
RESOURCE CONSENT CRC213948

Pursuant to Section 104 of the Resource Management Act 1991

The Canterbury Regional Council (known as Environment Canterbury)

GRANTS TO: Timaru District Council

A DISCHARGE PERMIT (S15): to discharge contaminants to air

COMMENCEMENT DATE: 26 May 2022

DATE CONSENT NUMBER ISSUED: 26 May 2022

EXPIRY DATE: 07 Dec 2041

LOCATION: 55A & 55B Redruth Street, Redruth, Timaru

SUBJECT TO THE FOLLOWING CONDITIONS:

- 1 The discharge to air authorised by this resource consent shall only be contaminants generated from the sorting, storage and production of compost at 55A and 55B Redruth Street, Timaru, legally described as Section 2 Survey Office Plan 463088, identified on Plan CRC213948, attached to and forming part of this consent.
- 2 The discharge to air shall not cause an odour which is offensive or objectionable beyond the boundary of the property on which this consent is exercised.

Limits

- 3 The raw materials used in the manufacture of compost shall be limited to organic waste collected from kerbside collection. This is limited to:
 - a. All food waste;
 - b. All garden waste except flax, bamboo and cabbage leaves;
 - c. All dirty paper and cardboard;
 - d. All food-soiled paper;
 - e. All paper tissues and handtowels;
 - f. All animal droppings - loose, in paper or Council approved bio-bags; and
 - g. All shredded paper.
- 4 The amount of raw material received on the site for the production of compost shall not exceed 27,000 tonnes per year.
- 5
 - a. No raw material shall be stored on site prior to composting for more than 24 hours.

- b. No storage of raw material shall occur outside of the composting facility building.

Operational

- 6 Following receipt the raw material detailed in Condition (3) initial composting shall occur in Engineered Compost Systems (ECS) Bunkers. The composting facility shall contain a maximum of ten ECS bunkers with each bunker having a maximum volume of 330 m³.
- 7 The ratio of C:N (carbon to nitrogen) shall be maintained within the range of 25:1 to 40:1 at the start composting in the ECS Bunkers.
- 8 Material shall be contained within the ECS bunkers for a minimum of 21 days.
- 9 Active aeration of the ECS bunkers shall be adjusted as necessary to ensure that material remains in an aerobic state at all times.
- 10 Temperature within the ECS bunkers will be maintained at a minimum of 55°C for a minimum of three days during Phase 1 composting. Following this the temperature shall be maintained between 45-70°C.
- 11 The ECS system shall be operated in manual and automatic modes in accordance with the manufacturers recommendations. The biofilter shall be designed, constructed, operated and maintained to ensure:
- a. A design empty bed residence time of a minimum of 15 seconds;
 - b. A media depth of no less than 1m;
 - c. An even distribution of air flow through a uniform media bed;
 - d. An operating pH in the range 5 – 9; and
 - e. A filter medium that is visibly damp below the surface and with a moisture content 40 - 60% on a dry weight basis.
- 12 Following initial composting as detailed by Conditions (6)-(11), composting material shall be moved to maturation windrows for a minimum of six weeks. Windrows shall be approximately eight to ten metres across at the base and not more than four metres high.
- 13 The Consent Holder shall ensure that where possible, compost operations (such as turning of windrows) is undertaken at times which are least likely to cause objectionable odour effects on neighbours, with consideration given to wind speed and direction.
- 14 Leachate from the bunkers and biofilter shall not be allowed to pond and shall be drained and collected for discharge into the landfill leachate collection system or irrigated onto composting material in the bunkers.

