

Policy

Freight Preparation

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Development of this policy is an interactive and ongoing process. It will be updated and modified from time to time to take into account developments in the law and best practice regarding heavy vehicle road laws. If you have any suggestions, comments or queries about this document, please contact Rio Tinto Procurement.

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Preamble

Freight destined for Rio Tinto sites in Australasia and road freight returning from Rio Tinto sites typically travels significant distances and passes through several points of handling before reaching its final destination. What may be considered sufficient preparation for a metro or short distance delivery will not always suffice for freight dispatched to regional or remote areas of Australasia. For example, where freight is transported over long distances, a metal strap over an item on a softwood pallet will often be in a poor state before reaching its final destination.

This, in turn, can present a hazard to supply staff, transport providers who handle the freight, other road users and the general public.

With this in mind, freight must be presented in such a manner that it:

- can withstand road transport over long distances and rough terrain;
- can be safely lifted on and off transport vehicles;
- minimises the risk of injury to those involved in freight and handling;
- minimises the risk of damage to that particular item; and
- minimises the risk of damage to other freight, other road users or the general public.

This policy covers the **minimum** requirements for the presentation and packaging of inbound and outbound goods and equipment for delivery into or within Australasia.

It is the consignor's responsibility to comply with this policy and the specific requirements of the relevant Australian and New Zealand Standards and legislation for the goods, equipment or materials being transported.

This policy also states the requirements for documentation, marking and protection to be observed for all freight to and from Rio Tinto sites within Australasia.

If the supplier is in doubt about any aspect of this policy, they are to check with the respective RTP team member

1 Introduction

1.1 Purpose

The purpose of this document is to articulate the policy and procedure for Rio Tinto and its Australasian Business Units (BUs). This policy and procedure covers the preparing of materials, equipment and machinery for dispatch via a third-party logistics provider (3PL), external transport provider or Rio Tinto-owned and operated vehicle.

This includes the approach taken with regards to:

- compliance with legal obligations of consignors/receivers and loader/packers under Chain of Responsibility legislation; and
- duty of care as defined by the relevant Australian State/Territory and New Zealand Occupational Safety & Health Act.

1.2 Aim

The aim of this freight preparation policy and procedure is to:

- protect our staff, environment, contractors and members of the public from the risk of accidents and incidents occurring as a result of non-compliance by Rio Tinto and our suppliers of goods and services with existing relevant Australian & New Zealand Standards, Legislation and guidelines;
- take all reasonable steps to ensure that Rio Tinto personnel, when consigning goods from BU sites, comply with this policy;
- ensure that staff and contractors of Rio Tinto and its Australasian BUs comply with all heavy vehicle laws, including those relating to mass, dimension and load restraint;
- take all reasonable steps to ensure that our suppliers of goods and services comply with the above; and
- assist Rio Tinto, its BUs and suppliers to comply with the Chain of Responsibility Laws in Australasia.

Compliance with this document will also reduce delays in the receipts' processing. This, in turn, means that invoice payments will not be unduly delayed and expediting /late reminder/delivery disputes will be avoided.

1.3 Scope

The scope of this document covers all freight that moves to or from a Rio Tinto site of operation. It is to be read and followed by suppliers, transporters and requisitioners, particularly by staff involved in packing and securing items for transportation.

Note: Individual BUs may, from time to time, issue requirements which are additional and more prescriptive than those described in this policy. In these cases the requirement of both this policy and the additional requirement will need to be complied with.

