



## GeelongPort Dry Bulk Cargo Handling Guidelines



## GEELONGPORT DRY BULK CARGO HANDLING GUIDELINES



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## GEELONGPORT DRY BULK CARGO HANDLING GUIDELINES



### 1. INTRODUCTION

The GeelongPort site operates under conditions mandated by the Victorian Environmental Protection Act, State Environment Protection Policy (Waters), and State Environment Protection Policy (Ambient Air Quality).

Loss of cargo into the environment and / or storm water in any form is not permitted within or from the GeelongPort site. This includes excessive airborne dust and / or spillage into Corio Bay.

### 2. SCOPE

These Guidelines apply to all bulk cargo operations conducted at all GeelongPort berths. These Guidelines outline the minimum requirements for handling bulk cargos. Individual companies are required to have their own Standard Operating Procedures and Environmental Management Plans (EMPs).

Port User operational adherence to the submitted EMP will come into effect on 1 July, 2019. Equipment upgrades/capital improvements required to meet these Guidelines will be given a 12-month implementation period (1 July 2020, or as otherwise agreed).

### 3. RESPONSIBILITY

It is the responsibility of GeelongPort to maintain these Dry Bulk Cargo Handling Guidelines (DBCHG). GeelongPort will actively monitor on-port operations for compliance with these Guidelines.

It is the responsibility of Port Users to ensure they are conducting operations in line with these Guidelines and to actively train and monitor their own staff and contractors to ensure compliance with these Guidelines and all applicable regulations.

It is the responsibility of all parties involved in the handling of bulk cargos to have EMP's covering these activities and to ensure that their staff understand and comply with them. EMP's are to be submitted annually to GeelongPort as part of the Site Access Permit requirements. Copies of the Port User EMP and these DBCHG's are to be available on site during operations.

It is the responsibility of the Port User to monitor conditions (wind, rain and product drift) and to manage the operation in line with the DBCHG and their own EMPs.

It is the responsibility of the Port User that has engaged transport operators to ensure that they are conducting operations in line with these Guidelines and to actively train and monitor their staff and contractors to ensure compliance with these Guidelines and all applicable regulations.

## 4. EQUIPMENT SPECIFICATIONS

The minimum equipment standards for each bulk cargo handled at GeelongPort are outlined in Table 1 following.

*Table 1: Dry Bulk Cargo Handling Equipment Specifications*

Bulk Cargo	Risk Rating		Hopper		Grab	
	Environment	Health and Safety	Dust Controlled	Non-Dust Controlled	Fully Enclosed	Open
<b>Vessel Discharge</b>						
Calcite	Low	Low		X		X
Clinker	High	High	X		X	
Grain (including wheat, barley, corn, palm kernel)	Med	Med	X		X	
Gypsum	Low	Low	X		X	
MAP/DAP/Gran-Z	Low	Low	X <sup>1</sup>	X <sup>1</sup>	X <sup>1</sup>	X <sup>1</sup>
MOP	Low	Low		X		X
Phosphate Rock	Med	Low	X		X	
Soda Ash	High	High	X		X	
Soy Bean Meal	Low	Low	X		X	
SSP	Med	Low	X		X	
Urea	Med	Low		X		X
<b>Vessel Loading</b>						
Grain (including wheat, barley, corn, palm kernel)	Med	Med	X	Extendable chute into vessel		
Fodder	Low	Low	X			
SSP	Med	Low	X			
Woodchips	Low	Low	NA			

Notes:

1 – Hopper and grab required is dependent on product characteristics.

## 5. PRIOR TO COMMENCING OPERATIONS

The following items shall be in place prior to commencing operations:

1. The berth shall be clean and ready for operations.
2. Deflectors (save-all, tarpaulin or similar) shall be positioned between the ship and the wharf or have in place other suitable apparatus to prevent any accidental spillage of any product entering Corio Bay.
3. Hoppers and grabs shall be appropriate for the cargo being handled (see Table 1).
4. Any spilt cargo must be swept up in a timely manner to eliminate cargo build up on the wharf and to ensure no offsite emission of particulates occurs during the loading or unloading of dry bulk cargo as well as at the end of the cargo transfer.
5. A vacuum street sweeper must be available at the facility at all times. The provision of alternative equipment for cleaning up cargo residues in areas difficult to access must also be available where necessary.
6. A pre-start checklist shall be completed by Port Users. A copy of this information shall be provided to GeelongPort and shall be available for audit. A sample prestart checklist is available in Appendix 1.

