



Air Quality Management Plan

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1. INTRODUCTION

This Air Quality Management Plan (AQMP) describes dust and odour management procedures that will be undertaken by Port of Timaru (PrimePort) to minimise discharges to air and water from storage, transport and handling of bulk cargos. It is important that these procedures are followed to prevent adverse environmental effects and ensure compliance with resource consent conditions.

Best practice operating procedures as at July 2020 are specified in this plan. However, the plan should be reviewed annually to incorporate any changes and improvements to the air quality management system. Any changes will be recorded and a copy of the current AQMP sent to ECan on 31 August each year.

The AQMP identifies the following:

- Key personnel responsible for implementing the AQMP
- Environmental performance standards
- The potential sources of dust and odour at the Port
- Dust and odour control procedures
- Subcontractor management
- Monitoring methods
- Methods for managing complaints regarding dust and odours and keeping records related to compliance

The area to which this AQMP applies is shown in Figure 1.



Figure 1: Aerial photograph showing area to which the AQMP and resource consent for discharges to air from bulk handling applies

2. KEY PERSONNEL

The Safety and Environmental Manager are responsible for the implementation of this plan. The managers shall be able to be contact at all times.

- Safety, Environmental & Security Manager: Stewart Gollan
- Operations Manager: Emma O'Connell
- Operations Supervisor : Michael Nickerson
- Telephone contact number (24 hours/day): 03 687 2700

3. ENVIRONMENTAL PERFORMANCE STANDARDS

The discharges from the Port are subject to the provisions of the Resource Management Act 1991, the National Environmental Standards for Air Quality, regional and district plans and the conditions of resource consent CRC160502.

The conditions of resource consent CRC160502 which set the environmental performance standards are copied below. The full text of consent CRC160502 is attached in [Appendix 1](#).

Condition 1

The discharges shall only be contaminants from the transfer, storage and transport of bulk cargo. The discharges shall not include any materials specified in Schedule B: Toxic Substances, Class 6.1, Toxic Substances of the "Hazardous Substances and New Organisms Act, 1996".

Condition 6

The cargo handling and stockpiling activity shall not cause the deposition of particulate matter that is offensive or objectionable, beyond the boundary of the property on which this consent is exercised.

Condition 8

Any discharges to water from the activity, after reasonable mixing and disregarding the effect of any natural perturbation, shall not give rise to the production of any conspicuous oil or grease films, scums or foams, floatable or suspended materials or any emission of objectionable odour in the receiving water.

4. POTENTIAL SOURCES OF DUST & ODOUR AT THE PORT

The loading, unloading and storage of bulk cargo have the potential to generate dust and odours which may be transported beyond the boundary of the Port and have adverse effects on the environment if not properly controlled. The major sources of dust and odours at the Port are:

- Ship loading and unloading;
- Stockpiles of materials;
- Vehicle movements; and
- Wind generated dust from split materials on wharf and yard areas.

The Port handles the following bulk cargos at present:

- Fertiliser, including urea;
- Stock feed including palm kernel extender (PKE), dried distillers' grain (DDG), cotton meal seed, soya meal, grains, seeds;
- Cement; and
- Logs.

If and when new products are introduced to the Port this AQMP will be revised to include any specific emission control procedures that are require for the new materials.

5. ENVIRONMENTAL FACTORS

The locations which are potentially most sensitive to dust and odour discharges from the Port are the residences located to the southwest of the wharf on The Terrace.

The prevailing winds at the Port blow from the north westerly and easterly quarters. Winds from the northeast which blow dust and odour towards the residential area are relatively infrequent.

The prevailing north westerly and easterly quarter winds blow any dust and odours generated at the Port towards the industrial facilities located to the west and east of the Port.

The major factors that influence dust emissions from bulk material handling activities are:

- Wind speed – the critical wind speed for the pickup of dust from surfaces is 5m/s. Dust pickup increases rapidly at wind speeds of above 10m/s¹.
- The percentage of fine particles in the materials.
- Moisture content of the material.
- The area of exposed surface.
- Disturbances such as loading and unloading of materials.
- Drop heights.

Odour discharges are closely associated with the dust discharges from the bulk materials handled at the Port. Consequently, if dust discharges are minimised, odour discharges should also be minimised.