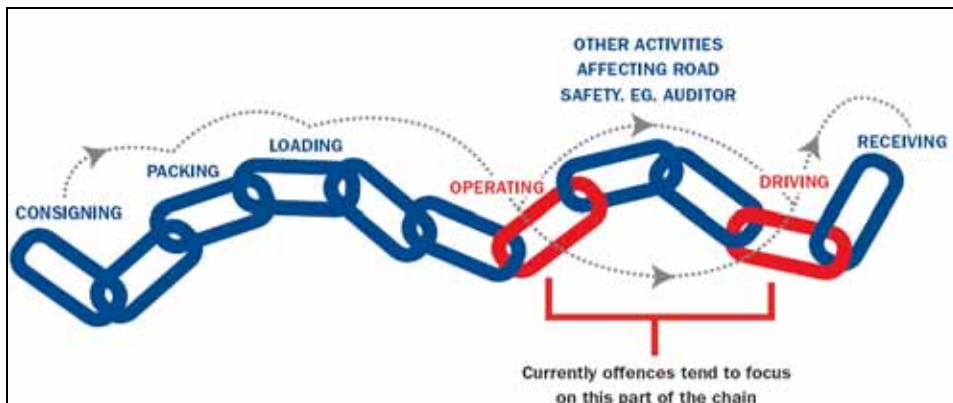
1.4 Principles

Central to this document is the acceptance of the accountability of all parties in **managing risks** and the demonstration of a high level of **duty of care** in accordance with Chain of Responsibility legislation.

1.5 Chain of Responsibility

Chain of Responsibility (COR) is legislation either in place, or pending, in all Australian States and Territories. New Zealand has similar legislation that is contained in the NZ Land Transport Act 1998.

Amongst other aims, the COR legislation aims to improve road safety and minimise negative impact on the environment, road infrastructure and traffic management associated with breaches of heavy vehicle road laws. By recognising the parties within the chain and making these parties responsible for their actions the COR legislation aims to encourage 'effective and efficient compliance with heavy vehicle road transport law.'



If a person plays a role in the transport of goods (or passengers) by road, then they are part of the "Chain of Responsibility" (COR).

Control = Responsibility = Legal Liability

Under the COR laws, all parties with some control in the transport chain now have legal responsibilities to ensure compliance with relevant heavy vehicle road laws, including compliance with mass, dimension and load restraint obligations. This includes people involved in consigning, loading, packing and receiving freight (or managing those activities), as well as drivers of those vehicles (including, for example, in relation to speeding and fatigue management).

This document is aimed specifically at Consignors (including OEMs, packers and loaders and their supervisors) for inbound and outbound goods. This extends from Rio Tinto BUs to the suppliers of goods and services to the BUs.

Compliance with this policy does not, in isolation, cover all components of COR legislation

1.6 Training

All persons who form part of the 'chain' shall be trained in the legislative and practical aspects of the legislation.

Persons that shall be trained in COR include:

- consignors and receivers of freight;
- loaders and packers of freight;
- drivers of heavy vehicles; and
- supervisors and managers of the above.

2 Inspection and Off-Site Receiving (OSR), (if applicable)

The freight inspection process involves a three-way match between the vendor paperwork, physical items and the Rio Tinto enterprise resource planning (ERP) system. Any packaging that does not meet the requirements of this policy must be rejected. The supplier will then be required to make arrangements to prepare the item adequately to meet the requirements of this document (at the supplier's own cost).

It should be noted that non-inspection (or inspection and clearance) of any freight does not constitute acceptance by Rio Tinto that the freight has been properly prepared for transport. The consignor remains responsible for the consequences of improperly prepared freight.

For some freight, freight inspection and the three-way match may not be possible without compromising the quality or integrity of the packaging. In these instances, inspection will be carried out when the freight reaches the final destination

Freight destined for RTA Weipa and Gove that is consigned via the Rio Tinto-preferred 3PL is subject to periodic inspection. This process is overseen by the Rio Tinto appointed OSR contractor

Freight destined for NZAS that is consigned via the Rio Tinto-preferred 3PL is subject to periodic inspection. This process is overseen by RTP staff in Invercargill.

Freight destined for Argyle Diamond Mine (ADM) Dampier Salt (DSL) and Pilbara Iron (PI) Mine Sites that is consigned via the Rio Tinto-preferred 3PL is subject to periodic inspection. This process is overseen by a Rio Tinto-appointed, central receiving quality control officer.

2.1 Inspection Waivers

Where consistent transaction volume warrants, an inspection waiver may be granted to suppliers who undergo an audit of their picking and packing operations and who consistently perform at a very high level of accuracy.

