**Appendix 4**

**Proposed Conditions**

1 For the purposes of these consent conditions the following definitions shall apply:

(a) “**AQE**” means a suitably qualified and experienced expert in the field of monitoring and assessment of air quality;

(b) **Calendar Year** means from the 1st of July through to the 30th June the following year;

(c) “**Coal Operations Manager”** means theCoal Operation Manager or other nominated person(s) who has the responsibility of managing dust effects in the coal stockyard as detailed in the DMP;

(d) “**CRC Manager**” means Canterbury Regional Council, Attention: Regional Leader - Monitoring and Compliance;

(e) “**DMP**” means the Dust Management Plan;

(f) “**PM10**“ means particulate matter with a diameter of 10 micrometres (µm) or less;

(g) “**Site**” means land owned by the Lyttelton Port Company shown on Plan CRCXXXXXXC; and

(h) “**Tangata Whenua**” means Te Hapū o Ngāti Wheke and Te Rūnanga o Ngāi Tahu.

2 The discharge of contaminants to air shall be from activities associated with an approximately 10 hectare coal stockyard operation at Lyttelton Port centred on reference NZTM E1578750:N5172060 as shown on Plan CRCXXXXXXA and also from activities associated with loading the coal onto a vessel at Cashin Quay 1.

3 The contaminants authorised by this discharge to air consent shall only be generated from activities associated with the operation of the coal stockyard, including:

(a) The handling of coal, including the unloading of coal from trains and the loading of coal onto vessels;

(b) The storage of coal;

(c) The use of conveyors and machinery to transport coal; and

(d) Movement of vehicles and machinery associated with the above activities, including machinery used for dust mitigation measures.

**LIMITS**

4 The annual throughput of coal shall not exceed two million tonnes over an annual rolling average.

5 The discharge shall not cause suspended or deposited particulate matter, which has a noxious, dangerous, offensive or objectionable effect, beyond the boundary of the Site.

6 Coal dust deposited from coal stockyard activities shall not exceed 2.4 grams per square metre per thirty days (2.4 g/m2/30 days) averaged over a nominal 30-day period at those sites containing dust monitoring gauges 10, 11 and 13 shown on Plan CRCXXXXXXB attached to the conditions of this consent.

**MITIGATION MEASURES**

7 The consent holder shall undertake all practicable measures to reduce coal dust emissions from the coal stockyard to ensure compliance with conditions 5 and 6 of this consent. Measures shall include but not be limited to:

(a) Applying water to the stockpiles, roads and other unconsolidated surfaces as necessary, to minimise coal dust emissions during or forecasted dry and windy conditions using a network of sprinkler towers and one or more water carts with water guns capable of reaching the tops of stockpiles;

(b) Taking current and forecasted wind conditions into account in planning and carrying out work to minimise dust discharge;

(c) Installing and maintaining covers on load-out conveyors as far as practicable;

(d) Installing and maintaining covers on the transfers points between the conveyor belts other than the transfer point to the jet slinger which is used to load onto the vessels;

(e) Minimising coal drop-height onto stockpiles and conveyors;

(g) Spraying water onto the load-in conveyor at a nominated point;

(h) Using scrapers to clean conveyor belts;

(i) Sweeping sealed surfaces and the wharf to remove any spillage;

(j) Ensuring machinery operating within the stockpile area do not exceed 15 km/hour and all other vehicles on the boundary roads do not exceed 30 km/hour;

(k) Applying a veneer or surfactant to the coal stockpiles.