¹ Air and Waste Management Association "Air Pollution Engineering Manual" 2nd edition edited by Wayne T Davis, 2000.

6. GENERAL DUST CONTROL PROCEDURES

The following dust management procedures shall be implemented by staff for all operations. In addition to these general procedures, specific procedures are required for materials, which are considered to have a higher risk of creating dust and odour emissions beyond the boundary of the Port. Material specific procedures are included in the Appendices for the following materials:

- Dry Bulk Cargos – including stock feed and fertilisers.
- Logs
- Cement

6.1 General Procedures

6.1.1 General

- Take account of daily forecast wind speed and wind direction before commencing an operation that has a high potential for generating odour or dust.

6.1.2 Ship Unloading

- Place deflection shields between the ship and the wharf during cargo transfer. Position the shields beneath the path of the hydraulic grabs to deflect spilled material onto the wharf and minimise spillage into the harbour.
- Cover holes in the wharf area where material may be deposited, including those adjacent to the railway tracks during cargo transfer to prevent discharges to water and enable easier cleaning of the wharf area.
- Cover the wharf area underneath the receiving hopper during cargo transfer.
- Cease the transfer of fine dusty products when there is potential for a significant discharge of wind-blown dust. For the purposes of this AQMP transfer of fine dusty products will cease in the following conditions when:
 - Dust generated on site is visible beyond the boundary of the Port
 - Wind gusts (two minute average or less) (as measured at the Port climate station), which exceed 10m/s (20 knots) during the previous two consecutive 10 minute periods.

Work may recommence when wind gust speeds (two minute average or less) are less than 7.5m/s (15 knots) during the previous two consecutive 10 minute periods.

- Maintain the hydraulic grabs used for cargo handling in good working order to minimise leakage from the base of the grabs during transfer to the hopper.
- Position the receiving hopper to minimise the cargo transfer distance between the ship and the hopper.
- The hopper is to be kept as full as possible. The product may be peaked in the centre of the hopper up to 500mm above grate level. This will avoid dust being generated when product is discharged out of the grab. When practicable, hoppers should be kept with product in the bowl to try to mitigate dust billowing when grab is discharged.

6.1.3 Vehicles

- Cover all trucks loaded with dry-bulk cargo prior to leaving the Port area.

- Trucks must be covered at all times, both full and empty when travelling to and from the ship.
- Vehicles travelling across unsealed surfaces such as the Log Yard shall not exceed a speed of 15km/hr.
- Trucks carrying stock food must transit through the truck wash before exiting the Port.

6.1.4 Sweeping

- Following unloading/loading operations the wharf areas shall be cleaned using a vacuum sweeper and/or a tractor mounted rotary broom with water attachment to remove the majority of any spilt materials. The area shall also be swept by hand in places if necessary. The material collected by these methods is to be disposed of off-site at appropriate facilities. The area shall then be cleaned with water.

6.1.5 Stockpiles

- Apply water sprays to the surface of stockpiles, as required, to minimise the discharge of wind-blown dust.
- Locate stockpiles as far as practicable to shelter them from prevailing winds.
- Minimise stockpile heights to reduce the effect of wind on the stockpiles.

6.1.6 Unpaved Surfaces

- Apply water sprays to unpaved yard areas including the Log Yard, as required to minimise the discharge of wind-blown dust.

6.1.7 Cement Unloading

- Whenever cement unloading operations are underway the bag filter on the pneumatic loading system must be operating. If emissions of dust are visible from the bag filter operations must cease until the cause of the visible emissions is identified and rectified.
- Cement unloading operations during excessively windy conditions will be stopped (in accordance with procedures outline in this AQMP).

7. USERS OTHER THAN PRIMEPORT

7.1 Contractors

Any cargo handling work undertaken by parties other than PrimePort, but under PrimePort's resource consent conditions, will comply with this AQMP. That party will appoint an Operations Supervisor, in accordance with this plan, to ensure that the specified dust control procedures are implemented.

8. MONITORING

To ensure that dust and odour mitigation measures are implemented and effective a monitoring plan is to be implemented.

