

Bulk Cargo Handling Procedures

11 June 2024

Purpose, Intent and Responsibilities

1. Background

- 1.1 Port User's activities have the potential to adversely affect the environment. All Port Users must ensure that adverse effects and the risk of adverse effects to the environment (environmental risk) are managed and mitigated to standards acceptable to the Port of Tauranga Limited (POTL).
- 1.2 Activities undertaken at the Port of Tauranga Facility (as detailed in Schedule 1) must comply with the Resource Management Act 1991, the National Environmental Standard for Air Quality and Bay of Plenty Regional plans. Activities that also require resource consents must comply with those consents.
- 1.3 These Bulk Cargo Handling Procedures (the Procedures) address the environmental risk of activities associated to the facilitation of bulk cargo through the Port of Tauranga Facility. They stipulate the "best practice" management and the minimum management and mitigation actions that Port Users must take to manage the environmental risk while operating within the Port of Tauranga Facility.

2. Scope

- 2.1 These Procedures cover the physical area of the Port of Tauranga Facility.
- 2.2 The Procedures apply to:

All bulk cargo stevedoring and transporting activities/operations undertaken within the Port of Tauranga Facility (**Bulk Cargo Operations**), namely:

- The storage of bulk cargo in an open hold of a vessel,
- The collection and transfer of bulk cargo from a ship's hold to a hopper or other receiving receptacle,
- The storage and holding of bulk cargo in a hopper or other receiving receptacle,
- The collection and transfer of bulk cargo into a truck or other means of transport,
- The movement and/or operation of trucks (including empty trucks) used to transport bulk cargo,
- The management, cleaning and housekeeping of the stevedore's work area and any other area affected by the bulk cargo operation

References in the Procedures to **Bulk Cargo Operators** means any party undertaking the activities identified above.



- 2.3 For the purposes of the Procedures, bulk cargo is granular cargo materials loaded or unloaded at the Port of Tauranga Facility, however, excludes materials loaded or unloaded in a way where the material is completely enclosed, such as packaged, bagged or containerised. Bulk cargos include:
 - Agricultural animal protein feeds,
 - grains,
 - fertiliser products,
 - coal,
 - clinker,
 - sulphur
 - salt, and
 - any other qualifying cargo handled, loaded or unloaded within the Port of Tauranga Facility in a process the same or similar to those materials listed above.
- 2.4 The Procedures detail the Bulk Cargo Operators minimum operational requirements required to be used to manage environmental risk during Bulk Cargo Operations. Additional mitigation measures to those detailed in the procedures may be needed for some Bulk Cargo Operations. These can be applied in addition to those required by the Procedures however, can only replace the measures detailed in the Procedures if an exemption is provided by POTL (as per Section 8).

Compliance with the Procedures does not guarantee compliance with additional regulation or resource consents held by Bulk Cargo Operators. If there is conflict between the Procedures and other regulation that means both cannot be complied with concurrently, the Bulk Cargo Operators must get an exemption from the respective section of the Procedures (as per Section 8).

POTL will monitor and enforce compliance with the Procedures, however, POTL is not responsible for the compliance of other Bulk Cargo Operators, this is the responsibility of the Bulk Cargo Operators.

3. Bulk Cargo Operator compliance documentation

3.1 Stevedore companies undertaking Bulk Cargo Operations are required to hold an Environmental Management Plan (EMP), or equivalent document, which details how their Bulk Cargo Operations will comply with the Procedures as well as include any other additional mitigation measures that will be employed to mitigate environmental risk.

The EMP shall cover all Bulk Cargo Operations (as detailed in Section 2) that occur within the stevedore's working area including the actions of other parties undertaking Bulk Cargo Operations in that area, such as transport providers.

3.2 POTL reserves the right to require any other party undertaking Bulk Cargo Operations, or any other activities associated to Bulk Cargo Operations, to hold and comply with an EMP in respect to their activities.

4. Responsibilities of parties

4.1 POTL will maintain the Procedures and provide assess to the current version at <u>https://www.port-tauranga.co.nz/health-safety/procedures-compliance/</u>. When significant



updates of these procedures are made, POTL may circulate the proposed changes and seek direct feedback from Stevedores and Cargo Owners undertaking Bulk Cargo Operations as far as is practicable. POTL requests that circulation and feedback from other parties, such as other contracted or sub contracted parties, be facilitated by the stevedores and Cargo Owners.

4.2 POTL will provide wind speed monitoring infrastructure within the Port of Tauranga Facility. POTL will also provide relevant wind speed information to parties undertaking Bulk Cargo Operations in order for these parties to manage operations in compliance with wind speed limits (as detailed in Section 5.3).