## 6. CARGO DISCHARGE

No cargo may be placed on the wharf deck unless its properties are such that windblown dust emissions can be managed, and any residues can be cleaned off the wharf deck. This includes tip-offs from overweight trucks.

Port Users must lodge an EMP and obtain written approval from GeelongPort before storing cargo on the wharf deck.

## 7. DURING OPERATIONS

### 7.1 WIND

Operations shall cease if windblown product is detected beyond the Port User's operational area.

### 7.2 GRABS

Grabs must meet the requirements specified in Table 1 for specific cargo types. Grabs that spill excessive quantities of cargo must not be used. Controls must be in place to capture any product spilt from grabs.

Before opening a grab to discharge product into a hopper, the crane driver must ensure the grab is as close as possible to the hopper grating. When opening the grab, it should be done so to allow product to be released gradually.



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### 7.3 HOPPERS

Hoppers must meet the requirements specified in Table 1 for specific cargo types.

For normal operations, the product level within hoppers is to be kept as close to grid level as possible to minimise billowing when the grab is discharged.

Product must not extend above grid level, and hopper must not be peaked. This is to avoid windblown product and minimise the chance of spillage over the sides of the hopper.

### 7.4 SWEEPING

Any spilt cargo must be swept up in a timely manner to eliminate cargo build up on the wharf and to ensure no offsite emission of particulates occurs during the loading or unloading of dry bulk cargo as well as at the end of the cargo transfer.

During operations, vacuum sweeping operations must be undertaken to control any spillage, including the truck tarping area, designated roadways and surrounding areas.

A vacuum street sweeper must be available at the facility at all times.

Further, product spilt on to fenders, around bollards, nib wall and base of hopper (outside reach of sweeper) shall be manually cleaned. This is to prevent product extending outside of the discharge area or into Corio Bay.

The provision of alternative equipment for cleaning up cargo residues in areas difficult to access must also be available where necessary.

The disposal of all sweepings is the responsibility of the product owner.

### 7.5 TRUCKS

One designated roadway is to be established for trucks to enter and exit the berth. A Traffic Management Plan (TMP) will be provided by the Port User to GeelongPort prior to each vessel arrival. This plan must be adhered to at all times during the course of the discharge with any and all variations notified to all parties.

The levelling of cargo in loaded trucks, shall be done adjacent to the ship's side within the operational area, to ensure that any product spilt is able to be cleaned up.

Trucks shall pull their covers within the operational area and keep clear of adjacent general cargo areas.

Trucks must be covered at all times, both full and empty, when travelling to and from the ship. Dusty trucks must be cleaned prior to departing the bulk cargo handler's working area to prevent product contaminating areas outside the bulk cargo handler's working area.

The Port User will ensure wheel tracked product does not leave the operational area. This may be achieved using a wheel wash, wheel shaker, street sweeper or similar.

### 7.6 SELF DISCHARGING VESSELS



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Cargo discharge from a self discharging vessel must be managed in such a way to minimise dust generation. The discharge chute must be lowered as far as reasonably practicable to allow product discharge to occur as close to the hopper grating as possible.

### 8. AT COMPLETION OF OPERATIONS

A thorough clean of the Port User operational area must be conducted. This includes, wharf apron, fenders, bollards, designated roadway and any other areas that have been contaminated.

Hoppers must be completely emptied, once this is confirmed, gates are to be left closed while in transit. Any product dropped during transit is the responsibility of the Port User and must be cleaned up.

