational contact point and a national contingency plan. This needs to be supported by a minimum level of response equipment, communications plans, and regular training and exercises.

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

In the event of an emergency situation, the Orica Yarwun plant is notified immediately for assistance and response. Orica has descriptions of the specific emergency response duties and responsibilities of personnel in the ERG. The responsibilities depend on the level of emergency that has occurred. Orica has technical representatives that are to be contacted by the subcontractors in the event of an emergency so they can provide guidance. They also have an Emergency Response Team that can be used and complete training scenarios alongside the subcontractors.

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

Orica, through its subcontractor management system, has procedures and current contact information for notifying the shipper, the receiver/consignee, regulatory agencies, outside response providers, medical facilities and potentially affected communities of an emergency.

Within the Emergency Response Guide the role of Orica is one of communication. Orica provides an Emergency Response Service (ERS) that operates 24 hours a day providing telephone advice and assistance to the public, emergency services and others on incidents relating to the transport, storage and use of chemical products and raw materials in emergency situations. This contact information is made publicly available. Orica requires customers to identify all relevant parties in their emergency response plans which must include their process for notifying appropriate entities in the event of an emergency.

The Emergency Response Guide contains a process for notifying the ICMI of any significant cyanide incidents, as defined in ICMI's Definitions and Acronyms document. No such incidents occurred during the audit period.

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

In the situation of remediation of a release, Townsville Rail Terminal would contact Orica and Orica will provide their product specialists to assist as needed. Subcontractors are to provide first response. The Emergency Response Guide Sodium Cyanide includes procedures for remediation, such as recovery or neutralisation of solutions or solids, decontamination of soils or other contaminated media and management of spill clean-up debris.

The use of chemicals such as sodium hypochlorite, ferrous sulfate and hydrogen peroxide to treat cyanide that has been released into surface water is forbidden by Orica (Orica, 2025).

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

Orica requires its subcontractors to develop emergency response plans that interface with Orica's, meaning that Townsville Rail Terminal is required to periodically evaluate their response procedures and capabilities and revise them as needed as detailed in Orica's Emergency Response Guide (Orica, 2025).

4.7 Conclusion

Based on the evidence reviewed, this due diligence did not find significant issues of concern regarding the management of solid sodium cyanide product at Townsville Rail Terminal. This assessment should not be a final acceptance for future work; rather it is recommended that Orica continue to review and monitor performance periodically and implement an adaptive management process.

4.8 Aurizon

4.8.1 Rail Carrier due diligence executive summary

WSP Australia Pty Ltd (WSP) conducted a due diligence of Aurizon during June 2025 on behalf of Orica Australia Pty Ltd (Orica). The assessment was reviewed by Ed Clerk who meets the International Cyanide Management Institute's (ICMI) requirements for a Transport Technical Specialist.

The following items, as detailed in the ICMI's *Auditor Guidance for Use of Cyanide Transportation Verification Protocol* (ICMI 2021), were addressed within the due diligence:

- Transport Practice 1.1 to 1.4
- Transport Practice 1.6
- Transport Practice 2.1
- Transport Practice 3.1. to 3.5.

The ICMI's *Auditor Guidance for Use of Cyanide Transportation Verification Protocol* (ICMI 2021) was used to conduct the due diligence assessment. It was not possible during this due diligence to physically inspect operations, as such the review was based on information obtained from previous due diligence reviews, ICMI audit reports and publicly available online information. Based on the evidence reviewed, this due diligence did not find issues of concern regarding the management of solid sodium cyanide product. This assessment should not be a final acceptance for future work. Instead, it is recommended that Orica continue to review and monitor performance periodically and implement an adaptive management process.

4.8.2 Overview of Aurizon

Orica contracts Aurizon to transport product to Kalgoorlie Freight Terminal. The containers are received at Fremantle Port AQIS clearance depot and are delivered to the Kwinana Rail via road by Toll. Orica then manages rail bookings with Aurizon from Kwinana Rail to Kalgoorlie Freight Terminal. Aurizon is Australia's largest rail freight operator with strong operating capability in terminals and a skilled team to deliver a variety of bulk commodities including dangerous goods.

Transport Practice 1.1: Select cyanide transport routes to minimise the potential for accidents and releases

Orica uses reputable contractors for the transportation of sodium cyanide manufactured by Orica or manufactured by third parties on behalf of Orica (Orica, 2024a).

Orica's Sodium Cyanide Transport Management protocol (Orica, 2024a) states that all routes used for sodium cyanide transport must undergo a risk assessment to determine their suitability. If multiple routes are available, each one requires an individual risk assessment. These assessments are conducted in accordance with the Route Risk Assessment (Orica, 2024b) and AS 4360:2004 Risk Management standards. Any risks identified as "extreme" must be prioritised and addressed through the development of an action plan to mitigate these risks as much as possible. The process for documenting the risks associated with selected routes is outlined in the Route Risk Assessment (Orica, 2024b).