3 Documentation

3.1 General

Shipping documentation and delivery dockets must be securely attached to the outside of all packaged items in a weather-resistant, sealed envelope or, to the goods, if packing is not required and must not be obscured. (Where a windowed envelope is used, the delivery address must remain visible.)

Freight containers must have delivery dockets and packing lists inside weather-resistant envelopes, attached to the internal wall.

Where packing is required, duplicate copies of shipping documentation, delivery dockets/invoices should also be placed inside the packaging in the event the external documents are misplaced.

Each purchase order must be packaged separately.

3.2 Delivery Dockets

The following information must be shown on the delivery docket with respect to each package:

- purchase order number;
- type of package (for example, box, bundle);
- a full description, the quantity and exact contents of each package;
- weight (kg) and/or dimensions;
- “ship to” address;
- stock item number;
- contact name;
- dangerous goods classification (if applicable); and
- MSDS paperwork (if applicable).

If a unit of equipment has to be shipped in more than one package, then the documents for the equipment must be forwarded with the first package and must indicate the number of packages to be expected.

3.3 Material Safety Data Sheet (MSDS)

The person (s) responsible for the packaging of any goods or materials requiring an MSDS are to ensure a copy of the MSDS is attached to

- a) the item
- b) the paperwork

4 Marking

The supplier must ensure that all packages dispatched as part of a Purchase Order are marked in a clearly legible manner.

To avoid confusion, markings and references from previous freight movements must, where practicable, be covered, made illegible or removed.

4.1 Marking of all Items

Items that will be handled as parcel freight must be clearly marked, in English on at least one side.

All items packaged in boxes or crates, palletised goods and unit items must be clearly marked, in English on two sides, as follows:

- purchase order number (as quoted to be marked externally on all packages);
- “ship to” address;
- item description;
- supplier name;
- case / box / package number (for example, 1 of 4);

- dimensions: length x width x height (metric);
- weight (kg); and
- dangerous goods classification (if applicable) and placarding.
- A completed “Freight Preparation checklist” (example at Appendix A) shall be attached to each unit of freight

Fragile or heavy items must be clearly marked or labelled ‘fragile’ or ‘heavy’ or Handle with Care for ease of handling

Where items are above 1.5m high, markings must be in a position so as to permit visibility to forklift operators.

The marking shall be durable, waterproof, fade resistant and able to withstand prolonged storage in bright sunlight and harsh conditions. The colour shall be in sharp contrast to the background on which it is marked

Any tags used shall be non rusting or durable plastic to avoid wear and tear.

4.1.1 Kits

Items that are part of a kit must be clearly marked and consolidated into one packing unit (for example, a 500-hour filter kit that comprises 7 separate filters must include all filters for the kit). In the event numerous sets of the same kit are purchased, each kit must be separately packed.

All kits must have a BOM packing list that lists and describes each item that comprises the kit. This packing list must be inside the kit box.

If the kit size does not permit consolidation into one packing unit, each item must be clearly marked as forming part of a kit.

5 Packing

5.1 General

Prior to packing, the supplier must ensure that all items for the Purchase Order are prepared, protected and marked in accordance with the following clauses listed.

- All packaging must be capable of withstanding road transport over long distances and rough terrain.
- All packaging must be suitable for multiple handling movements. Freight can be unloaded and reloaded as it is consolidated and/or trans-shipped through regional or capital city depots.
- All packaging must be capable of being safely lifted on and off transport vehicles and being safely transported without rolling, tipping, sliding or spilling.
- All packaging materials should be environmentally friendly. Substitutes for polystyrene foam and plastic beads are to be used whenever possible.
- Packaging methods used must ensure safe delivery of the goods to the Site. They must take into account the value of the item and the weight and size limits of cargo that can be transported to the Site.