The provision of wind speed data shall be made available to Bulk Cargo Operators via online web page <u>https://www.port-tauranga.co.nz/cargo-and-shipping/harbour-conditions/</u>, the POTL wind monitoring app, or via the visual wind speed display lights located at berths 7 and 8.

- 4.3 The Stevedore undertaking the Bulk Cargo Operation shall ensure that activities undertaken within the Stevedore's work area comply with the Procedures.
- 4.4 All parties undertaking Bulk Cargo Operations must ensure that their activities comply with the Procedures, any applicable EMP and any other applicable regulation or resource consent.
- 4.5 All Bulk Cargo Operators and the Cargo Owner must ensure that their staff and contracted parties are familiar with any applicable EMP and the sections of the Procedures applicable to their activities. Bulk Cargo Operators and Cargo Owners shall also ensuring that Bulk Cargo Operations are supervised and undertaken in compliance with the applicable EMP(s) and the Procedures.
- 4.6 POTL, the Cargo Owner, and the Stevedores shall undertake monitoring of the Bulk Cargo Operation in accordance with Section 7 of the Procedures and must undertake reasonable actions in a timely manner in order to correct any non-compliances identified.



Rules

5. Rules for activities in the stevedore's working area

The Bulk Cargo Operations of stevedores and other parties operating in the stevedore's working area (as detailed in schedule 2), must comply with the following rules (unless exemption has been granted as per Section 8). The Stevedore is responsible to ensure that all parties operating in the stevedore's working area comply with the Procedures.

Prior to operations commencing

- 5.1 Prior to the Bulk Cargo Operation commencing the Stevedore shall:
 - a) Ensure that the stevedore work area is clean and free of any foreign particulate manner or other material,
 - b) Ensure save-alls are correctly positioned against the hull of the vessel to remove the risk of product loss from the grab entering the harbour, as far as is practicable,
 - c) Ensure that grabs and hopper fine water misting units (if required) are tested and working correctly (i.e. grabs are closing completely and not leaking bulk cargo and hopper fine water misting units are activating and operating correctly),

<u>Note</u>: If a hopper(s) is not operating correctly, contact POTL Customer Service Centre on 07 572 8888 to arrange repair. Do not use the hopper(s) if it is not operating correctly.

- d) A suitable vacuum sweeper is present on site and ready to commence operations,
- e) Port of Tauranga wind speed information is able to be monitored via online web page <u>https://www.port-tauranga.co.nz/cargo-and-shipping/harbour-conditions/</u>, or the Port of Tauranga wind monitoring app, or via the visual wind speed display lights located at berths 7 and 8.
- f) Wind speed conditions comply with the requirements of Section 5.3.

During operations - Wind conditions and airborne particulate/dust

- 5.2 The Stevedore shall visually monitor the extent of visible airborne particulate and wind speed throughout the Bulk Cargo Operation to ensure compliance with Sections 5.4, 5.14, 5.16, 5.17, 6.3 and 6.6 is achieved.
- 5.3 Bulk cargo shall only be transferred from the ship's hold into a hopper or from a ship's hold into any other receiving receptacle when the 15 minute average wind speed value at berth 8 is 15 knots or less. If this wind speed is exceeded, then the following shall occur:
 - No further bulk cargo shall be transferred from the ship's hold to the hopper or other receiving receptacle,
 - Ship hatch lids shall be closed,
 - Product volumes in hoppers or other receptacles shall be reduced as much as is necessary to ensure no windblown product escapes the top of the hopper, as much as is practicable,
 - No further product shall be transferred from the ship's hold until the 15 minute average wind speed is displayed as 15 knots or less for a period of fifteen minutes or longer.



5.4 Bulk Cargo Operations shall not cause the generation of visible airborne particulate/dust that travels greater than 100 metres from the stevedore's work area (as detailed in schedule 2), or into or above the harbour.

<u>Note</u>: If this occurs, operators may employ additional mitigation actions in order to comply. If additional mitigation actions are not able to achieve compliance, then the operation is to shut down until compliance can be achieved.