Feedback regarding the routes is taken into consideration and forwarded to the Health, Safety & Environment (HS&E) Officer for the necessary updates to the route assessment. This information is also shared with the Orica representative in the relevant region (Orica, 2024a). Rail is considered the safest mode of transport for dangerous goods, minimising the potential for cyanide accidents and releases on the way to Kalgoorlie.

In situations where special safety measures or concerns are present, or where escorts are required, compliance with SUP-GLO-PRO-024 is mandatory. Additionally, Carrier Safety Programs should align with the requirements of SUP-GLO-PRO-005 (Orica, 2024a).

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

Orica, through its subcontractor management system, has a process in place for the use of only trained, qualified and licensed operators in operating transport vehicles during the transportation of its cyanide. The Orica Transport Management Procedure (Orica, 2024a) details the required training for all contractors and notes if subcontractors are utilised by prime contracted agencies, the prime contractor is to have an appropriate procedure to ensure that all relevant subcontractor personnel meet the detailed training requirements.

The Orica Carrier Assessment Procedure is used to verify that contractors are aware of the applicable Code requirements and to ensure their compliance. It is applicable to all carrier and their subcontractors utilised for deliveries of sodium cyanide to customers of Orica. Carriers and subcontractors are assessed using the Carrier Assessment Questionnaire. They are assessed for compliance with Orica's requirements on a two-yearly basis at a minimum with additional assessments conducted following changes in operational requirements or as new risks are identified.

Aurizon provides required training to its employees including Aurizon Dangerous Goods Awareness, Locomotive Access and Egress, and Spill Kit Management.

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

Orica has a process in place requiring that only equipment designed and maintained to operate within the loads it will be handling is used. They have developed a Transport of Sodium Cyanide – Carrier Safety Program (Orica, 2016a) that details the minimum safety requirements and programmes that Orica requires its prime contractor and associated subcontractors to implement. Through its subcontractor management system, Orica has procedures to prevent overloading of the transport vehicle being used for handling cyanide. The Sodium Cyanide Transport Management Procedure (Orica, 2024a) requires that all transport assets are load capable within the regulatory requirements and that only one container/isotainer/isotank is to ever be transported (with the exception of specifically designed rail wagons).

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

Orica, through its subcontractor management system, ensures that cyanide is transported in a manner that maintains the integrity of the producer's packaging. Cyanide is transported in solid form within a purpose-built isotainer and uniquely identified seals are placed on the camlocks to the isotainer.

The Transport Management Procedure requires that all packing is labelled and placarded in accordance with the applicable legislative requirements. This means that, as a minimum, the packaging meets the requirements of the current versions of the United Nations Dangerous Goods Transport Guidelines, the Australian Code for the Transport of Dangerous Goods by Road and Rail and the International Maritime Dangerous Goods Code.

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

Orica's Tracking of Cyanide Shipments procedure (Orica, 2016c) ensures that all transporters have a means of communication at all times which is implemented by Orica's line managers.

All isotainers and domestic shipping containers used by Orica have an installed GPS tracking system.

Checkpoint audits are used to check the presence and serviceability of the tracking equipment and Orica's line managers are responsible for ensuring that the Tracking of Cyanide Shipments procedure is followed. The equipment is further verified as functioning by the constant use of it during transportation routes. Orica also has a process for chain of custody/inventory control to prevent the loss of cyanide during shipment.

Aurizon uses a comprehensive tracking system for their shipments. Customers can access train consignment details, live tracking, and timetables through their Freight Online portal. This service covers trains in Western Australia (Aurizon, 2025).

Transport Practice 2.1: Store cyanide in a manner that minimises the potential for accidental releases

Orica's Emergency Response Guide for Sodium Cyanide provides the storage requirements for Cyanide. Solid sodium cyanide is usually stored and transported in Composite Intermediate Bulk Containers (IBCs) that can hold between 800 and 1100 kilograms. The sodium cyanide is packed into a single-use woven polypropylene bulk bag, which is hermetically sealed within a polyethylene bag that lines the interior of the wooden IBC. This entire package (the composite IBC) has been thoroughly tested and approved according to the United Nations Recommendations for the Transport of Dangerous Goods, Model Regulations (Orica, 2025). As per the approval conditions, the sodium cyanide composite IBCs can only be transported inside a sealed 20-foot general-purpose shipping container. The sodium cyanide must stay within the shipping container throughout all stages of its distribution and can only be unpacked at the mine site.