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- No employee or contractor may be called on or permitted to manually handle an item likely to affect his or her health or safety. After a risk assessment and Take 5, any package deemed unable to be handled by one person must be packaged suitable for either crane or forklift handling. If safe forklift handling is not possible, approved lifting and slinging lugs must be fitted by the supplier to facilitate safe crane handling.
- All items that require mechanical lifting must have forklift access points, lifting lugs that must be approved or have suitable access for slings. For standard forklifts access points must be sufficient to allow the use of tines that are 210mm wide x 80mm high. For 20 tonne forklifts access points must be sufficient to allow the use of tines that are 250mm wide x 120mm high.
- Where multiple items are packaged in the one package (carton, crate or skid), heavy items must be packed at the bottom of the package.
- Heavy or large/awkward items that do not fit in a case or crate must be strapped with steel strapping to a skid or pallet. The skid or pallet must be strong enough to support the weight of the item and multiple handling movements.
- Securing devices applied to articles packed shall not abrade or otherwise damage the equipment and/or materials
- Consignments of multiple packages wherever possible must be either:
 - placed in a secure cage; or
 - palletised for ease of handling.
- Shrinkwrapping of heavy items onto a pallet is not considered to be suitable.

5.2 Material Specific

Rio Tinto maintains an ongoing process of developing material specific guidelines for selected material groups that are deemed to present a safety risk to handlers and transporters. These material specific guidelines are meant as guidelines only. Wherever possible, Rio Tinto endeavours to work with suppliers to continue to develop better practices and, accordingly, suppliers are encouraged to contact Rio Tinto to develop guidelines for their materials.

5.3 Packaging Methods

5.3.1 Cases, Boxes and Crates

All boxes and crates must be fitted with skids suitable for lifting by forklifts. The design of timber boxes must take into consideration the method of lifting. Where slings are to be used on crates, particularly those weighing over 300kg, the top edges must be sufficiently reinforced to withstand loads applied by slinging.

Where timber is used, either internally and externally, it must be free of bark and insect infestation. Plastic or steel cases, boxes or crates are a preferred option.

Contents must for, purposes of handling and transportation, fit snugly inside the case and must be restrained from movement by blocking the items. Where metal or prepared paintwork may come into contact with the case timbers, it must be protected from abrasion by felt pads, foam rubber, plastic or cardboard.

Cases or cages must be used for delivery of bulk items and, if used, must be firmly secured on pallets. If the cases or cages are reusable, then arrangements must be made for their return to the supplier prior to subsequent order placements.

Timber crates/cases

All timber crates and cases must be of close-jointed, solid timber, preferably hardwood, suitable to adequately support the item. All timber crates and cases must have an SWL exceeding the weight of the item. Cases must be fully closed (for example, not partially open-topped construction) and the base of all cases and crates must be constructed for lifting by forklift, unless otherwise approved by the Rio Tinto Company Representative.

Timber cases, boxes and crates must be secured with straps capable of bearing the unrestrained weight of the item. Straps must be secured in a manner consistent with the strapping material type. For example, metal straps must utilise crimped steel seal or nylon and propylene straps must be secured using either crimping or appropriate heat technology.

Wherever possible, screws, not nails, should be used when sealing timber crates/cases.

5.3.2 Cages

Where the amount of items in a cage is insufficient to effectively block the items from moving, then the items must either be restrained to the base of cage by way of straps or by blocking, using timber or similar to prevent movement.

5.4 Equipment Protection

Equipment must be suitably protected and packaged to prevent damage or corrosion during transport and be protected from climatic damage during storage on-Site. If there are specific packaging requirements these are to be placed on the Purchase Order. In the event of no specific requirements the following guidelines apply -

- Where applicable all machined surfaces, bearings and electrical components must be protected against the ingress of salt air, water vapour, seawater, moisture and other corrosive and harmful substances.
- Where applicable all bearings must be protected against “brinelling” by suitable locking of shafts or false bearings used to relieve bearings of the load during transportation.
- All doors on equipment must be locked, the keys labelled and securely taped to the door handles. Keys must not be left in locks during transport.
- All painted items must be packed and handled in such a way that minimises damage to the surface.
- All openings must be sealed. Engines, drivelines, pumps, valves and similar should be plugged or capped and filters replaced where appropriate prior to dispatch. This is to avoid wind sucking fluid from items while on the back of trucks.
- Equipment such as electrical switchboards and panels, office machines and precision instruments must be packed within a moisture/vapour-proof barrier with a suitable desiccant to absorb moisture within the package. The packaging of this type of equipment and the application of desiccants must comply with AS2400.18 – SAA Packaging code-Part18-Use of desiccants in packaging.
- Openings in electric motors, generators and other electrical equipment must be sealed with waterproof tape or in some equally effective manner.
- Where possible, goods containing oils or lubricants such as gearboxes, hydraulic components or transmissions, should be drained before transport, and carry a tag stating "NO OIL".

