14.5.1 **INTRODUCTION**

14.5.1.1 This standard specifies the safety controls associated with freight / cargo loading operations at KUC properties and presents working references supporting KUC standards and requirements for the safe loading of trucks carrying general freight / cargo.

14.5.2 **DEFINITIONS**

14.5.2.1 **Authorized KUC representative** – A KUC employee, contractor partner, or a Rio Tinto employee who is trained and authorized by KUC to administer this standard. (Person(s) that has been assigned responsibility, by the Site Owner, for performing the requirements of this Standard in a specific area)

14.5.2.2 **Commercial Truck Drivers** – Truck drivers who only received site specific Hazard Training and are not directly involved in loading operations (except for the possible removal / installation of gates, load securing devices, tarps etc. when instructed to do so).

14.5.2.3 **Escort** – A person assigned by the Site Owner to guide drivers to and from their destination within a KUC facility.

14.5.2.4 **Loading Operation** - Includes all types of general freight / cargo loads that require a forklift or crane to load. Loading Operations does not include commodities in bulk that lack structure or fixed shape (e.g. liquids, gases, sand, gravel, aggregates) that are transported in a tank, hopper, box or similar device.

14.5.2.5 **Load Risk Assessment** - A formal (written) risk assessment conducted before the start of any “loading operation”.

14.5.2.6 **Site Owner** – The site based KUC representative that has been assigned accountability for implementing and using this Standard in their area. The Site Owner is accountable for the loading activities. (See Site Owner – Safety and Health Standard 14.4)

14.5.3 **REQUIREMENTS**

14.5.3.1 This standard applies to KUC personnel, Rio Tinto personnel in KUC facilities, commercial truck drivers, and contractors participating in “loading operations”. (For “unloading operations” refer to Safety and Health Standard 14.4)

14.5.3.2 **Load Risk Assessment** - Before the start of a “loading operation”, a Load Risk Assessment must be completed. A sample of a Load Risk
Assessment is attached, but as regulations or potential risks may change from site to site, this should be taken as an example only and each Site Owner should finalize as appropriate.

- The Load Risk Assessment is to be completed by an authorized KUC representative and the truck driver.
- Where the authorized KUC representative is not the person who will operate the forklift or crane those operator(s) should also take part in the risk assessment.
- Any identified hazards and the corrective actions required to be taken, must be detailed on the Load Risk Assessment. The Load Risk Assessment is to be signed off by all persons involved in the loading operation to ensure that everyone participating is aware of the identified hazards and the selected safety controls.
- The Load Risk Assessment is to be maintained for a minimum period of 30 days if loading activity has no incident (or with the investigation if loading activity has incident).

14.5.3.3 A Load Risk Assessment is not required for recurring loading operations (i.e. same load in same location) where an applicable risk based loading JSA / SOPs or risk assessment has been generated and reviewed with all persons involved in the loading operation.

14.5.3.4 Exclusion zones - Pedestrian exclusion zones are to be set and demarcated through the use of barricading or by the use of spotters during loading operations. Anyone not directly involved in the loading operation is not to enter these exclusion zones unless the forklift or crane operator has signaled that it is safe to enter and the forklift or crane operation has ceased all movement.

- Loading operators will immediately stop work if the location of the driver cannot be confirmed or any pedestrian or vehicle enters the exclusion zone without permission.
- The commercial truck driver is to remain outside the exclusion zone in a designated location (safety zone) during the loading operation unless otherwise instructed by the operator.

14.5.3.5 Training - All commercial truck drivers, as a minimum, must report to site security or other agreed upon location for visitor induction hazard training and at the discretion of the Site Owner be escorted when on site.

- When an escort is assigned they will instruct the driver to stay in the vehicle cab until notified that it is safe to exit and then remain with the
driver at all times; and communicate and enforce all applicable KUC Requirements.

- The truck driver must be wearing the correct PPE in accordance with site standards when exiting the vehicle cab.
- All forklift and crane operators must be trained and meet all regulatory and site compliance standards for any equipment that will be operated, have all required site specific license training, and task training on the safe loading and unloading of trucks.
- All persons performing rigging must be trained, competent and authorized if they set-up or rig loads; provide signals for controlling lifts; or inspect lifting or rigging equipment.

14.5.3.6 The following requirements apply when performing the task of loading any vehicle:

- Trucks are to be loaded on level surface or safe surface that is as close to level as practicable.
- Truck wheels are to be chocked and brakes set.
- Forklift and crane operators are to ensure that their equipment is inspected and of suitable capacity to load the freight. (Know the weight of the load)
- Persons performing rigging are to check and ensure that all rigging is inspected and all connections are correct prior to commencing a lift.
- If a hazard is identified during loading, the KUC representative is to be contacted to assist in an agreed upon corrective action.

14.5.3.7 **Loading team** - The loading team may consist of:

- An authorized KUC representative.
- A trained loading operator (i.e. forklift / crane operator).
- Riggers assigned to assist the crane operator.
- Spotters / escorts – site control personnel.
- The truck driver.

14.5.3.8 **Completion of loading** - Once loading is complete drivers are responsible to physically check that their load is secure, and verify that there is no damage sustained to the consignment. Also, that all load restraint equipment (i.e. tarps, straps, dunnage) is properly applied and secured before driving / moving the vehicle.

14.5.3.9 Drivers will ensure that all loads entering public highways comply with all DOT Federal Motor Carriers Cargo securement Rules.

- All vehicle structures, systems, parts and components used to secure cargo must be in proper working order.
Requirements concerning securement, working load limits, blocking and bracing are applicable to all loads being transported. All cargo securement systems must meet the requirements, except to the extent a commodity-specific rule imposes additional requirements that prescribe in more detail the securement method to be used.