Table 1 outlines the monitoring schedule that is to be implemented in this AQMP. The frequency of the monitoring is defined but it must be noted that in the instance of a strong wind, emissions of dust off-site or a complaint, the frequency of monitoring should be increased.

| Monitoring Activities | Frequency |
|--|---|
| Check weather forecasts for strong winds and rainfall | Daily when loading and unloading operations are planned to occur |
| Observe weather conditions via observations and data inputs from weather station | Daily and as conditions change when loading and unloading operations are underway |
| Inspect all unpaved and paved surfaces for dust generation potential | Daily and as conditions change |
| Inspect stockpiles to ensure stabilisation, dampness, height and requirement for covering or shelter | Daily and as conditions change |
| Inspect dust and odour generating activities to ensure all emission control systems are implemented and dust and odour emissions are minimised | Daily and as new activities are commenced and when winds exceed 5 m/s (10 knots) |
| Inspect watering systems (sprays and water carts) to ensure equipment is maintained and functioning effectively | Weekly |
| Monitor vehicle speeds | As required |
| Monitor covering of vehicle loads | As required |

Table 1: Monitoring Programme

9. COMPLAINTS

Complaints may be referred by one or more of the regulatory authorities or a member of the public. It is the responsibility of the "site supervisor" to respond to and follow up all complaints regarding dust or odours. The "site supervisor" is responsible for ensuring that suitably qualified personnel are available to respond to complaints at all times.

9.1 Actions to be taken as soon as possible following a complaint or if an adverse effect is observed

- Note the time, date, identity and contact details of complainant on a complaint form. Note if complainant has been referred from a consent authority.
- Note weather conditions including wind direction, wind speed and rainfall.
- Ask complainant to describe the nature of the dust or odour emission; is it constant or intermittent, how long has it been occurring, is it worse at any time of day, does it come from an identifiable source?

- As soon as possible after receipt of a complaint undertake a site inspection. Note all dust and odour generating activities taking place and the mitigation methods that are being used. Order any remedial action necessary.
- As soon as possible visit the area from where the complaint originated to ascertain if dust or odours are still a problem.
- If it becomes apparent that there may be a source of dust or odour other than the Port causing the nuisance it is important to verify this. Photograph the source and emissions if possible.
- As soon as possible after the initial investigations have been completed contact the complainant to explain any problems identified and remedial actions taken.
- If necessary update any relevant procedures to prevent any recurrence of problems.
- Complete complaint form and file on complaint register.

9.2 Follow Up Actions

- Advise management and regulatory authority as soon as practical that a complaint has been received, what the findings of the investigation were and any remedial actions taken.
- Advise staff and contractors that a complaint has been received, what the findings of the investigation were and any remedial actions taken.

10. REPORTING

10.1 Site Management to Contractors

Site management will inform all contractors on site of the following:

- Their responsibilities with respect to this AQMP.
- Any complaints received regarding dust and odours and the remedial actions taken.

10.2 Contractors to Site Management

All contractors on site shall inform site management of the following:

- Any problems they foresee with dust and odour management with their operations and any problems they may have regarding the management of odour and dust with other contractor's operations.
- The measures they carry out to prevent dust and odour emissions.

10.3 Site Management

Site management will inform the regulatory authorities of the following:

- Any complaints regarding odour or dust as soon as practical after receipt of the complaint.
- Provide the regulatory authorities with a copy of the AQMP annually and if any significant revisions of the plan are made during the year.

Appendix 1 – Resource Consent Conditions

RESOURCE CONSENT CRC160502

Pursuant to Section 104 of the Resource Management Act 1991

The Canterbury Regional Council (known as Environment Canterbury)

| | |
|---------------------|---|
| GRANTS TO: | Primeport Timaru Limited |
| A DISCHARGE PERMIT: | To discharge contaminants to air and water. |
| COMMENCEMENT DATE: | 24 Aug 2015 |
| EXPIRY DATE: | 24 Aug 2050 |
| LOCATION: | Port of Timaru, Timaru |

SUBJECT TO THE FOLLOWING CONDITIONS:

- 1 The discharges shall only be contaminants from the transfer, storage and transport of bulk cargo. The discharges shall not include any materials specified in "Schedule B: Toxic Substances, Class 6.1, Toxic Substances" of the Hazardous Substances and New Organisms Act, 1996.
- 2 The discharges to air and water shall be from at or about grid reference NZ Topo50 BZ19:6094-8299 as shown on Plan CRC160502, which forms part of this consent.
- 3 The consent holder shall adopt the best practicable option to minimise the discharge of contaminants into air and water from the stockpiling or transfer of bulk cargoes between ship and wharf or landbased transport, or between the wharf and landbased transport vehicles. Such measures shall include, but not be limited to:
 - a. The use of shields between ship and wharf to prevent the spillage of materials to the sea during loading and unloading of cargo;
 - b. The covering of holes or gaps in the wharf area during the loading and unloading of cargo;
 - c. Minimising cargo transfer distance and cargo handling as far as is reasonably practicable;
 - d. Regular maintenance of hydraulic grabs;
 - e. The covering of bulk cargo loads on trucks before those trucks leave the wharf area;
 - f. The cleaning of the wharf area by mechanical or suction sweeper after the completion of each cargo transfer operation;
 - g. Not loading or unloading dusty products during strong wind conditions;

- e. A description of any significant discharges of cargo material to air and/or water, including a description of the event, its timing and duration, weather conditions at the time of the event, the type and approximate amount of material discharged, and any remedial action taken.

This record shall be provided to the Canterbury Regional Council on request.

- 8 Any discharges to water from the activity, after reasonable mixing and disregarding the effect of any natural perturbation, shall not give rise to the production of any conspicuous oil or grease films, scums or foams, floatable or suspended materials or any emission of objectionable odour in the receiving water.
- 9 A record of any complaints relating to deposited and/or suspended particulate matter shall be maintained, and shall include:
 - a. The location where the deposited particulate matter was detected by the complainant;
 - b. The date and time when the deposited particulate matter was detected;
 - c. A description of the wind speed and wind direction when the deposited particulate matter was detected by the complainant;
 - d. The most likely cause of the deposited particulate matter detected; and
 - e. Any corrective action undertaken by the consent holder to avoid, remedy or mitigate the deposition of particulate matter detected by the complainant.

This record shall be provided to the Canterbury Regional Council on request.

- 10 The filtration systems in the cement unloading and loading system on No. 2 Wharf shall operate at all times when cement is being unloaded from or loaded onto ships.
- 11 The filtration systems in the cement loading and unloading system shall be maintained in an effective operating condition and shall be operated in accordance with the manufacturer's instructions.
- 12 The Canterbury Regional Council may, once per year, on any of the last five working days of May or November, serve notice of its intention to review the conditions of this consent for the purposes of:
 - a. Dealing with any adverse effect on the environment that may arise from the exercise of the consent; or
 - b. Requiring the adoption of the best practicable option to remove or reduce any adverse effect on the environment.

- 13 If this consent is not exercised before 30 September 2020 it shall lapse in accordance with section 125 of the Resource Management Act 1991.

Issued at Christchurch on 24 August 2015

Canterbury Regional Council

Appendix 2 – Dry Bulk Cargo Management Plan

These procedures relate to all dry bulk cargos handled within the Port area to effectively minimise dust and ensure compliance with resource consent obligations.

Air Quality Objective: To ensure that dust from handling dry bulk cargos shall not cause an objectionable or offensive effect beyond the ‘dust control boundary’ (shown on the attached plan), by using best practicable solutions to mitigate.

Marine Quality Objective: To ensure that dust, debris or other material from handling dry bulk cargos shall not cause objectionable or offensive pollution to the marine environment, by using best practicable solutions to mitigate.