Grabs and hopper management

- 5.5 Grabs shall be positioned as close as possible to the bulk cargo product level in a hopper prior to opening to reduce the falling distance of the product as much as is practicable.
- 5.6 Grabs capable of gradual or slow release, such as hydraulic grabs, shall be used and operated with slow/gradual release when handling bulk solid materials determined to have higher risk of airborne particulate/dust generation, as listed in Section 10.
- 5.7 Hoppers shall be kept as full as is practicable throughout the Bulk Cargo Operation to reduce the falling distance of product that is released from a grab.
- 5.8 When undertaking a Bulk Cargo Operation for bulk cargo materials with higher risk of airborne particulate/dust generation, as listed in Section 10, the hopper's fine water mistering units shall be operational (if available) at all times bulk cargo is being transferred from the ship's hold into a hopper.

<u>Note</u>: Exemption to rule 5.8 may be applied for, as per Section 8, if it is determined that a bulk solid product is not suitable to be handled in a hopper operating with fine water misting.

A fine water misting unit is considered operational if the unit is turned on and operating correctly. Actual misting that occurs is not required to be continuous in the event the misting is intermittent due to activation by sensor.

5.9 When fine water misting units are being operated, a grab shall not be opened until the misting units have been activated and are generating full mist volume.

<u>Note</u>: This rule is to ensure that maximum mist is being generated by the fine water misting units prior to the generation of dust to ensure maximum effectiveness of the mist, to therefore reduce fugitive dust travelling beyond the stevedore's work area. This may mean that a crane operator may need to delay for several seconds between placement of the grab above the hopper and opening of the grab to release the product.

5.10 When fine water misting units are being used, a grab shall not be positioned above the receiving hopper until the hopper is ready to receive the bulk cargo material from the grab.

Note: As the placement of a grab above a hopper activates the fine water mister unit, continual positioning of a grab above a hopper when not discharging product into a hopper will likely cause continual misting to occur unnecessarily.

5.11 Bulk cargo material levels in hoppers shall not extend higher than the maximum height of the hopper.



- 5.12 Any equipment used to handle, store or transport bulk cargo materials, including, but not limited to, grabs and hoppers, shall be operated free of leaks of bulk cargo.
- 5.13 Hopper operators shall ensure that truck bins are not overfilled to prevent the excessive spillage of material from the truck bin, including when the truck levels the bulk solid material.

Site housekeeping and cleaning

- 5.14 Stevedores shall ensure that the levelling of cargo undertaken by trucks operating in the stevedore's work area does not result the generation of airborne particulate/dust that is visible and travels greater than 15 metres from the truck bin.
- 5.15 When undertaking a Bulk Cargo Operation for bulk cargo materials with higher risk of airborne particulate/dust generation, as listed in Section 10, a vacuum sweeper truck suitable to collect the bulk cargo material shall be present throughout the entire Bulk Cargo Operation.

The vacuum sweeper truck shall be operated to keep the ground in the stevedore's working area, and any affected adjacent ground areas, free of accumulations of bulk cargo materials as much as is practicable. Adjacent affected areas may include, but are not limited to, truck traffic paths empty cargo storage areas and roadways.

5.16 The vacuum sweeper truck shall be managed appropriately to ensure that it does not result in the generation of airborne particulate/dust that is visible and travels greater than 15 metres from the vacuum sweeper truck.

<u>Note</u>: Dependent on the cargo being handled, the vacuum sweeper truck may need to employ dust mitigation measures such as water spray jets, or reduced travel/operating speed to ensure that its operation complies with rule 5.16

5.17 Areas where bulk solid materials accumulate during the Bulk Cargo Operation that are not accessible to a vacuum sweeper truck, including, fenders, fender plates, bollards, save-alls, nib walls, areas immediately adjacent to building walls and the base of the hopper, shall be manually cleaned periodically and as required. This cleaning should not result in the generation of airborne particulate/dust that is visible and travels greater than 15 metres from the cleaning site.

<u>Note</u>: This may entail moving the bulk solid material from these areas into an area a sweeper truck can access for collection. This may be achieved by sweeping or careful use of a blower.

At the completion of operations

- 5.18 At the completion of the bulk cargo loading or unloading the stevedore shall:
 - Ensure that the stevedore work area and other adjacent affected areas are clean and free of any particulate matter or other material. This includes the wharf apron, fenders, fender plates, bollards, designated roadways, immediately adjacent to buildings and nib walls,
 - Hoppers must be completely empty with jaws left closed,
 - Stormwater protection materials shall be removed and disposed of by the stevedore,



Note: The use of water to wash down the berth or any other surface/equipment is prohibited within the Port of Tauranga Facility other than in in designated Port of Tauranga wash down areas. The discharge of any material, including bulk solids, into the harbour is also prohibited.