Monitoring and Records

- 15 The Consent Holder shall keep and maintain the following information:
- a. The date, time and volume of any material brought onto the site for the manufacture of compost;
 - b. The specific materials and method of recording shall be done in accordance with the Compost Facility Management Plan which will be prepared in accordance with Conditions (21) and (22);

- c. Copies of these records shall be made available to the Canterbury Regional Council, Attention: Regional Leader - Monitoring and Compliance, to view at any time as may reasonably be requested.
- 16 The Consent Holder shall continuously monitor and record the temperature within each operational ECS bunker. This information shall be made available to the Canterbury Regional Council, Attention: Regional Leader - Monitoring and Compliance upon request.
 - 17 The Consent Holder shall monitor and record the operational parameters of the biofilter referred to in Condition (11). This information shall be made available to the Canterbury Regional Council, Attention: Regional Leader -Monitoring and Compliance upon request and shall include:
 - a. Continuous instrumental monitoring of the temperature and pressure of inlet air to the biofilter;
 - b. Weekly visual and olfactory assessment of the condition of the biofilter media;
 - c. Weekly monitoring of the biofilter media temperature;
 - d. Three-monthly monitoring of the static pressure drop across the biofilter media;
 - e. A gravimetric determination of biofilter medium moisture content by taking are presentative sample on a monthly basis for the first 6 months operation then six monthly thereafter; and
 - f. Monthly monitoring of the pH of the biofilter media.
 - 18 The Phase 2 windrow temperature, moisture content, and oxygen level shall be measured twice weekly and recorded. Records shall be kept and provided to Canterbury Regional Council, Attention: Regional Leader - Monitoring and Compliance upon request.
 - 19 The Consent Holder shall maintain records of any odour or dust complaints received and provide these to the Canterbury Regional Council, Attention: Regional Leader - Monitoring and Compliance on request.
 - 20 The complaint records required by Condition (19) of this resource consent shall include:
 - a. Name and location/address and telephone number of complainant when odour/dust is detected (if provided);
 - b. Date and time of the odour/dust detection;
 - c. Weather conditions, including wind direction and speed at the composting facility when odour/dust detected;
 - d. Strength of the odour complained of;
 - e. Any possible cause for the odour complained of; and
 - f. Any corrective action taken.

Composting Facility Management Plan

- 21 Twenty working days prior to exercise of this consent, the Consent Holder shall prepare and submit to the Canterbury Regional Council, Attention: Regional Leader - Monitoring and Compliance, a Composting Facility Management Plan (**CFMP**) for certification that it complies with the requirements of this consent. The composting operation shall be managed in accordance with this plan, and a copy shall be held onsite by the operator at all times.

The plan shall include, but not be limited to, the following:

- a. describing measures to be undertaken to achieve compliance with the conditions of this consent;
 - b. a detailed description of the compost operation, including hours of operation;
 - c. acceptable raw material, unacceptable raw material, site access and security; and
 - d. a description of activities that may generate odour, and measures in place to avoid, remedy or mitigate those discharges; and
 - e. a description of how the leachate and stormwater collection system will operate, including when and how collected leachate will be pumped onsite back over the windrows and/or off site for disposal to land; and
 - f. the means of receiving, recording in writing, and dealing with any complaints; and
 - g. a list of site management structure and responsibilities; and
 - h. a list of after hours contact details in case of any emergency of problems; and
 - i. contingency plans in the event of system malfunctions or breakdowns; and
 - j. procedures for effective pasteurisation of compost in accordance with Appendix K of New Zealand Standard 4454:2005; and
 - k. monitoring programme for airborne spores/pathogens.
- 22 The CFMP shall be reviewed once every two years, and updated as required, and the outcome of the review and any update, shall be provided in writing to the Canterbury Regional Council, Attention: Regional Leader - Monitoring and Compliance by 1 July. The Manager will advise the Consent Holder in writing if any aspects of the CFMP are considered to be inconsistent with the provisions of this consent. At all times, the Consent Holder shall ensure that the Canterbury Regional Council has a copy of the most recent version of the CFMP.

- 23 Prior to first exercise of this consent, the Consent Holder shall install and maintain a data logging weather station in an unobstructed central location on the site to record weather conditions on-site and for the purposes of assessing the need for mitigation measures and to inform the CFMP review.

Administration

- 24 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 which 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.

25 The Canterbury Regional Council, Attention: Regional Leader - Monitoring and Compliance, must be informed within five days of first exercise of this consent by the Consent Holder.

26 The lapsing date for the purposes of Section 125 of the Resource Management Act 1991 shall be the 30 June 2025.

Issued at Christchurch on 1 June 2022

Canterbury Regional Council