| Task | Responsibility |
|--|------------------------------------|
| Preparation Prior to Loading | |
| 1. A meeting will be held between PrimePort and the stevedore to discuss the following: <ol style="list-style-type: none"> a. Requirements of the resource consent b. Provide information on where to access weather information c. Seek the stevedore’s confirmation in writing that they accept and understand the need to prevent dust and odour emissions which are offensive and objectionable beyond the resource consent boundary. | PrimePort and Stevedore |
| 2. Ensure 24 hour contact numbers of the stevedore’s representatives who have been designated as responsible for the materials handling are provided to the ECan pollution hotline at least 24 hours prior to start of loading. | Stevedore |
| 3. Whenever possible the No. 1 Extension Wharf or North Mole berths shall be used in preference to inner harbour berths to increase the separation distance to residential properties. | PrimePort Operations Manager |
| 4. Check forecast wind conditions and determine the potential dust risks the day before the shipment is due to be unloaded by completing a Dust Risk Assessment form (Appendix 5). | Stevedore |
| 5. If high risk weather conditions are forecast (e.g. wind speeds greater than 7.5 m/s (15 knots) the stevedore must advise the importers representative and PrimePort Operations Manager as forewarning that a high dust risk exists. | Stevedore |
| 6. If extreme risk weather conditions are forecast (e.g. winds are forecast to exceed 7.5 m/s (15 knots) and to blow from the north or northeast) the stevedore must advise the importers representative and PrimePort Operations Manager as forewarning that an extreme dust risk exists and give consideration to delaying unloading. | Stevedore |
| 7. Check all grabs to ensure the teeth are tight when shut to ensure they will not leak. If there is a problem that results in PKE spillage, that grab must be immediately taken out of service for repair. | Stevedore |
| 8. Ensure that all equipment required to carry out the general mitigation procedures and these specific procedures are available and in good working order. | Stevedore and PrimePort |
| 9. Ensure all staff working on loading are aware of and understand these procedures. | Stevedore Supervisor |

| Task | Responsibility |
|---|------------------------------|
| During Vessel Unloading – Dust Risk Assessment | |
| 1. During unloading the risk of dust and odour emissions beyond the consent boundary must be assessed regularly as necessary, but no less frequently than four hourly intervals for the duration of the unloading operation. | Stevedore Supervisor |
| 2. The risk is to be assessed by a combination of: <ul style="list-style-type: none"> a. Checking the weather data on PrimePort’s weather website for high risk conditions occurring; and b. By physical inspection by the stevedore’s supervisor of the consent boundary to determine if objectionable or offensive dust or odour emissions are occurring beyond the boundary. | Stevedore Supervisor |
| 3. The results of the periodic assessments must be recorded in the Dust Risk Assessment Record (Appendix 5). | Stevedore Supervisor |
| 4. When wind gusts over 7.5 m/s (15 knots) have occurred twice in the previous 30 minutes then physical inspection of the resource consent boundary must be undertaken to evaluate if non-compliance with the resource consent is occurring. | Stevedore Supervisor |
| 5. Where this assessment finds dust and/or odour emissions are moving over the consent boundary then loading must cease until effective mitigation measures can be implemented and wind conditions abate. | Stevedore Supervisor |
| 6. In the event that unloading must cease it is the stevedore’s responsibility to liaise with the importers representatives and PrimePort Operations Manager to keep them informed. | Stevedore Supervisor |
| 7. When wind gusts over 7.5 m/s (15 knots) have occurred twice in the previous 30 minutes and the wind is blowing from the north or northeast unloading must cease until it has been established by a physical inspection of the resource consent boundary that no non-compliance with the resource consent is occurring. | Stevedore Supervisor |
| During Unloading – Mitigation of Effects | |
| 1. PrimePort will maintain active oversight of the unloading operations and audit implementation of the procedures. | PrimePort Operations Manager |
| 2. The discharge of dust to coastal water is to be minimised by adoption of the following measures: <ul style="list-style-type: none"> a. Checking of grabs b. Minimising cargo handling distances c. Use of screens between the ship and the wharf d. Regular wharf cleaning using mechanical rotary broom sweeper with dust suppression device and hand sweeping e. Ensuring decks and tailgates of trucks are tight and loads are covered f. Minimising drop heights from grabs to hoppers g. Regular sweeping of spills including any significant spills on public roads h. Use of shovels or mechanical means to place the sweeping into hoppers that are then emptied back into trucks i. Prevent overfilling of the hoppers | Stevedore |