6. Rules for bulk cargo transport operators

- 6.1 Trucks undertaking Bulk Cargo Operations shall at all times adhere to the Port of Tauranga approved traffic management plan provided for the operation.
- 6.2 Trucks shall travel at or below the designated speed limits. These are sign posted and detailed in Schedule 3.
- 6.3 The levelling of cargo by trucks shall be undertaken within the stevedore's work area adjacent to the ships side and shall not result the generation of airborne particulate/dust that is visible and travels greater than 15 metres from the truck bin.
- 6.4 Trucks undertaking transport activities for bulk solid materials shall have their bins completely covered in all areas of the Port of Tauranga Facility, with the exception of the stevedore's working area, to prevent the generation of airborne particulate/dust. This includes when the bins are empty and if a truck is only travelling through Port of Tauranga Facility (i.e. not loading or unloading bulk cargo materials).
- 6.5 Trucks operating in the stevedore's work area shall travel at speeds of 10 kilometres per hour or less.
- 6.6 Trucks heavily coated with bulk cargo material shall be cleaned as soon as practicable within the stevedore's working area or at an appropriate enclosed offsite facility, such as an appropriate bulk cargo storage facility. If cleaning is undertaken within the stevedore's work area, it must not cause generation of airborne particulate that is visible and travels greater than 15 metres from the cleaning site.



Compliance, Monitoring and Administration

7. Monitoring of compliance

7.1 A representative from the POTL, the Cargo Owner and the Stevedore, who are familiar with the requirements of the Procedures shall undertake a daily compliance audit of the Bulk Cargo Operation.

Each party shall undertake at least one audit each calendar day that the operation occurs, as practicable. However, to allow for instances where this is not practicable, compliance with this rule shall be considered met for each party if an audit is undertaken on 80 percent of calendar days that the operation occurs on.

7.2 Audits undertaken as per rule 7.1 shall be completed on the audit form (as provided in Schedule 4). All applicable sections of the form shall be completed. Copies of the Audit Form must be kept as a record and shall be made available to any other party named in rule 7.1 that was involved in the Bulk Cargo Operation in a timely manner following a written request from that party.

<u>Note</u>: A Cargo Owner may only request audit results from another party if the operation was the handling of the Cargo Owners product. Similarly, a stevedore may only request audit results from other parties if they were the stevedore undertaking the Bulk Cargo Operation. POTL may request the audit results of any Bulk Cargo Operation undertaken within the Port of Tauranga Facility.

7.3 If any party listed in rule 7.1 identifies a non-compliance with these procedures when undertaking an audit, it is the responsibility of that party to identify the non-compliance with the party responsible. The party responsible shall correct the non-compliance as soon as is practicably possible.

8. Exemptions to the Procedures and alternative handling equipment

- 8.1 An application for exemption from any section of the procedures must state what section the exemption is sought from, why, for how long and any additional mitigation measures proposed instead. Applications are to be made to the POTL Manger of Operations, Cargo Services Manager or the Environmental Manager.
- 8.2 POTL reserves the right to decline any application for an exemption and to apply any reasonable conditions to a granted exemption applied for in accordance with Section 8.1.
- 8.3 A stevedore undertaking a Bulk Cargo Operations may verbally request from the POTL Customer Service Centre approval to continue to operate at times when wind conditions exceed the limits stipulated by rules 5.3. Any approval granted by the Customer Service Centre will only be granted if the cargo being handled is not causing visible airborne particulate/dust generation beyond the stevedore's work area. This approval may be retracted by the POTL at any time, and is valid only to that Bulk Cargo Operation for 24 hours.
- 8.4 POTL reserves discretion to approve or decline any request made as per Section 8.3.
- 8.5 Any party wishing to utilise new or alternative equipment (type or technology) for any Bulk Cargo Operation activity must seek prior approval from POTL. This includes any alternative to the standard equipment type and technology used on site as of 1 January 2021, including but not limited to hoppers, grabs, and vacuum sweeper trucks.



- 8.6 POTL reserves the right to decline any application for the use of new or alternative equipment made as per Section 8.5.
- 8.7 In assessing if the approval applied for under Section 8.5 will be granted POTL will consider:
 - The potential environmental risk both within and beyond the Port of Tauranga Facility associated to the equipment or technology,
 - The degree of environmental risk mitigation provided by the equipment compared to current equipment,
 - Potential logistical issues associated to the equipment or technology that may directly affect POTL infrastructure, operation or procedure, or the operations and procedures of other port users, and
 - Any potential additional infrastructure requirements or constraints that may occur as a result of the new equipment or technology.

