



CPAA PROCEDURE MANUAL

Guide for Loading and Unloading Concrete Pipes



Concrete Pipe Association
of Australasia

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1. Introduction

The unloading and loading of concrete pipe often requires putting someone in a position where safety can be a concern. This Guide is intended for use by persons responsible for the safe loading, delivery and unloading of vehicles which transport precast concrete pipe and associated products from CPAA member factories to either construction sites or merchant's yards.

This Guide gives clear indications of the scope of responsibilities before, during and after the products have been delivered. The Appendices also provide a useful guideline for achieving a safe working practice. However, it is acknowledged that all parties involved in loading, delivery and unloading of precast concrete pipe and associated products assume a duty of care to ensure safe practices are observed.

This Guide also acknowledges the comprehensive information published in the Safe Work Australia code of practice 'Managing the Risk of Falls at Workplaces' (December 2011) and advises readers to familiarise themselves with its contents.

2. Prior to Delivery

2.1 Prior to any delivery of precast products, and before leaving the suppliers (manufacturers) premises, the driver must make sure the load is safe and he/she is satisfied with how it is loaded. The load must then be properly secured using heavy duty restraining systems that meet the requirements of the NTC Load Restraint Guide.

2.2 The three key 'dutyholders' in the delivery process are:

- i. The supplier;
- ii. The transporter, and
- iii. The receiver

Work Health and Safety legislation places a requirement for co-operation between these duty holders and for all duty holders to assess delivery and collection risks. An example of the Chain of Responsibility, depending on the supply contract arrangements, can be found in Appendix A.

2.3 All parties should agree on a safe delivery plan. In the case of regular deliveries, this should be an agreed written delivery plan. In the 'last minute, one-off basis' it may only be practical to exchange generic delivery safety information by email or telephone. A guide for a typical safe delivery plan is shown in Appendix B. In the absence of agreement on a safe delivery plan, the suppliers generic safe delivery plan will apply.

2.4 The supplier will provide information (such as product weights) that is relevant to requirements for the offload of precast concrete pipe and associated products.

2.5 The recipient should ensure that he knows what type of product is to be delivered and should familiarise himself as to whether any special lifting equipment is required. The supplier can assist with information related to this.

2.6 The recipient should make certain that he knows the individual weights of the products to be unloaded and that he has mechanical lifting equipment of the right capacity and reach.

2.7 A safe area in which to unload should be provided.

3. Delivery

- 3.1** The carrier has a responsibility to carry the products to site in a safe manner. In the cases where external providers are used, the cartage contractor must ensure that all drivers, or sub-contracted carriers, are conversant with these requirements
- 3.2** It is the driver's decision as to where he can manoeuvre his vehicle and it is his/her right to point out to the recipient of the goods any concerns that they may have about the chosen unloading area. (Note: Most hauliers in the industry have a long experience of carrying these products).
- 3.3** Upon arrival at a safe delivery place, the driver will wear the appropriate PPE as designated by his/her company, and as ruled by the recipient site rules before un-sheeting and loosening any straps, and securing devices.
- 3.4** The delivery driver should assess the risk on site before unloading commences. Appendix C offers a typical guide for on site assessment.

4. Offloading

- 4.1** The site or yard must take responsibility at all times for the safety of the driver whilst he/she is on the site that the products are to be offloaded.
- 4.2** The recipient should be aware that to be on the back of a truck during the offloading process constitutes 'working at height' and so the requirements of the relevant Working at Height Regulations must be satisfied. Refer to the CPAA Safety Note – Working at Heights for further information.
- 4.3** Unless the delivery is made with a vehicle 'Crane mounted offload system', whereby the driver operates the crane, it is the recipient's duty to lift the products off the back of the truck with appropriate safe lifting equipment using appropriate capacity equipment.
- 4.4.** The recipient should ensure that there is adequate stocking area for the products and that they are stacked in a safe manner.
- 4.5** The Safe Work Australia code of practice 'Managing the Risk of Falls at Workplaces' (December 2011) gives guidance on all aspects of working at heights. This is also outlined in the CPAA Safety Note – Working at Heights.

5. Summary

- 5.1** The suppliers (manufacturers of precast concrete pipe and associated products) undertake through their hauliers to deliver their products in a safe and secure manner.
- 5.2** The recipients of such deliveries have a responsibility to ensure that they have full knowledge of all aspects of the delivery and to have carried out all their obligations to make sure that the offloading operation is carried out safely with minimal risk to all parties.
- 5.3** The manufacturers are available to provide information on specific lifting equipment and any other aspects related to their products.