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- Where goods containing oils or lubricants such as gearboxes, hydraulic components or transmissions are being dispatched for *repair and have leaking seals or can be expected to leak oil during transport, these must be drained before transport* and carry a tag stating "NO OIL".
- Gearboxes, exciters, suitable hydraulic components and transmissions must contain in quantities sufficient to ensure effectiveness, the corrosion inhibitor "Shell VSI 8235" or a Site-specific equivalent, for internal corrosion protection for a shelf life of at least 6 months. A tag nominating the presence of corrosion inhibitor and the date it was applied must be clearly displayed. Ensure all vents breathers and openings are plugged. Breathers to be attached to the gearbox in a clean plastic bag with a tag stipulating "attach to gearbox after installation". This is to due to the corrosion inhibitor being effective only in a closed area.
- Exposed machined surfaces must be coated with the corrosion inhibitor "Valvoline Tectyl 506" or a Site-specific equivalent. Hydraulic and pneumatic cylinder rods must be in the fully retracted position
- Goods contaminated with grease, waste oil, solid lubricants or other process contaminants and that are being consigned from mine sites must be cleaned before transport to prevent environmental damage during the entire supply chain.

5.5 Fragile/Sensitive Components

All instruments, protection relays or other fragile parts must be placed in sealed plastic bags and packed in plastic cushioning, or some equally effective shock absorbent material, in timber boxes. Polystyrene foam alternatives are to be used where available. All fragile components must be securely supported to prevent damage in transit and must be packed in separate crates and not with heavy items.

The sensitive nature of the freight must be clearly marked on the outside of the packaging.

5.6 Contents

To minimise the risk of theft or loss, small packages and components and those considered attractive must be packaged separately or consolidated into larger containers; NOT packed inside equipment such as pumps, electrical cubicles or other items.

5.7 Shelf Life

Any shelf life or preservation requirements must be clearly indicated on or with each applicable item.

5.8 Freight Containers

Containerised items must be blocked, bracketed and/or bolted to prevent movement within the container. Items that cannot be anchored or blocked, or where size or weight prohibits containerisation, must be packed and shipped separately.

For further information refer The IMO/ILO/ UN ECE Guidelines for Packing of Cargo Transport Units

Prior to international shipping of containers, the supplier must provide a packing plan to the Freight Forwarding agent for review.

5.9 Air Shipments

Items for air transport must be packed to acceptable airline industry standards in such a way as to afford maximum mechanical protection, ease of handling and the minimisation of total weight of shipping units.

5.10 Palletised Items

It is preferred that pallets are non returnable, however some delivery points may choose to accept hire pallets. In these cases the pallets will be made available for return and the return of hire pallets is to be managed by the 3PL service provider.

Items conducive to damage from moisture, dirt and dust and which can be conventionally secured to a pallet to facilitate handling, must be packed in this manner.

Pallets must be, preferably hardwood, suitable to adequately support the item and with an SWL exceeding the weight of the item. Pallets must be two-way, flush sided and under railed.

Items that require mechanical lifting during handling must be palletised. Pallets are to be used for items that:

- cannot be handled manually by one person or designed to be lifted by a forklift;
- have dimensions that allow stable loading on the pallet, and
- do not exert excessive point loads on the pallet.

Palletised items must be secure on the pallet to prevent movement.

Cylindrical items and items likely to roll or fall must be chocked and strapped with steel straps capable of bearing the unrestrained weight of the item to the pallet. Chocks should be fixed directly onto the pallet.

The approved strapping method is secured to the bearers; not the boards. The strapping must ensure complete security and no chance of items falling off the pallet.

Loads must not overhang the forklift entry points of the pallet.