Each tie down must be attached and secured in a manner that prevents it from becoming loose, unfastening, opening or releasing while the vehicle is in transit. Also, edge protection must be used whenever a tie down would be subject to abrasion or cutting at the point where it touches an article of cargo and or transport trailer.

The cargo securement system used to restrain cargo against movement must meet requirements concerning the minimum number of tiedowns. When an article of cargo is not blocked or positioned to prevent movement in the forward direction, the number of tiedowns needed depends on the length and weight of the articles and must meet DOT requirements.

Cargo must be firmly immobilized or secured on or within a vehicle by structures of adequate strength, dunnage (loose materials used to support and protect cargo) or dunnage bags (inflatable bags intended to fill space between articles of cargo or between cargo and the wall of the vehicle), shoring bars, tie downs or a combination of these.

Articles of cargo that are likely to roll must be restrained by chocks, wedges, a cradle or other equivalent means to prevent rolling. The means of preventing rolling must not be capable of becoming unintentionally unfastened or loose while the vehicle is in transit.

Articles of cargo placed beside each other and secured by transverse tie downs must be:
- Placed in direct contact with each other, or
- Prevented from shifting towards each other while in transit.

REFERENCES
Safety and Health Standard 14.4 Delivery Driver Unloading Standard
DOT Federal Motor Carriers Safety Regulations (FMCSRs)

REVISION HISTORY:

<table>
<thead>
<tr>
<th>MOC#</th>
<th>Description of Change</th>
<th>Prepared By</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>11104</td>
<td>New Standard</td>
<td>KUC Safety and Health Standards Committee</td>
<td>12/09</td>
</tr>
</tbody>
</table>
Attachment 1

**Load Risk Assessment**

Date __/__/__  Vehicle No._________________  Loading area_______________________
Load Assessor Name______________________  Transport Company_________________

### General Requirements

<table>
<thead>
<tr>
<th></th>
<th>Y</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Is the Truck / Trailer parked on level solid ground, breaks set and wheels chocked?</td>
<td>✗</td>
</tr>
<tr>
<td>2</td>
<td>Has an area walkthrough been conducted and TRACK discussed?</td>
<td>✗</td>
</tr>
<tr>
<td>3</td>
<td>Is there any damage to the truck / trailer (tires, deck, side-rails)?</td>
<td>☑</td>
</tr>
<tr>
<td>4</td>
<td>Are the appropriate (trained) people and suitable capacity equipment available for loading?</td>
<td>✗</td>
</tr>
<tr>
<td>5</td>
<td>Have the appropriate inspections been completed for all equipment and rigging?</td>
<td>✗</td>
</tr>
<tr>
<td>6</td>
<td>Is the area demarcated through the use of barricading or by the use of spotters?</td>
<td>✗</td>
</tr>
</tbody>
</table>

### Loading

<table>
<thead>
<tr>
<th></th>
<th>Y</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Have fall from heights issues been addressed?</td>
<td>✗</td>
</tr>
<tr>
<td>2</td>
<td>Is freight to be loaded clean (decontaminated), well packed and secured?</td>
<td>✗</td>
</tr>
<tr>
<td>3</td>
<td>Are Dangerous Goods / Hazardous Materials being loaded? (If Yes complete a – g)</td>
<td>✗</td>
</tr>
<tr>
<td></td>
<td>a. Are the appropriate MSDS included with the dispatch documentation?</td>
<td>✗</td>
</tr>
<tr>
<td></td>
<td>b. Are the Goods packed in approved packing containers?</td>
<td>✗</td>
</tr>
<tr>
<td></td>
<td>c. Are the containers in an upright position?</td>
<td>✗</td>
</tr>
<tr>
<td></td>
<td>d. Are the containers correctly labeled?</td>
<td>✗</td>
</tr>
<tr>
<td></td>
<td>e. Is the truck carrying the Emergency Procedure Guidebook (EPG)?</td>
<td>✗</td>
</tr>
<tr>
<td></td>
<td>f. Does the truck have the correct labeling?</td>
<td>✗</td>
</tr>
<tr>
<td></td>
<td>g. Is additional PPE required?</td>
<td>✗</td>
</tr>
<tr>
<td>4</td>
<td>Are there any items that may have stored energy e.g. springs under tension fitted with warning labels?</td>
<td>✗</td>
</tr>
<tr>
<td>5</td>
<td>Is the load placed in a stable position?</td>
<td>✗</td>
</tr>
<tr>
<td>6</td>
<td>Does the total weight of the cargo exceed the trucks carrying capacity or axle loadings?</td>
<td>✗</td>
</tr>
</tbody>
</table>

**Any question answered in a cell highlighted red means a potential hazard has been identified and requires corrective action to be explained on opposite side**

Risks associated with the load have been identified and effective controls put in place.

KUC Representative  Name.................... Signature....................
Transport operators Rep.  Name.................... Signature....................
Equipment Operator  Name.................... Signature....................
A formal (written) risk assessment must be conducted before the start of any "loading operation". A Loading Operation includes all types of general freight / cargo loads that require a forklift or crane to load. Loading Operations does not include commodities in bulk that lack structure or fixed shape (e.g. liquids, gases, sand, gravel, aggregates) that are transported in a tank, hopper, box or similar device. A separate Load Risk Assessment is not required for recurring loading operations (i.e. same load in same location) where an applicable risk based loading JSA / SOPs or risk assessment has been generated and reviewed with all persons involved in the loading operation.