8 Notwithstanding condition 7, the following shall also apply:

(a) If coal dust is visually observed in the air beyond the boundary of the Site then the Coal Operations Manager shall take immediate actions to reduce coal dust emissions and investigate why the emissions occurred;

(b) Sprinkler towers around the perimeter of the coal stockpile area in the direction that the wind is coming from shall be activated when:

i The wind speed exceed 7 m/s as a 1-hour rolling average; and

ii. Less than 2 mm of rain has fallen in the previous 24 hours; or

iii The continuous dust monitoring instrument required by condition 24 exceeds the tier one trigger specified in the DMP;

(c) When the continuous dust monitoring instrument required by condition 24 exceeds the tier one trigger specified in the DMP the Coal Operations Manager shall:

i. Ensure that the sprinkler towers are activated in accordance with condition 8 (b) (iii) or the fog cannons are activated in accordance with condition 8 (b) (iii) (if invoked pursuant to condition 14);

ii. Take any other immediate actions as necessary to reduce dust emissions; and

iii. Investigate why the emissions occurred;

(d) When the continuous dust monitoring instrument required by condition 24 exceeds the tier two trigger specified in the DMP the Coal Operations Manager shall carry out requirements set out in condition 8 (c) and either:

i. Ensures all working on the stockpiles and transporting coal to or from the stockpiles using the bulldozers or front end loaders ceases immediately; or alternatively

ii Introduces a surfactant to the water discharged by the sprinkler towers or the water carts or fog cannons (if invoked pursuant to condition 14) immediately.

(e) The mitigation measure used in either condition 8 (d) i. or ii. above shall remain in place until the 1-hour average concentrations fall back to or below the tier one trigger concentration contained in the DMP.

**Additional Mitigation Measures Due to a Predicted Increase in Annual Throughput**

9 The consent holder shall on the 1st of July each year forecast the annual throughput for the following Calendar Year.

10 Subject to condition 4, where the forecast of the annual throughput of coal made in accordance with condition 9 is to exceed 1.75 million tonnes over the following year, then the consent holder shall implement the mitigations measures described in conditions 11 to 17. These mitigation measures are additional to those set out in conditions 7 and 8.

11 Installation of a spray bar on bucket wheel reclaimer or associated conveyor as a means to dampen the coal prior to load-out.

12 The consent holder shall engage an AQE to carry out a trial on the effectiveness of using fog cannons as a mitigation measure. The trial is to be conducted as follows:

(a) The AQE recommends the number, layout and type of fog cannons needed for the trial and how they are to be used;

(b) The consent holder installs and uses the fog cannons in accordance with the recommendations made by the AQE made under condition 12 (a);

(c) The trial fog cannons must be in place and in use by November of that year until May of the following year; and

(d) At the conclusion of the trial the AQE prepares a written report that:

i. Discusses the effectiveness of using the fog cannons, which includes an analysis of the results of the air quality monitoring collected in accordance with conditions 24, 27 and 28;

ii. Describes any practical issues associated with the use of the cannons, and

iii. Makes a recommendation on whether fog cannons are an appropriate long- term mitigation measure; and, if so, makes recommendations on the number, layout and type of the fog cannons to be used.

13 The consent holder shall provide the CRC Manager a copy of the report prepared under condition 12 (d) by 1st July of the following year.

14 The consent holder shall implement the recommendations set out in condition 12 (d) (iii) by 1st November immediately following the trial required under condition 12 (b) and (c) year unless:

i. There are reasons provided in writing to the CRC Manager by the consent holder as to why it would be inappropriate to adopt the recommendation: and

ii. The CRC Manager agrees that the recommendation should not be adopted for the reasons provided by the consent holder.

15 The consent holder may cease to use some or all of the sprinkler towers, and may remove some or all of the sprinkler towers, provided that the fog cannons are introduced in accordance with condition 14 and the fog cannons are continued to be used and condition 16 is not invoked.

16 In the event that the fog cannons are not adopted as a mitigation measure pursuant to condition 14, the consent holder shall routinely use a second water cart.

17 The consent holder shall engage an AQE to make recommendations on how the second water cart is to be routinely used at the coal stockyard pursuant to condition 16. The recommendations shall include but not be limited to:

(a) The type and capacity of the second water cart to be used; and

(b) The circumstances when the second water cart is be used, including:

i. Months of the year;

ii. Meteorological conditions or forecasted conditions; and

iii. The results of the monitoring carried out in accordance with conditions 24, 27 and 28.