Individual contents of each pallet must be clearly marked.

Where timber is used, either internally and externally, it must be free of bark and insect infestation.

Where possible steel pallets and skids should be used for the packaging of large and heavy items.

5.11 Sacks

Where protection from dust, dirt or moisture is necessary, liners must be used on the inside of the sacks and bags.

5.12 Bundling

Each bundle must be treated as an individual package and marked accordingly.

All items must be segregated in accordance with length and size and bundled into units using steel straps capable of bearing the unrestrained weight of the item.

5.13 Special Handling Instructions

Packages must be conspicuously marked with: "Handle with Care"; "Right Side Up"; "Keep Dry" and others in English and with the appropriate international standard symbols to prevent possible damage.

Pictorial markings complying with AS 2852 Packaging – Pictorial marking for the handling of packages must be used to fully convey information regarding specific handling requirements.

Lifting and slinging requirements must be clearly marked on goods.

5.14 Centre of Gravity

Equipment and materials must be packed to ensure an even weight distribution within the package.

Where this is not possible, particularly in the instance where a case or crate conceals the internal goods, the supplier must ensure that the centre of gravity and hoisting position are marked on two sides to ensure loading, unloading and handling can be done in a safe manner. For example, top-heavy containers or unbalanced loads must be clearly marked with centre of gravity including sling marks to facilitate safe loading, unloading and handling.

5.15 Large Equipment

Large equipment requiring disassembly before transport must be clearly match-marked prior to disassembly to facilitate efficient reassembly on Site.

Loose accessories in each package must be identified individually, by a metal or weather resistant label indicating the purchase order number, tag number, name of the main equipment, names of accessories, quantity and its position number on assembly drawings.

5.16 Furniture

Furniture and office equipment shall be transported in covered vans fitted with trolleys and blankets designed for the purpose. Furniture deliveries are to be consolidated by the 3PL service provider and delivered to the delivery point in a dedicated furniture vehicle.

Furniture with readily detachable components shall be disassembled for packing and transportation to minimise damage in transit and for ease of handling.

6 Freight in Frames

If the item to be transported requires a frame the vendor is to liaise with the RTP representative to confirm the type and specifications of the frame. The specifications and associated costs of the frame are to be reflected on the purchase order

Purpose-built transport frames must be designed, checked and manufactured to Australian Standard AS4991 (Lifting Devices). They must also incorporate load restraints and lashing points as described in the National Transport Commission publication "Load Restraint Guide" 2004 edition. Spreader beams or transport frames incorporating lifting beams must also conform to AS1418 (Cranes Hoists & Winches).

Wherever possible manufacture and structural integrity of all transport frames must conform to AS3990 (Mechanical Steelwork) including non-destructive testing of lifting lugs.

If frames appear not to have been manufactured to the above standards, or there is doubt regarding the adequacy of a transport frame, the Rio Tinto-preferred 3PL is empowered to act on behalf of Rio Tinto and request a formal inspection and verification certificate.

If the frame is assessed to be non compliant with the standard the Rio Tinto preferred 3PL is empowered to reject the freight, and contact the RT representative

6.1 Modifications to Frames

No modifications must be carried out to Original Equipment Manufacturers (OEM) frames other than by the OEM themselves.

No modifications must be carried out to BU-owned frames unless it is approved by an authorised and qualified Rio Tinto Maintenance or Engineering representative. Relevant BU change management processes must also be followed.

6.2 Single-Use Frames

Packing that typically accompanies equipment delivered from overseas OEM to local vendors in containers will not normally suffice for long distance road haulage.

If the supplier chooses to use a single-use frame, it must be built to a standard that will safely transport goods from point of origin to final destination. If a suitable single-use frame is not available, a multiple-use frame must be used.

These frames must conform to the Australian and New Zealand Standards described above.

6.3 Multiple-Use Frames

Whenever an item is placed in a frame, an independent inspection is to be carried out by a Supervisor, or person deemed to be competent, to ensure that the item has been prepared correctly for transport, the item is secure that a Frame Checklist or similar (see Appendix 1) has been completed.