9. Non-compliance with the procedures

- 9.1 POTL may issue a warning (strike) on a Bulk Cargo Operation if it is identified that a rule within the procedures is not complied with.
- 9.2 If three warnings are received by a single operation POTL may require the operation to shut down for up to 12 hours. The operation will be permitted to recommence following the specified shutdown period if all non-compliances have been remedied. POTL also reserves the right to request additional mitigation actions to be taken by the appropriate party prior to recommencement of the operation.
- 9.3 In the event of a shutdown being made in accordance with Section 9.2, POTL will not be responsible for any direct or consequential costs incurred as a result.
- 9.4 In the event that a warning is issued, POTL will ensure that notification of the warning, and reasons for the warning, is provided to the responsible party, the stevedores and the bulk cargo owner as soon as is practicably possible.
- 9.5 POTL reserves the right to take any additional action if any party incurs repeated warnings for non-compliances over multiple operations.
- 9.6 POTL reserves the right to take immediate action above and beyond the warning process if any of the following occurs:
 - A significant breach of the Procedures,
 - The failure to comply with any requests for further mitigation actions, as detailed in Section 9.2,
 - Identification of a non-compliance with any legislation or regulation (including a resource consent or rule in a regional plan),
 - Identification of any nuisance or adverse environmental effect within or beyond the Port of Tauranga Facility associated to the Bulk Cargo Operation and is considered by the POTL to be unacceptable.

In these instances, the POTL reserves the discretion to determine what action will be taken.

<u>Note</u>: When taking any immediate action on a party in accordance with Section 9.6 POTL must determine that the party was responsible for the non-compliance and/or adverse



environmental effects based on evidence based on evidence that meets a 'balance of probabilities' standard.

10. High risk/dusty bulk cargo materials

- 10.1 For the purposes of the Procedures, the following bulk cargo materials are considered as likely to have higher risk of airborne particulate/dust generation during Bulk Cargo Operations:
 - Agricultural animal protein feeds, including but not limited to, Palm Kernel Expeller, Soya Bean Meal, Tapioca, Dried Distillers Grain, Cotton Seed, Corn Gluten
 - Phosphate Rock,
 - Potash
 - Clinker
- 10.2 POTL reserves the right to determine any other bulk solid material as having a higher risk of airborne particulate/dust generation during bulk solids operation, and effectively be added to the list detailed in Section 10.1.
- 10.3 Exemptions may be granted for certain bulk solids materials listed in Section 10.1, applications for exemptions will be managed by the process detailed in Section 8.



Schedule 1 – Port of Tauranga Facility



Schedule 2 – Stevedore's Work Areas



- North PEPER CONSTRUCTION 20 40

Schedule 3 – Speed Limits within Port of Tauranga Facility

Schedule 4 – Daily Audit Form

Daily Audit sheet to assess compliance with BCHP						
If a yellow box is selected, this identifies a non-compliance, or potential non -compliance. Refer to BCHP document and correct any confirmed non-compliances immediately.						
Date:		Time:				
Monitoring Party	(circle one)	Stevedore	POTL	Cargo Owner	Other]
Person monitoring:			1			
, state memoring.			1			
Cargo Owner:				Cargo type:		Is the Cargo a 'dusty cargo' (as per section 10 of BCHP?): Yes No
What exemptions apply:]
Hoppers in use:				7		
		Yes	No	N/A	Comment	
Current wind speed status (circle one)			Green	Amber	Red or	Current 15 min average wind speed at berth 8:
Sweeper operating on site? Yes			No	N/A	h	Comment or corrective actions if applicable
Average ground condition Medium accu		140	1/8		if medium or heavy dust is present, consider haulting operation to allow sweeper to "catch up"	
		Small amount	of dust			
		Medium accumulation of dust				
		Heavy accumulation of dust				-
				-		
Are the hoppers bein		Yes	No	_		
Are hoppers beign overfilled (peaked)?		Yes	No			
Are save alls installed?		Yes	No			
Is product around nib walls etc being cleaned up?		Yes	No			
Is there any product visible in the harbour?		Yes	No			
Are non active ship holds closed? Yes		Yes	No			
Are grabs being opened in slow release?		Yes	No			
Are grabs and hoppers leaking?		Yes	No			
Are grabs being opened at a suitable height		Yes	No	No	ote: suitable height i	s less than 1 metre above top of hopper or the product level if the hopper has no cross memebers
Is there visible dust travelling >100m from work area? Yes No						
	Are trucks covered in excessive bulk cargo product?		No			
Are trucks arriving an	nd leaving work area with bins covered?	Yes	No			