| Task | Responsibility |
|---|----------------|
| Clean up on Completion of Unloading | |
| 1. Determine when berth is next required and ensure wharf is clean before the arrival of the next ship. In any event the wharf cleaning is to be complete within 18 hours of unloading finishing. | Stevedore |
| 2. Remove hoppers to a sealed area, sweep down, contain and remove residue off site. Clean hoppers with fresh water under high pressure. | PrimePort |
| 3. Clean the wharf and any other surfaces using a vacuum and/or tractor mounted rotary to remove the majority of spilt materials. Sweep the area by hand if necessary. | Stevedore |
| 4. Collect spilt material and dispose of off-site at an appropriate approved facility. | Stevedore |
| 5. Clean wharf and surrounding areas with fresh water under high pressure. | Stevedore |

| Task | Responsibility |
|---|---------------------|
| <p>Wharf Area The discharge of dust to air or coastal water from log stevedoring activities is to be minimised by the adoption where appropriate of the following measures:</p> | |
| <p>Monitoring: Fill out the Dust Risk Assessment form (Appendix 5) based on weather forecasts one day prior to start of loading.</p> <p>If high risk weather conditions are forecast (e.g. wind speeds greater than 7.5 m/s (15 knots) the stevedore must advise the importers representative and PrimePort Operations Manager as forewarning that high dust risk exists.</p> <p>Regular visual monitoring of dust generation from operations on the wharf.</p> <p>Regular assessment of wind conditions.</p> | Stevedoring company |
| <p>Wharf Cleanliness:</p> <ul style="list-style-type: none"> • The resource consent requires that as much bulk cargo as is reasonably practicable is removed from the wharf surface before wash down of the wharf commences. • Find out when berth is next required and ensure wharf will be clean for the next ship. In any event the wharf cleaning is to be completed within immediately once vessel operations are completed. • Dry clean the wharf to remove as much bark and dust as is reasonably practicable using brooms, shovels and a road sweeper. • The wharf is only to be washed if further cleaning is necessary and all dust has been swept and collected. Fresh water under high pressure is to be used for hosing any remaining residue from the wharf. | Stevedoring company |
| <p>HAZMAT:</p> <ul style="list-style-type: none"> • Any hazardous substances (such as fuels, oils etc) used for operations adjacent to the wharf shall be stored in an appropriate dangerous goods store or equivalent industry standard facility. • A spill kit shall be kept on site in a state of readiness for deployment in case of a spill. Any spills are to be reported to PrimePort. | Stevedoring company |
| <p>Communication:</p> <ul style="list-style-type: none"> • Ensure all staff working on loading are aware of, and understand, the procedures. • Ensure 24 hour contact numbers of the Stevedoring Company's representative(s) are provided to PrimePort prior to the start of loading. • In the event that loading must cease it is the stevedore's responsibility to liaise with the importers representative and PrimePort Operations Manager to keep them informed. | Stevedoring company |
| <p>Compliance:</p> <ul style="list-style-type: none"> • PrimePort will maintain active oversight of the operations and audit implementation of the procedures. | PrimePort |

Appendix 4 – No. 2 Wharf Cement Loading & Unloading Management Plan

These procedures relate to all log cargos handled within the Port area to effectively minimise dust and ensure compliance with resource consent obligations.

Air Quality Objective: To ensure that dust from handling cement shall not cause an objectionable or offensive effect beyond the ‘dust control boundary’ (shown on the attached plan), by using best practicable solutions to mitigate.

Marine Quality Objective: To ensure that dust, debris or other material from handling cement shall not cause objectionable or offensive pollution to the marine environment, by using best practicable solutions to mitigate.