Suppliers and BUs using frames intended for multiple use must maintain a Transport Frame Procedure that, as a minimum, should include the following information:

- design standard;
- frame register;
- engineering calculations;
- engineering drawings; and
- tag system (for repair agency and BU use).

All transport frames must be engineered and fit for purpose. Inspection regimes for frame integrity must be implemented by the Supplier and should be auditable by Rio Tinto.

Freight retained in supporting frames should be secured using washers combined with an appropriate minimum torque on the stud or nut to retain the item in the frame.

Nylok nuts, castellated nuts or similar must be used to ensure the retaining nuts do not vibrate loose in transit.

Lifting and tie-down points must be clearly indicated on the frame.

Frames owned by Rio Tinto or its BUs are to be inspected as part of the Scope of Works (SOW) and their fit-for-purpose condition, or otherwise, noted. The serial number must be noted in the quotation response. If a frame is received that does not have a serial number, contact the person nominated on the purchase order to arrange the issuing of a number.

7 Dangerous Goods

The packaging and transport requirements for the carriage of dangerous goods by road, rail and air shall be in accordance with the latest issues of the relevant Dangerous Goods transport legislation and codes.

All Dangerous Goods shall be identified by correct shipping name, labelled, packaged and packed in full compliance with the directives of the appropriate authority.

8 Load restraint

Correct restraint of packages and items onto transport vehicles is critical.

The National Transport Commission (NTC) Load Restraint Guide should be used as a reference to assist with material specific packaging and restraint guidelines.

- Load restraint equipment such as Loadbinders, chains, ropes, gates must be compliant and in suitable condition to perform the task. Dunnage is to be used to assist with the restraint of items. Loose dunnage is to be placed in an approved dunnage cage.
- Due to safety risks associated with the use of 'overcentre' loadbinders (dog and chain), this type of load restraint equipment must not be used. Ratchet tie down devices such as the "Ausbinder" or "Ev-Cam" should be used in their place,
- Any lengths of steel should be correctly secured to its own dunnage for ease of loading and transportation.

8.1 9. Relevant Standards & Other Related Documents

In preparing this document, the following documents have been used as resources:

- AS 2852 Packaging – Pictorial marking for the handling of packages;
- AS4068 - Flat pallets for materials handling;
- AS4762 – General-purpose flat pallets – Principal dimensions and tolerances (International Pallet sizes);
- AS2400.1 Packaging-Part1: Glossary of packaging terms;
- AS2400.6 – SAA Packaging code-Part6-Paper and Paperboard;
- AS2400.7 – Packaging-Part7: Timber boxes;
- AS2400.10 – Packaging-Part10: Protection against shock and vibration (cushioning);
- AS2400.18 – SAA Packaging code-Part18-Use of desiccants in packaging;
- AS4991 - Lifting Devices;
- AS1418 - Cranes Hoists & Winches;
- Relevant Australian State/Territory and New Zealand Occupational Safety & Health Regulations ;
- Australian and New Zealand WorkSafe - General Duty of Care Guidance Notes;
- Australian National Transport Commission - Load Restraint Guide ;
- Australian and New Zealand Code for the transport of Dangerous Goods by Road, Rail or Air;
- Emergency Procedure Guides (EPG) Australian Standard 1678;
- NZ55.020 – Packaging and Distribution of Goods;
- NZ55.040 – Packaging Materials and Accessories;

- NZ55.180.10 – General Purpose Containers;
- NZ55.180.20 – General Purpose Pallets;
- NZ55.180.99 – Other Standards related to freight distribution of Goods;
- NZ53.020 – Materials Handling Equipment; and
- NZ5444. – Load anchorage points for Vehicles.
- The IMO/ILO/ UN ECE Guidelines for Packing of Cargo Transport Units
- Rio Tinto standard Terms and Conditions

NB: New Zealand suppliers and Rio Tinto personnel are expected to comply with the Australian standards when no equivalent New Zealand Standard applies.