18 A copy of the recommendations prepared under condition 17 shall be forwarded to the CRC Manager.

19 If relevant, the consent holder shall implement the routine use of a second water cart pursuant to condition 16, and in accordance recommendations set out in condition 17, by the 1st November immediately following the trial required under condition 12.

20 Where the forecast of the annual throughput of coal made in accordance with condition 9 is to fall below 1.75 million tonnes over the following Calendar Year, then the consent holder may cease using the mitigation measure invoked under either condition 14 or condition 16.

21If condition 10 is invoked more than once then the requirements under either condition 14 or condition 16 will again apply. However, a fog cannon trial under condition 12; or, alternatively, the engagement of an AQE to make recommendations for the routine use of a second water cart under condition 17 is not required to be repeated.

**MONITORING**

22 At the commencement of this consent, instruments capable of continuously

monitoring and providing representative meteorological data for the coal stockyard shall be installed. The instruments shall be capable of measuring the following:

(a) Wind speed;

(b) Wind direction;

(c) Rainfall; and

(d) Temperature.

23 The meteorological monitoring instruments shall be installed and used in accordance with the

following:

(a) The anemometer shall be installed at a height of at least ten metres above natural ground level and in accordance with AS/NZS 3580.14:2014 ‘Methods for sampling and analysis of ambient air – Part 14: Meteorological monitoring for ambient air quality monitoring’;

(b) The meteorological monitoring results shall be continuously recorded using an electronic data logging system with an averaging time for each parameter of not more than two minutes. The logging system shall alert the Coal Operations Manager immediately when condition 8 (b) is triggered;

(c) The wind speed and direction shall be used to activate relevant sprinkler towers or fog cannons (if adopted) in accordance with condition 8 (b);

(d) The meteorological data shall be retained in the form of an electronic record for the

duration of this resource consent and copies provided to the CRC on request;

(e) The meteorological monitoring instruments shall at all times be maintained in order to achieve the conditions of this consent; and

(f) A report shall be prepared by the 1st July each year that details the number of times condition 8 (b) (i) and (ii) have been exceeded for the previous year and detail the maintenance of the instruments carried out in the previous year.

24 Within three months of the commencement of this consent, the consent holder shall install and operate and maintain a nephelometer that continuously monitors for PM10 in real time as a means to manage coal dust emissionsin accordance with condition 8 (c) and (d). The continuous monitor shall:

(a) Be located within the areas shown on Plan CRCXXXXXXB attached with this consent;

(b) Be installed in general accordance with the AS/NZS 3580.12.1:2015 guidelines; and

(c) Alert the Coal Operations Manager immediately when the triggers under Condition 8 (c) and (d) have been exceeded.

25 At the commencement of this consent, the consent holder shall install and operate nine dust deposition gauges located at the monitoring stations shown Plan CRCXXXXXXB attached to these conditions. The method of sample collection and analysis shall be in accordance with Australian Standard 3580.10.1-1991 to the extent that compliance with topographic constraints is reasonably achievable.

26 Notwithstanding condition 25, the consent holder may relocate the dust deposition gauges shown on Plan CRCXXXXXXB as follows:

(a) Within Area A for monitoring stations numbered 10, 11, 13;

(b) Within Area B for monitoring station 18; or

(b) At another location which is agreed to in writing by the CRC Manager.

27 The amount of coal dust deposited at each monitoring station shall be measured at least every 30 days (+ or - 2 days). The amount of coat dust deposited at sites 10, 11 and 13 shall be measured at least every 15 days (+ or - 1 day) during the months of September to April (inclusive) of each year.

28 The results of these measurements carried out in accordance with condition 27 shall be expressed as milligrams per square metre per day (mg/m2/day) deposited coal dust (calculated as daily average depositions over a thirty-day period and in accordance with Australian Standard 3580.10.1). The laboratory carrying out the analyses shall be accredited to ISO/IEC 17025:2017, by IANZ.

29 A report presenting a summary of the results of the continuous monitoring and deposition gauge monitoring required by conditions 24, 25, 27 and 28 shall be provided to the Canterbury Regional Council by the 1st of July each year.