Additionally, solid sodium cyanide can be transported in specially designed and constructed bulk sparge isotank containers. These containers can hold 20-24 tonnes of bulk solid cyanide. These isotanks are designed, built, and approved to international standards in line with the IMDG Code, making them suitable for transport by road, rail, and sea (Orica, 2025).

As per Orica's Emergency Response Guide for Sodium Cyanide, sodium cyanide should be stored in a dry, cool, and well-ventilated area, secured and under surveillance. Access to the storage area and the product should be limited to authorised personnel who have been trained in cyanide hazards.

Bulk sparge isotainers and shipping containers containing composite IBCs are placarded with and emergency information panel (EIP) detailing the proper shipping name, dangerous goods class number, UN number, HAZCHEM Code and emergency contact information. Containers are placarded with the environmentally hazardous substance markings (United Nations, 2021). Product labels are provided on the side of the IBC that allows forklift access via the pallet base. IBCs are placed into shipping containers so that the label is facing outwards.

Orica's Sodium Cyanide Transport Management Plan (Orica, 2024a) stipulates that agents, distributors, and transport companies are obligated to ensure compliance with all legal requirements related to the transport and storage of sodium cyanide. They are also tasked with notifying Orica of any violations or breaches of these legal requirements.

Aurizon requires all dangerous goods to be fully comply with the Australian Goods Code for the Transport of Dangerous Goods by Road and Rail.

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

Orica has developed the Emergency Response Guide (ERG) for Sodium Cyanide (Orica, 2025). This guide stipulates that the first responders should immediately get in touch with trained personnel, such as local site management or emergency services, to establish a basic command structure for managing the situation and providing the necessary emergency response. This includes alerting others in the immediate vicinity of the spill, barricading the area if necessary to prevent exposure, and documenting key information about the scene (e.g., location, what happened, who is involved).

After these initial steps, first responders will need to apply their knowledge specific to sodium cyanide to effectively manage casualties, provide appropriate medical treatment, and carry out safe and proper product recovery, site remediation, and decontamination activities.

According to Orica's Transport Management Plan (Orica, 2024a), the emergency response plan should cover the entire delivery route. While Orica's responsibilities are limited to the aspects of supply for which it is contractually accountable, agents, distributors, and transport companies must have an appropriate emergency response plan to handle any sodium cyanide incidents within their contractual responsibilities.

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

Orica has descriptions of the specific emergency response duties and responsibilities of personnel in the ERG. The responsibilities depend on the level of emergency that has occurred. Orica has technical representatives that are to be contacted by the subcontractors in the event of an emergency so they can provide guidance. They also have an Emergency Response Team that can be used and complete training scenarios alongside the subcontractors.

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

Orica, through its subcontractor management system, has procedures and current contact information for notifying the shipper, the receiver/consignee, regulatory agencies, outside response providers, medical facilities and potentially affected communities of an emergency.

Within the Emergency Response Guide the role of Orica is one of communication. Orica provides an Emergency Response Service (ERS) that operates 24 hours a day providing telephone advice and assistance to the public, emergency services and others on incidents relating to the transport, storage and use of chemical products and raw materials in emergency situations. This contact information is made publicly available. Orica requires customers to identify all relevant parties in their emergency response plans which must include their process for notifying appropriate entities in the event of an emergency.

The Emergency Response Guide contains a process for notifying the ICMI of any significant cyanide incidents, as defined in ICMI's Definitions and Acronyms document. No such incidents occurred during the audit period.

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

Aurizon in conjunction with Orica would undertake remediation or recovery of cyanide. In the situation of remediation of a release, Aurizon would contact Orica and Orica will provide their product specialists to assist as needed. Subcontractors are to provide first response. The Emergency Response Guide Sodium Cyanide includes procedures for remediation, such as recovery or neutralisation of solutions or solids, decontamination of soils or other contaminated media and management of spill clean-up debris.

The use of chemicals such as sodium hypochlorite, ferrous sulfate and hydrogen peroxide to treat cyanide that has been released into surface water is forbidden by Orica (Orica, 2025).

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

Orica requires its subcontractors to develop emergency response plans that interface with Orica's, meaning that Aurizon is required to periodically evaluate their response procedures and capabilities and revise them as needed as detailed in Orica's Emergency Response Guide (Orica, 2025).

4.9 Conclusion

Based on the evidence reviewed, this due diligence did not find significant issues of concern regarding the management of solid sodium cyanide product by Aurizon. This assessment should not be a final acceptance for future work; rather it is recommended that Orica continue to review and monitor performance periodically and implement an adaptive management process.

5 References

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6 Important information

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Appendix A

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