8.2 Definitions & Terms

Bearer	<i>A member separating the top and bottom decks of a pallet and providing space for entry of tines (forks). Bearers may consist of blocks or continuous beams</i>
Blocking	<i>(a) A method of interior packaging that builds up irregularly shaped articles to a regular shape to protect projections from damage, to reinforce weak parts and to maintain objects in fixed positions during transit, by bracing them against each other or against the sides of the container.</i> <i>(b) An undesired adhesion between touching layers of material, such as might occur due to the effects of pressure, and sometimes temperature, during storage or use.</i>
Bonded rubber units	<i>Solid rubber mouldings to which are bonded two metal parts for securing the rubber to the inner and outer frame of a packing case or crate in suspension packaging.</i>
Business Unit	<i>Any Rio Tinto operating site within Australasia.</i>
Box - shipping	<i>A re-usable non-collapsible container equipped to be handled by overhead hoist or forklift truck.</i>
Case	<i>A rigid, heavyweight timber box which has panels that are totally closed, as distinct from those of a crate.</i>
Case - timber-framed	<i>A box consisting of substantial frame members designed to withstand the design load with sheathing applied to give strength and complete coverage.</i>
Climatic damage	<i>Damage caused by the effects of climate (for example, temperature, humidity, rain, wind or water immersions, solar radiation, sand, dust or salt spray and corrosive atmospheres).</i>
Corrosion preventive	<i>Substance which, by intimate contact with metal surfaces, protects them from corrosion by acting as an impervious barrier by modification of the metal surface, for example. by absorption or by superficial oxide formation.</i>

Pallet - two-way	<i>A pallet with bearers that permit the entry of tines from two opposite directions only.</i>
Quality assurance	<i>All activities and functions concerned with the attainment and proof of the required quality.</i>
Requisitioner	<i>Rio Tinto staff requesting goods and materials to be purchased.</i>
Rio Tinto	<i>The dual listed company structure incorporating Rio Tinto plc and Rio Tinto Limited and including:</i> <i>(a) any Related Body Corporate of Rio Tinto plc or Rio Tinto Limited;</i> <i>(b) any unincorporated joint venture in which Rio Tinto plc or Rio Tinto Limited or any Related Body Corporate of Rio Tinto plc or Rio Tinto Limited has a participating interest of not less than 50%;and</i> <i>(c) any body corporate or unincorporated joint venture managed by Rio Tinto plc or Rio Tinto Limited or any Related Body Corporate of Rio Tinto plc or Rio Tinto Limited.</i>
Rio Tinto Limited	<i>Rio Tinto Limited (ABN 96 004 458 404) having its registered office at 33rd Floor, 120 Collins Street, Melbourne, Victoria 3000.</i>
Rio Tinto plc	<i>Rio Tinto plc (Company No. 719885) of 6 St. James's Square, London SW1Y 4LD, United Kingdom.</i>
Safe Working Load (SWL)	<i>Is the breaking load of a component divided by an appropriate factor of safety giving a "safe" load that can be carried or lifted.</i>
Working Load limit (WLL)	<i>The maximum load that an item can lift in a particular configuration or application.</i>
Take 5	<i>Pre Task Hazard Assessment with the following steps:</i> <i>a) think through the task;</i> <i>b) spot the hazard;</i> <i>c) assess the risk;</i> <i>d) make the changes; and</i> <i>e) do job safely.</i>

9 Appendix 1

FREIGHT PREPARATION CHECKLIST

	YES	NO	N/A
Pallet/crate/stand selection appropriate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Free of bends/buckles/cracked welds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Forklift access points not damaged	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All boards present	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Load secure on pallet/frame	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Washers/lock nuts used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nuts torqued to required level	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oils/lubricants			
Drained	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plugged	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pressure cleaned	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transportation documentation accurate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All items listed on connote	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
< 250kg accurate to +/- 20kg	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
>250kg <1000kg accurate to +/- 50kg	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
>1000kg accurate to +/- 3%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Prepared by (print name):
Date:

10 Appendix 2

a) Examples of Acceptable Freight Preparation







b) Examples of unacceptable Freight Preparation



This bag contained mixed fittings and was unmarked





Damage caused to mating surface of fuel hose that could have been avoided with better packaging