All spilt product is to be swept and captured by vacuum truck or equivalent (Refer Section 7.4). This product is to be transported and disposed of offsite or alternate arrangements may be made as agreed by GeelongPort.

The sweeping of product into Corio Bay is strictly prohibited.

All cleaning of equipment must be carried out in the designated areas as advised by GeelongPort or within a mobile bunded area.

A 'Completion of Operations' checklist shall be completed at the end of vessel discharge by the Port User and a copy provided to, and agreed by, GeelongPort. This information shall be available for audit. A sample checklist is available in Appendix 1.

### 9. INSPECTIONS

In order to ensure that Port Users are complying with these Guidelines, GeelongPort may carry out random inspections of operations at the facility. Appendix 2 shows the detailed inspection checklist to be used for such purposes.

### 10. NON-COMPLIANCE

A three-strike policy operates for non-compliance with these Guidelines. When a Port User managing a bulk cargo operation receives their third breach notification (verbal and/or written) from GeelongPort during a single discharge, the operation will be shut down for a minimum of 12- hours to allow for an investigation to be undertaken.

Suspended operations will only be allowed to restart once an investigation is complete and Corrective Action Reports are submitted and approved by GeelongPort.



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Specific breaches include, but not limited to:

- Over-peaked hoppers
- Discharging grabs from excessive height
- Absence of effective deflectors
- Ineffective housekeeping during discharge
- Ineffective sweeping of berth, designated roadways or adjacent areas
- Trucks not following designated roadways
- Trucks not tarping within operational area
- Dusty trucks not being cleaned down prior to leaving the operational area

Following the receipt of a breach notice, the Port User must immediately rectify the non-compliance.

Any direct or consequential loss incurred as a result of a 12-hour shut down will be the responsibility of the Port User. GeelongPort will not be responsible for any costs, loss or liability arising out of its actions under this clause.

GeelongPort reserves the right to take additional action for repeat violations over multiple vessels as per GeelongPort Standards and Procedures.

GeelongPort reserves the right to take immediate action above and beyond the three-strike policy if a significant breach of these Guidelines occurs, or if Port User fails to comply with a breach notice, or fails to comply with a GeelongPort instruction to cease operations. In such instances, operations will be stopped and will not be allowed to recommence until GeelongPort are satisfied that adequate procedures are in place to prevent a reoccurrence.

## 11. INCIDENT REPORTING

Any non-conformance with the EMP or TMP must be reported to GeelongPort. This includes, but is not limited to:

- all instances of uncontrolled product release from grabs, hoppers or trucks,
- traffic near misses and incidents, or operations outside of designated traffic routes,
- contamination outside the operational area and
- contamination of adjacent vessels, cargo or worksites.

## 12. EXEMPTIONS

Exceptions can be granted from the requirements of these Guidelines. These exceptions are to cover the cargos and situations that have in the past not caused dust nuisances. Exemptions will only remain valid when there is no dust nuisance and each discharge must be monitored to ensure that it complies. If conditions change, discharge must immediately revert to comply with the DBCHG. GeelongPort reserves the right to over-rule exemptions for cargo types and situations, if it is the opinion of GeelongPort that dust nuisances have in the past resulted from that, or similar, cargo types or situations. If this is to occur, GeelongPort will notify the operator either verbally and/or in writing.





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If a Port User believes that the product they are handling can be safely worked outside the conditions of the DBCHG, they may apply in writing to GeelongPort to operate under an exemption. They are required to clearly state which requirements they request to be exempt from, an explanation as to why an exemption is justified and what control and monitoring systems they will be employing to manage the risk. GeelongPort will consider such requests and respond in writing with a decision, clearly stating any conditions. No exemption shall be granted without written authorisation from GeelongPort.

An exemption list will be held on file in the GeelongPort document management system.

### **13. FUELING OPERATIONS AND OIL / FUEL SPILLS**

Mobile refueling shall be minimised and be carried out away from storm water entry points and the wharf edge. Any mobile fueling equipment shall be in good working order, banded and nozzles shall be equipped with automatic shut-off to prevent overfill. Spill kits shall be available on mobile refueling vehicles. Operators must be trained in refueling operations and spill-kit use.