| Task | Responsibility |
|--|--|
| Preparation Prior to Unloading | |
| <ul style="list-style-type: none"> • A meeting will be held between PrimePort, Holcim and/or its designated Contractor to discuss the following: <ul style="list-style-type: none"> ○ Requirements of the resource consent ○ Provide information on where to access weather information ○ Seek the stevedore’s confirmation in writing that they accept and understand the need to prevent dust emissions which are offensive or objectionable beyond the resource consent boundary | PrimePort, Holcim and/or its designated Contractor |
| <ul style="list-style-type: none"> • Ensure 24 hour contact numbers of representatives from Holcim and/or their Contractor who have been designated as responsible for the materials handling are provided to the ECan pollution hotline at least 24 hours prior to start of loading. | Holcim and/or its designated Contractor |
| <ul style="list-style-type: none"> • Checks forecast wind conditions and determine the potential dust risk the day before the shipment is due to be unloaded by completing a Dust Risk Assessment form (Appendix 5). | Holcim and/or its designated contractor |
| <ul style="list-style-type: none"> • If high risk weather conditions are forecast (e.g. wind speeds greater than 7.5 m/s (15 knots) Holcim and/or its designated Contractor must advise PrimePort Operations Manager as forewarning that a high dust risk exists. | Holcim and/or its designated Contractor |
| <ul style="list-style-type: none"> • If extreme risk weather conditions are forecast (e.g. winds are forecast to exceed 7.5 m/s (15 knots) and to blow from the north or northeast) Holcim and/or its designated Contractor must advise the PrimePort Operations Manager as forewarning that an extreme dust risk exists and give consideration to delaying unloading. | Holcim and/or its designated Contractor |
| <ul style="list-style-type: none"> • Check the operation of the pneumatic unloading system and associated bag filtration system ensuring there is no excessive wear and there are no leaks from the filter socks. | PrimePort, Holcim and/or its designated Contractor |
| During Vessel Unloading – Dust Risk Assessment | |
| <ul style="list-style-type: none"> • During unloading the risk of dust emissions beyond the consent boundary must be assessed regularly as necessary, but no less frequently than four hourly intervals for the duration of the unloading operation. | Holcim Site Supervisor and/or its designated Contractor’s Supervisor |
| <ul style="list-style-type: none"> • The risk is to be assessed by a combination of: <ul style="list-style-type: none"> ○ Checking the weather data on PrimePort’s weather website for high risk conditions occurring; and ○ By physical inspection by the Holcim Site Supervisor and/or the designated Contractor’s supervisor of the consent | |

| Task | Responsibility |
|---|---|
| <p>boundary to determine if objectionable or offensive dust emissions are occurring beyond the boundary.</p> | |
| <ul style="list-style-type: none"> The results of the periodic assessments must be recorded in the Dust Risk Assessment Record (Appendix 5). | |
| <ul style="list-style-type: none"> When wind gusts over 7.5 m/s (15 knots) have occurred twice in the previous 30 minutes then physical inspection of the resource consent boundary must be undertaken to evaluate if non-compliance with the resource consent is occurring. | |
| <ul style="list-style-type: none"> Where this assessment finds dust emissions are moving over the consent boundary then loading must cease until effective mitigation measures can be implemented and wind conditions abate. | |
| <ul style="list-style-type: none"> In the event that unloading must cease it is the Holcim and/or its Designated Contractor responsibility to liaise with PrimePort Operations Manager to keep them informed. | |
| <ul style="list-style-type: none"> When wind gusts over 7.5 m/s (15 knots) have occurred twice in the previous 30 minutes and the wind is blowing from the north or northeast unloading must cease until it has been established by a physical inspection of the resource consent boundary that no non-compliance with the resource consent is occurring. | |
| <p>During Unloading – Mitigation of Effects</p> | |
| <ul style="list-style-type: none"> PrimePort will maintain active oversight of the cement unloading operations and audit implementation of the procedures. | <p>PrimePort Operations Manager</p> |
| <p>Clean Up on Completion of Unloading</p> | |
| <ul style="list-style-type: none"> If the unloading equipment has been operating efficiently there should be no spilt material on the wharf. In the event there is spilt material on the wharf remove it with a dustless suction road sweeper. | |
| <ul style="list-style-type: none"> Only wash wharf with water if further cleaning is necessary and once all dust has been swept and collected. Fresh water under high pressure is to be used for hosing any remaining residue from the wharf. | |
| <p>Preparation Prior to Loading Coastal Ships</p> | |
| <ul style="list-style-type: none"> A meeting will be held between PrimePort, Holcim and/or its designated Contractor on an annual basis to discuss the following: <ul style="list-style-type: none"> Requirements of the resource consent Seek Contractor confirmation in writing that Holcim and/or its designated accept and understand the need to prevent dust emissions which are offensive or objectionable beyond the resource consent boundary. | <p>PrimePort, Holcim and/or its designated Contractor</p> |
| <ul style="list-style-type: none"> During loading operations the ships hold is to be fully enclosed. Check the operation of the pneumatic loading system and associated bag filtration system ensuring there is no excessive wear and there are no leaks from the filter socks. | <p>PrimePort, Holcim and/or its designated Contractor</p> |
| <ul style="list-style-type: none"> During loading operation's the ships hold is to be fully enclosed. Check the operation of the pneumatic loading system and associated bag filtration system ensuring there is no excessive wear and there are no leaks from the filter socks. | <p>PrimePort, Holcim and/or its designated Contractor</p> |

