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Maintained by: Harbourmaster/Operations Manager

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## VARIATION RECORD:

Version No.	Version Date:	Brief Description of Change:
1.0	April 2013	This procedure has been separated from the Vessel loading and discharging operations SOP. A complete review occurred.
1.1	June 2013	Minor updates including clarification of use of gloves and number of trucks on wharf during cargo operations.
1.2	June 2013	Changed wording of assessment question.
1.3	August 2013	Changed wording of assessment question.
1.4	September 2014	KPA logo and position title changes. Minor additions including information on vessel manifest and information on unloading and loading dangerous goods and loading livestock and fodder.
1.5	March 2015	Change to truck operators responsibilities.
2.0	September 2015	Include Hazard line and housekeeping plus full review.
2.1	April 2016	Updated 7.2 Loading and unloading Tubular on Trucks to reflect new way of crossing over wire slings and securing through eye.

## 1. INTRODUCTION

### 1.1. Purpose

To ensure truck loading and unloading operations are completed safely and to eliminate the potential for injuries where vehicle and people interaction occurs.

### 1.2. Scope

This procedure applies to all Kimberley Ports Authority (KPA) employees, truck operators and other personnel involved in the loading and unloading operations of trucks on the wharf, in the maintenance yard and in any other Port operated areas where loading and unloading of trucks occurs. Cargo types could include containers, palletised cargo, bulk bags, casing and project cargo.

### 1.3. References

Loading, Unloading Exclusion Zones Guidelines (LUEZ) V1 November 2010. Safety Assist.

Load Restraint Guide, 2nd Edition 2004, National Transport Commission Australia.

Marine Order Part 32, issue 3, Cargo Handling Equipment, November 2011.

This Standard Operating Procedure (SOP) is to be used in reference to the following KPA SOPs:

- Crane Operations;
- Forklift Operations;
- Lifting Equipment Maintenance and Storage;
- Personal Protective Equipment (PPE); and
- Traffic Management SOP
- Hazard and Incident Reporting Procedure.

In addition, specific vessel JHA's will address overall vessel operations, including loading and discharge, in further detail.

Other documentation required during the loading and unloading process may include:

- Toolbox Talk Checklist;
- Labour Requisition / Shift Log;
- Hazob and Incident report;
- Permit to work;
- Lift plan.

## **2. RESPONSIBILITIES**

### ***2.1. HarbourMaster/Operations Manager***

- Ensure this procedure is developed and reviewed with adequate consultation; and
- Authorising approval and amendments to this procedure.

### ***2.2. HSE Coordinator, Operations Superintendent, HS Officer and Engineer***

- Implementing this procedure, including education regarding critical changes to the procedure are communicated to supervisors, employees and relevant trucking companies;
- Monitoring compliance with this procedure;
- Periodic review of this procedure; and
- Investigating reported non-compliances with this procedure

### ***2.3. Supervisor/person in charge***

- To ensure they and their team members comply with this procedure;
- To ensure that the stevedores operating equipment that requires a high risk work licence, have a current licence and are currently verified as competent to operate the equipment;
- To ensure the loading and unloading of trucks is conducted safely and in consultation with the truck driver;
- To ensure adequate and appropriate instructions regarding this procedure are provided to the stevedore gang and relevant third parties in the logistics chain;

- To report non-compliances with this procedure to Management;
- To complete required documentation associated with unloading and loading of trucks; and
- Periodic review of this procedure.

#### **2.4. Employees**

- To comply with this procedure;
- To follow instructions from the supervisor or person in charge regarding this procedure;
- To report all hazards and/or incidents to your supervisor as soon as possible
- Employees who are allocated a high risk role on the shift, e.g. crane operation, dogman or rigger, forklift operator are to ensure they currently verified as competent to carry out that task and to follow the requirements of this procedure;
- The dogman or forklift operator is responsible for confirming with the truck driver:
  - the location of the safe zone;
  - when cargo operations have been completed; and
  - when it is safe to move from the safe zone.