Oil spill-kits shall be available to attend any oil spills from equipment being used. Sufficient resources shall be available to deal with hydraulic oil spills from machines as well as fuel spills. Provision of oil spill kits/spill resources are at Port User expense.

## 14. APPENDIX 1 – PORT USER CHECKLISTS

The following are sample pre-and completion checklists. Port Users may elect to use their own checklists. Checklists shall be available for audit purposes.

### Pre-start checklist

Vessel		Berth		Date	
Stevedoring Company		Contact			
Supervisor/ Foreman		Contact			
Environmental					
	Yes	No	Comments		
Berth Clean					
Save-alls in place					
Grabs appropriate for product and in good working order					
Hoppers appropriate for product and in good working order					
Weather forecast reviewed					
Sweeper on site as required					
Manual sweeping plan in place for areas unavailable to sweeper					
Truck tarping and blow down area Designated as required					
Storm water entry points protected					
Additional comments:					
Prepared by:		Contact number			

### **Completion of Operations Checklist**

Vessel		Berth		Date	
Stevedoring Company		Contact			
Supervisor/Foreman		Contact			
	Yes	No	Comments		
Spilt product from fenders, around bollards, nib wall and base of hopper cleaned					
Berth, designated roadways, tarping area swept and clean					
Hoppers empty and jaws open					
Stevedoring equipment and huts removed from berth area					
Storm water protection removed					
All fugitive product collected removed from Port to a licensed disposal facility					
Additional comments:					
Prepared by:		Contact number			

## 15. APPENDIX 2 – GEELONGPORT INSPECTION CHECKLIST

Dry Bulk Operations Inspection Checklist			
Berth		Temperature	
Vessel		Wind Speed and Direction	
Product		Date and Time	
Activity being undertaken			
Estimated time of completion			

\* Prior to completing this checklist, the environmental controller must identify themselves to the cargo handling operations supervisor and advise of the intention of the inspection.

Requirement			Yes/No	Comments
<b>Grabs</b>	1A	Must use fully enclosing grabs		
	1B	No leakages from base or top of grab		
	1C	Grabs in good state of repair		
<b>Hoppers</b>	2A	Must have large enough hopper openings		
	2B	Grabs must be fully lowered into hopper		
	2C	Grabs speed of release minimises emissions		
<b>Deflectors (Savealls)</b>	3A	Must be located: 1. beneath the grab swing zone 2. beside the hopper		
	3B	Of sufficient size to prevent spillages to bay		
<b>Spillages</b>	4A	Berth must be regularly swept		
	4B	A vacuum sweeper must be onsite		
	4C	There should be minimal spillages:		
		1. beneath the hopper 2. beneath the grab swing zone 3. between the vessel and wharf 4. around the mooring points 5. on other areas of the berth		
<b>Dust</b>	5A	No dust beyond the boundary of the site. Minimal dust present:		
	5B	1. above the hoppers 2. from the vessels hold 3. generated during truck loading		
		5C	Truck loads covered prior leaving the site	
<b>For Post-Loading Inspections</b>				
<b>Cleaning</b>	6A	Site clean within 2hours of cargo completion		
	6B	No material around:		
		1. wharf capping 2. bollards 3. stormwater pits 4. berth surface		
		6C	Wharf clean	
<b>Any other issues or comments</b>				
<b>Environmental Controller</b>		<b>Cargo Supervisor</b>		
<b>Signature</b>		<b>Cargo Supervisor Signature</b>		

**Amendment and Review Log**

This document will be reviewed annually and amended when there are any changes to operating procedures or changes to legislation. The following is a record of reviews and amendments.

DOCUMENT REVIEW DATE	REVIEWER (NAME & SIGNATURE)	MANAGER OPERATIONS (SIGNATURE)

AMENDMENTS (DATE & AUTHOR)	UPDATED (NAME & SIGNATURE)
01	
02	
03	
04	
05	
06	
07	
08	
09	
10	
11	