**DUST MANAGEMENT PLAN**

30 Within three months after commencement of this consent, the consent holder shall submit a

DMP to the CRC Manager and to the Tangata Whenua.

31 The purpose of DMP is to set out the practices and/or procedures and mitigation measures to be adopted to ensure compliance with consent conditions and otherwise to minimise adverse effects beyond the boundary of the Site from the discharge of coal dust.

32 The DMP shall be prepared by an AQE and shall include but to be limited to:

(a) A description of the coal stockyard operation and surrounding environment;

(b) A description of the dust sources and their risk of creating an off-Site dust nuisance;

(c) Details of the mitigation measures to be carried out;

(d) Details of the dust and meteorological monitoring to be carried out;

(e) Details of meteorological and PM10 dust parameters that are monitored for and used to activate mitigation measures under condition 8 (b), (c), and (d), including the rationale for the trigger values used;

(e) A description on how complaints are to be recorded and responded to by the consent holder;

(f) A description of the record keeping to be performed;

(g) Identifying the persons responsible for carrying out all actions in relation to meeting

the requirements of this consent; and

(h) Auditing and review of the DMP.

33 The consent holder shall implement the measures set out in the DMP, and the operation of the coal stockyard shall be consistent with the DMP.

34 Where there is an inconsistency between the DMP and the conditions of this consent

the conditions of this consent shall prevail.

35 The consent holder may amend the DMP at any time provided any amendment achieves the purpose of the DMP.

36 Notwithstanding condition 35, the DMP must be amended if either condition 14 or condition 16 is invoked.

37 The DMP shall engage an AQE to review the DMP at least once every four years from the first date of the first commencement of this consent. The review shall examine those matters set out in auditing and review section of the DMP.

38 The review by the AQE caried out under condition 37 must recommend whether or not the DMP should be amended and the consent holder shall amend the DMP in accordance with those recommendations.

39 A copy of the DMP and any amended DMP shall be provided to the CRC Manager and to the Tangata Whenua.

40 A copy of the four-yearly reviews of the DMP carried out in accordance with condition 37 shall be provided to the CRC Manager and to the Tangata Whenua.

**RECORDS AND REPORTING**

41 The consent holder shall keep a record of coal stockyard throughput in tonnage to show compliance with Condition 3. This record shall be provided to the CRC Manager by the 1st of July each year for the previous year, for the duration of this consent.

42 The consent holder shall provide the CRC Manager a copy of the forecast made under condition 9 and shall inform the CRC Manager if conditions 10, 20 or 21 apply.

43 A record of all complaints made to Lyttelton Port Company shall be maintained and shall include:

(a) The location where the coal dust was detected by the complainant;

(b) The date and time when the coal dust was detected;

(c) A description of the wind speed, wind direction and measured PM10 concentration when the coal dust was detected by the complainant;

(d) The most likely cause of the discharge of contaminants detected; and

(e) Any corrective actions undertaken by the consent holder to avoid, remedy, or mitigate

the effects of the contaminants detected by the complainant.

44 The record shall be provided to the CRC Manager by the 1st July each year for the duration of this consent.

**ENGAGEMENT WITH TE HAPŪ  O NGĀTI WHEKE**

45 The consent holder shall organise a hui at least annually, or at another mutually agreed time, with Te Hapū o Ngāti Wheke.  The purpose of the hui is to:

a. To discuss the results of monitoring information collected pursuant to conditions 24 and 27;

b. To discuss any adverse effects that may have arisen from the discharge of coal dust during the previous year and the actions taken to avoid or mitigate those effects;

c. To discuss any amendments to the Dust Management Plan and the reasons why the amendments are necessary; and

d. To receive and respond as necessary to matters raised from Te Hapū o Ngāti Wheke about the discharge of coal dust from the coal stockyard operation.

46 The consent holder shall keep minutes of the hui and distribute them to Te Hapū o Ngāti Wheke within five working days.

47 All administration costs of a hui will be the responsibility of the consent holder.

**ADMINISTRATION**

48 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 dealing with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage.

49 The lapsing date for the purposes of section 125 shall be 5 years from the date of commencement of this consent.