#### **2.5. Truck Operators**

- All truck operators to comply with this procedure;
- To report any hazards or incidents to a KPA employee, and
- To comply with directions from KPA employees in regards to this procedure.
- To secure loads correctly
- To ensure that any specific loading requirements are passed on to the supervisor in charge of loading

### **3. DEFINITIONS**

**Crane Operator:** A person who holds a current high risk work licence / certificate of competency, and has completed the KPA competency verification to operate a crane for the KPA.

**Competency Verification:** A KPA process where an employee who has a current high risk work licence to operate equipment, has demonstrated their competency to operate the equipment on a KPA worksite. The verification could be completed by an internal employee who is qualified as a trainer and assessor or an external qualified trainer and assessor.

**Dogman:** A person who holds a current high risk work licence / certificate of competency, and has completed the KPA in-house induction authorising the person to do dogging work for the KPA. The designated dogman is the person in charge of the lift.

**Dogging Work:** consists of the application of slinging techniques to move a load (including the selection and inspection of lifting gear) and/or the directing of a crane/hoist operator in the movement of a load.

**Forklift Operator:** a person who holds a current high risk work license/certificate of competency and has completed the KPA in-house induction authorising the person to operate a mechanical lifting device.

**Load restraint:** Load restraint includes lashing/unlashing, tie down, twistlock locking/unlocking for the purposes of ensuring a load is secured to the truck to meet the performance standards in the load restraint guide or unsecured in preparation for removal.

**Safe zone:** is an area free of interaction between equipment/machinery and people. The safe zone will usually be identified by green

**Spotter:** A person acknowledged by the equipment or vehicle operator to provide assistance for maneuvering and in particular reversing the equipment or vehicle.

**Work Zone:** Also called the exclusion zone, is an area where operational tasks occur e.g. crane/forklift operations for truck unloading/loading. Only operationally critical personnel can enter the work zone, as approved by Supervisor.

#### **4. PPE AND SAFETY EQUIPMENT**

All KPA Employees and Port Users are required to wear the minimum PPE requirements. For information on what requirements are to be met (see Appendix 1). KPA employees can refer to the KPA PPE sop for more detailed information.

All KPA employees and truck operators involved in the loading and unloading process must wear appropriate gloves, unless they are operating equipment e.g. crane, truck or forklift.

To achieve hands free operations, hands free tools e.g. stiffer sticks are to be used and tag lines where deemed necessary by the supervisor, dogman or crane driver.

Stairs or platforms are to be used to access truck trailer decks when rigging/unrigging loads.

Appropriate equipment such as traffic cones, flags and/or bollards, are to be used to mark the exclusion zone around the work area and safe zones. For example, red/orange/yellow traffic cones for work/exclusion zones and green traffic cones for safe zones such as PPE free zones.

#### **5. HAZARD AND INCIDENT REPORTING**

If you identify a hazard:

- if possible remove or eliminate the hazard;
- make the work area safe e.g. barricades, tag out
- alert your colleagues;
- report it to you supervisor;
- that is not able to be resolved and you are still exposed to an unsafe situation then cease work (a Stop Work Authority is activated) until the matter is resolved; and
- report the hazard by filling out a hazob.

If there is an incident resulting in injury, damage or a near miss the job should be stopped and the incident reported to the supervisor. The supervisor should then advise a management representative immediately. Priority must be given to any injured personnel and rectifying or isolating any hazard resulting from the incident to ensure others are not put in any danger. Where it is safe, employees and truck drivers must remain at the location of the incident, until authorisation to leave is given by a KPA Management Representative.

Note: Serious incidents may require the authorities to conduct an investigation. In this case the site will need to be left in the same condition as when the incident occurred until they attend the site. This requirement is not to restrict or impede any rescue efforts or environmental pollution controls.

## **6. PRIOR TO COMMENCING CARGO OPERATIONS**

### **6.1. Traffic Management**

A traffic management plan for the task is to be discussed between the involved parties, for example at a toolbox talk, prior to loading and unloading. A trucking operator representative may attend this toolbox meeting. The traffic management plan will be discussed and appropriate controls to be implemented, including traffic cones designating specific work areas and safe zones.