| Task | Responsibility |
|--|---------------------------------|
| During Loading – Mitigation of Effects | |
| <ul style="list-style-type: none"> PrimePort will maintain active oversight of the cement unloading operations and audit implementation of the procedures. | PrimePort Operations Manager |
| Clean Up on Completion of Loading | |
| <ul style="list-style-type: none"> If the loading equipment has been operating efficiently there should be no spilt material on the wharf. In the event there is spilt material on the wharf remove it with a tractor broom sweeper. | |
| <ul style="list-style-type: none"> Only wash wharf with water if further cleaning is necessary and once all dust has been swept and collected. Fresh water under high pressure is to be used for hosing any remaining residue from the wharf. | |

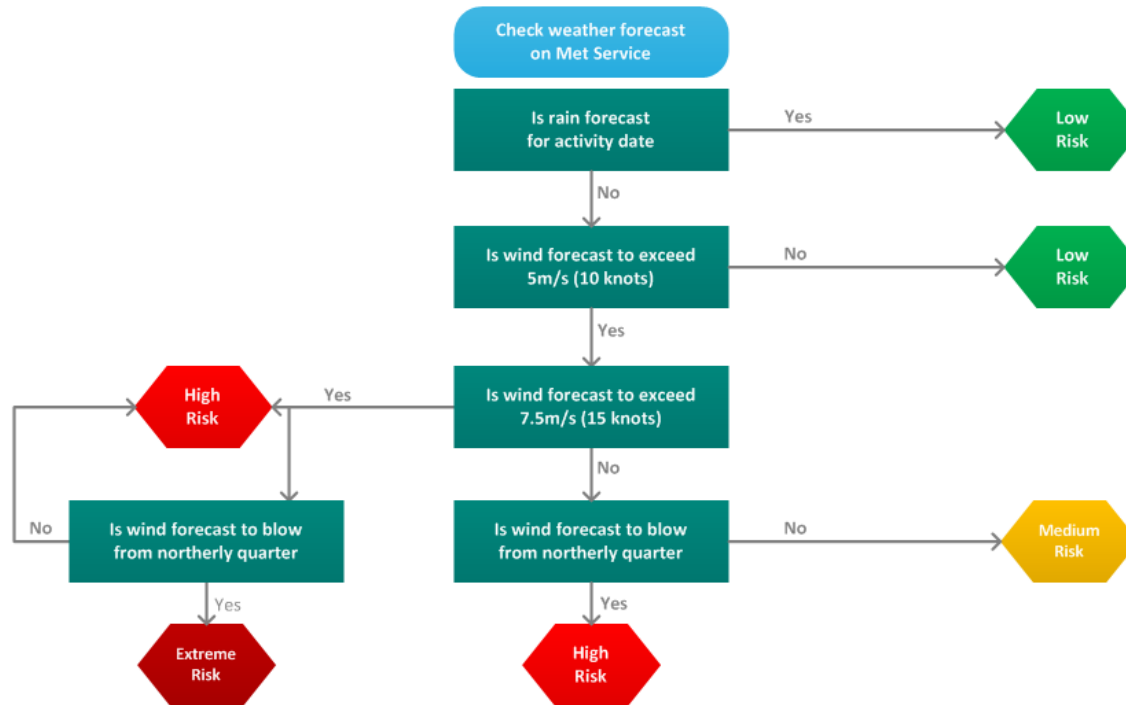
Appendix 5 – Risk Assessment Form

Prime Port Odour and Dust Risk Assessment

Date _____

Planned Activity Date _____

Prepared by _____



Actions to be taken

Summary Risk Level _____