References

1. Safe Work Australia code of practice 'Managing the Risk of Falls at Workplaces' (December 2011):

http://www.safeworkaustralia.gov.au/sites/SWA/AboutSafeWorkAustralia/WhatWeDo/Publications/Documents/632/Managing_the_Risk_of_Falls_at_Workplaces.pdf

2. National Transport Commission (NTC) 'Load Restraint Guide' (2004):

<http://www.ntc.gov.au/filemedia/Reports/LoadRestraintGuide2004FullCopy.pdf>

Appendix A:

Chain of Responsibility under Varying Supply Contract Details

Supply Arrangement	Supplier	Transporter	Receiver
Free on Truck	<ul style="list-style-type: none"> • Safe delivery plan in place for loading of pipe 	<ul style="list-style-type: none"> • Safe delivery plan in place for loading of pipe • Suppliers site induction induction required 	<ul style="list-style-type: none"> • Safe delivery plan in place for unloading of pipe • Receiver site induction required for transporter • Provide safe working method statement for unloading pipe. • Provide working at height controls
Free on Ground	<ul style="list-style-type: none"> • Safe delivery plan in place for loading of pipe. • Check contractors has appropriate safe working method statement and working at height controls in place and understood. 	<ul style="list-style-type: none"> • Safe delivery plan in place for loading of pipe. • Safe working method statement and working at height controls in place. 	<ul style="list-style-type: none"> • Safe delivery plan in place for unloading of pipe. • Receiver site induction required for transporter
Receiver Pickup	<ul style="list-style-type: none"> • Safe delivery plan in place for loading of pipe 	N/A	<ul style="list-style-type: none"> • Safe working method statement for unloading pipe. • Provide working at height controls

Appendix B:

Guide for a Typical Safe Delivery Plan

The following Safe Delivery Plan is for the purpose of the carrier who arrives at customer sites with precast concrete pipe and associated products. The products are of varying shapes, sizes and weights, therefore specialist offloading equipment may be required. Information for this is available from the supplier.

In order for a safe offloading procedure to commence there are certain points which should be observed.

- On arrival at customer site, the delivery driver must report to the responsible person in charge of deliveries and remind them of the type of product(s) that are being delivered. This is to help the site organize their workforce and equipment necessary to offload.
- The delivery driver must make sure he/she uses the designated on site traffic route, or otherwise as per instruction from the responsible person, and that the vehicle is parked safely and does not obstruct any highways or pedestrian walkways.
- The site is required to provide a hard standing area (and/or equivalent) prior to offloading the products.
- If the vehicle is required to reverse while on the customer's site, the relevant responsible person must deliver instructions to the driver before the vehicle reverses.
- The delivery driver must make sure he/she parks the vehicle in a way as to ease the release and removal of all the necessary securing devices and that they are safe from other moving vehicles or pedestrians on site. This also applies if being loaded in order to return any products back to the manufacturer.
- The delivery driver will wear the appropriate PPE as designated by his/her company, and as ruled by the recipient site rules before he/she gets out of the vehicle. .
- If safe to do so, the driver releases and removes the securing devices and stores them in his vehicle.
- Any lifting equipment used for offloading (provided by the supplier or recipient) should have a valid and current test certificate appropriate for the task and this should be validated prior to work commencing
- If the products are being delivered on a truck mounted 'Crane offload' system, the following shall apply:
 - The operator should be fully trained and competent, and carry the relevant certification
 - The operator should have a clear view of the area where the load will be lifted from or lowered onto.
 - Ensure that loads will not become snagged which may cause equipment failure. This may require an observer or guide ropes to be attached.
- If the recipient has the responsibility of offloading the products, then the driver must be satisfied that vehicle is ready for offloading. He/she can then hand the vehicle over for unloading.