Specific traffic management requirements, such as oversize loads, must be communicated to appropriate KPA personnel such as the Gatehouse and third parties to ensure the traffic plan is understood.

No more than 2 trucks per cargo vessel are to be in the Maritime Security Zone and where possible heavy vehicles should drive forward into position.

Refer to the Traffic Management SOP for further information.

### **6.2. Work Zones**

When identifying the work zones it is important to consider the following:

- Other pedestrians not related to your job
- Driver safe zone
- KPA employee safe zone,
- Effective system of communication
- Effective loading and unloading operations in progress warnings; e.g. spotter, barricades and signage

See photo below for example of driver safety zone and work zone.

**Photo 1: Driver Safe Zone and Work Zone**



### **6.3. Mobile Phones**

Mobile phone use is to be limited and restricted to operational needs only and must not be used within the work zone. It is recognised that Supervisors are required to use mobiles more frequently for operational reasons. Supervisors must ensure it is safe to take the call and they must leave the work area and/or take the call in the marked safe zone.

### **6.4. Suitability of pallets or bags**

Prior to lifting any cargo, consideration must be given to the specific hazards associated with the cargo, packaging or lifting support e.g. pallet. Types of hazards to consider include:

- stability of the item,
- restraint of cargo on pallets (NB: plastic shrink wrapping must not be relied upon to ensure cargo and pallet integrity)
- integrity of pallets/packageing;
- strength of bags/handles; and
- lifting equipment suitability (fit for purpose and certified).

If the hazard associated with the cargo cannot be eliminated or addressed, then the cargo should not be lifted and reported to the Supervisor or Management representative.

### **6.5. Manifest for documentation of cargo mass or weight**

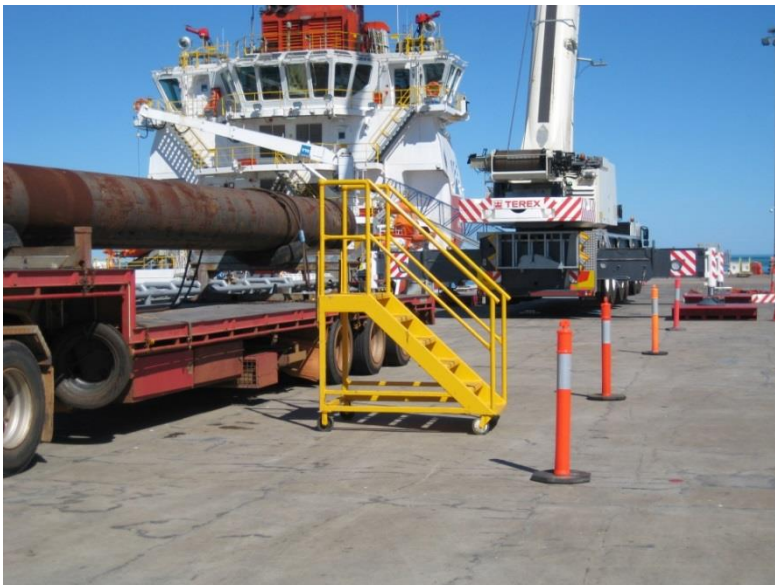
- Supervisor must receive a copy of the manifest from Port Operations or the Drilling Logistics Coordinator (DLC)/Agent, before starting discharge/backload.
- The description and mass of cargo must be individually declared on the manifest. In most instances there will also be identifying marks or stickers on the cargo.

## 7. GENERAL LOADING AND UNLOADING TRUCK PROCEDURES

The following are general loading and unloading procedures for trucks:

- Trucks may be loaded and unloaded either manually, by cranes and/or forklifts. The use of crane or forklift is determined by the KPA Supervisor/person in charge.
- Loading/unloading cargo by forklift is to be done by the delegated competent forklift operator utilising safe zones and work areas as per Forklift SOP.
- Never stand under the load.
- KPA employees must not stand on truck trailers during placement or removal of loads by cranes or forklifts. Access to truck trailers should be avoided where possible and only occur with the authorization of the supervisor/person in charge, once the load is landed and settled on the truck and where an adjacent platform, for example a trailer, work platform or stairs, is in place. Stairs need to be controlled by another person while in use. See photo 2 for example of trailer access.
- Lifts are to be checked off the manifest and any discrepancies noted. If there is a weight discrepancy, ensure that the appropriate persons are notified, including truck operators who may need to use alternative load restraint.

**Photo 2: Trailer access and crane/truck work zone**



- Be aware of pinch points and crush hazards during the loading and unloading process. Keep hands away from cargo and truck trailer during loading and unloading and do not touch the load with your hands while it is moving. Utilising hands free tools and tag lines for assisting load movement is appropriate.
- For trucks the unlashings and lashing will be conducted by the truck drivers or trucking company representative. All lashing on vehicles is to be in compliance with the Load Restraint Guide.

- Trucks are to arrive and depart the Port Lands and the jetty with all items suitably restrained by the transport company. If safe to do so, and in agreement with the Supervisor, trucks can move to the lashing zone for restraining of a load.
- Truck drivers are not to walk into the work area during cargo handling operations unless authorised by a KPA employee.
- Truck drivers must stay in the safe zone, for example next to the cab, until the load has been loaded or unloaded and/or the truck driver has been authorised to leave the safe zone by the KPA dogman or forklift operator.
- Truck drivers to remain with their vehicles unless there is an operational requirement to do otherwise.
- The trucking company is responsible for determining the appropriate restraint method in line with the load restraint guide and the load placement location on truck. KPA stevedores are required to bring to the attention of a truck driver when they believe a load is not restrained in accordance with the Load Restraint Guide. Where you believe an unsafe situation has not been addressed adequately then you are required to notify your Supervisor immediately or elevate your concerns to a Management representative.
- If trucks are required to reverse on Port Lands and/or the jetty then a spotter is required at all times during the reversing operation. It is the responsibility of the truck driver to arrange the spotter. Reversing alarms must be installed and in good working order on all trucks.

*Any loads or items placed on the wharf from a vessel or truck must be placed in a planned methodical way considering good housekeeping practices and well clear of the hazard line to maintain sufficient room for any mooring or unmooring that may arise. No items are to be stored on or inside the hazard line.*

### **7.1. Process for Unloading and Loading Trucks for Rig Tenders**

The following is an example of the steps to follow when unloading trucks for rig tenders:

- KPA employee assists to position the truck trailer in work zone;
- Truck driver is authorised by a KPA employee to enter work zone and unlash cargo;
- Truck driver to return to the safe zone before unloading of the truck occurs;
- KPA employees to commence unloading of truck;
- Once unloading of the truck is complete the dogman or forklift operator to advise truck driver that unloading is complete;
- The truck driver is then permitted to re-enter the work zone and must conduct a final visual check of truck and trailer prior to departing work zone; and
- Once the truck is ready to depart, if reversing is required, the truck driver must arrange and utilise a spotter.

The following is an example of the steps to follow when loading a truck for a rig tender:

- KPA employee assists to position the truck trailer in work zone;



- Truck driver is authorised by a KPA employee to enter work zone to prepare trailer deck;
- Truck driver to return to the safe zone before loading of the truck occurs;
- KPA employees to commence loading of truck;
- Once loading of the truck is complete the Dogman or forklift operator will advise the truck driver that loading is complete;
- Truck driver is permitted to re-enter work zone. If safe to do so the truck driver may move the truck to the lashing area;
- The truck driver is to restrain the load and must conduct a final visual check of truck and trailer prior to departing work zone; and
- Once the truck is ready to depart, if reversing is required, the truck driver must arrange and utilise a spotter.

### ***7.2. Loading and unloading Tubular on Trucks***

The following are guidelines on the loading and unloading of tubular on trucks:

- Tubular cargo is to be loaded and unloaded on trucks with suitable headboards and sufficient bolsters in place to secure the load should the tubular items shift.
- Ensure tubular has settled prior to removing the tag line and slings.
- Wire slings are to be crossed over, pulled tight and secured through the eyes by the truck driver.
- A forklift can be used to settle loose casing on the truck trailer. The work zone must be enforced to ensure that all stevedores and truck drivers are in a safe zone. This is a hands free operation.