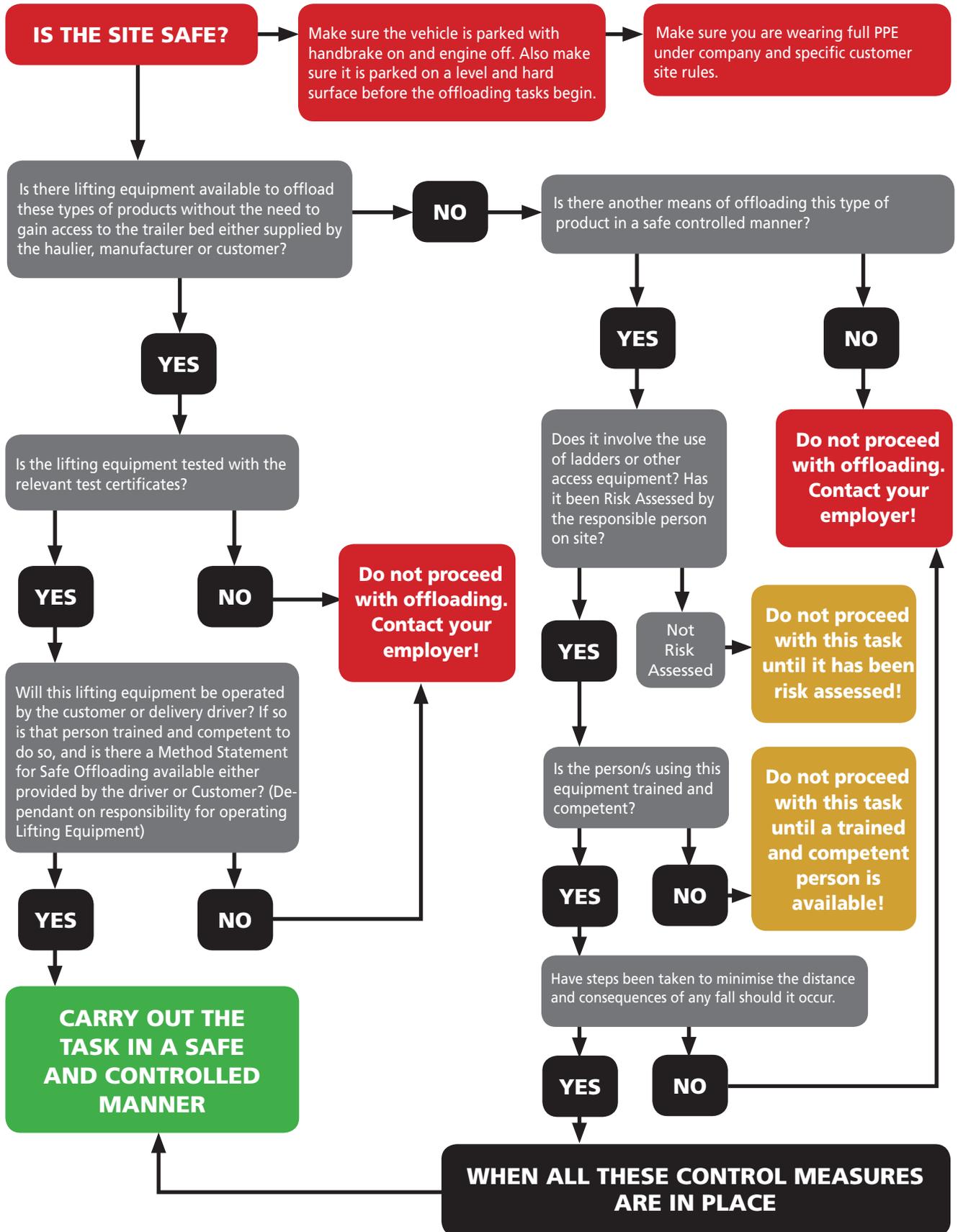
Avoidance of 'Working at Height' (in accordance with the relevant regulation) must be implemented where possible. This includes:

- ensure, so far as is reasonably practicable, that any work involving the risk of a fall is carried out on the ground or on a solid construction.
- provide safe means of access to and exit from the workplace;
- minimise the risk of falls so far as is reasonably practicable by providing:
 - (i) a fall prevention device;
 - (ii) a work positioning system, or
 - (iii) a fall arrest system, so far as is reasonably practicable (in which case emergency procedures must be established).
- After the products have been successfully and safely offloaded, the driver must leave the site as per instruction by the responsible person.

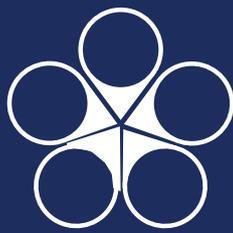
**This completes the safe offloading
of precast concrete pipe and associated products.**

Appendix C:

Assessment Flow Chart for Offloading Precast Concrete Pipe and Associated Products on Site



Notes



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