Information on the method of load restraint and quantities of tubular per truck will be provided to KPA prior to the discharge commencing e.g. specific requirements for chrome casing or supply base handling requirements.

For additional information refer to JHA.

### ***7.3. Container loading and unloading on Trucks***

Slings on pre-slung containers must be long enough and be on the outside of the container so they can be easily reached to avoid the need to climb into or on top of containers or onto a truck trailer. Stingers should be used to ensure slings are of adequate length.

Containers are to be loaded onto trailer twistlocks where possible. The truck driver is responsible for locking the twistlocks.

KPA employees are not permitted to climb into any containers to retrieve slings.

When slings are unable to be accessed from the ground, stairs or a platform, then the container is to be:

- returned to the supply base; or
- lifted off the truck with a forklift to assist with access to the slings.

Containers used at KPA must be fitted with a safety approval plate with all applicable information clearly legible. For example, when stacking containers the “Allowable stacking Weight” specified on the safety approval plate must be adhered to at all times.

All offshore containers must be clearly marked with the date of packing and weight of the container. When the weight is not clearly marked then the following must occur prior to lifting:

- If on the vessel, ask the Master of the vessel to advise of the correct weight;
- If on a truck, return it to the supply base for correct labeling.

For further information on container loading and unloading refer to Job Hazard Analysis (JHA).

#### ***7.4. Loading and unloading of break Bulk Bags on trucks***

The following are specific requirements and hazards to consider when loading and unloading of break bulk bags on trucks:

- Set up lashing zone for truck;
- When loading trucks with break bulk bags ensure the bags are landed on the truck trailer within the coaming rails;
- A platform and stairs are to be used to access the truck trailer to unhook bags and to avoid climbing on bags;
- Stevedores must be aware of the location of suspended rigging gear such as spreader bar and chains when unhooking bags.
- Once bags are landed and unhooked and personnel have left the work area the truck can be directed to the lashing zone.

#### ***7.5. Unloading and Loading Dangerous goods on trucks***

When loading radioactive items on to trucks they should be loaded as far from the drivers cab as possible to protect the driver from radiation exposure during long line haul trips.

Order of load or discharge must be considered for all DG freight especially Radioactive (Class 7), Explosives (Class 1.1 – 1.4) and Fuel Pods (Flammable Liquid Class 2). These items of inbound cargo need to be unloaded from the vessel to the truck first and outbound cargo loaded onto the vessel last.

#### ***7.1. Loading of Livestock and Fodder***

Refer to the KPA Livestock and Fodder SOP and the Transport Company SSW for its operations on trucks.

### ACKNOWLEDGEMENT

This written assessment must be completed by KPA employees and personnel involved in the loading and unloading operations of trucks to ensure a good understanding of the Procedure.

**INSTRUCTIONS:** All questions must be answered correctly; incorrect answers will require you to demonstrate your understanding to the correct and fill in where indicated. Pass mark is 100% correct

**Questions:**

1. How are the following areas marked?
  - a) The work zone: \_\_\_\_\_
  - b) The safe zone: \_\_\_\_\_
  
2. When slings are unable to be accessed from the ground, stairs or a platform, then the container is to be:
  - a) \_\_\_\_\_
  - b) \_\_\_\_\_
  
3. Tag lines and hands free tools/ stiffy sticks are used to achieve what outcome?  
\_\_\_\_\_
  
4. Truck drivers will conduct all lashing/unlashing and locking/unlocking of loads. (Tick true or false)  
 True  False
  
5. Who is responsible for arranging a spotter for a reversing truck? (Tick correct one)  
 KPA Stevedore  Truck Driver

**End of Assessment**

***I have read and understood the content of the Policy/Procedure and agree to be bound by the Policy/Procedure.***

Full Name (please print): \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Organisation: \_\_\_\_\_