

Our Reference: 1249070055-46478 Consent No. RM23.185.06

DISCHARGE PERMIT

Pursuant to Section 104B of the Resource Management Act 1991, the Otago Regional Council grants consent to:

Dunedin City Council Name:

Address: 50 The Octagon, Dunedin

To discharge contaminants (landfill gas, combustion emissions from landfill gas flares and engine, dust, and odour) to air.

For a term expiring 14 May 2060

Green Island Landfill, located at 9, 114, 140, and 170 Location of consent activity:

Brighton Road, Dunedin

Legal description of consent

location:

Refer Attachment C

Map Reference of approximate E1399304 N4912786

site midpoint (NZTM2000):

Conditions

General

- 1. Under section 125 of the Resource Management Act 1991, this consent lapses five years after the date of commencement of the consent unless:
 - a) The consent is given effect to; or
 - b) The Otago Regional Council extends the period after which the consent lapses.
- 2. This consent is also subject to the General Conditions in Schedule 1 General Conditions and Attachments A-C to that Schedule. In the event of differences or conflict between the General Conditions and the conditions of this consent, the conditions of this consent prevail.
- 3. The Consent Holder must adopt the best practicable option to avoid and/or mitigate any adverse effect on the environment resulting from the discharge of contaminants to air. The best practicable option must include the Consent Holder operating, supervising and maintaining the landfill and monitoring the discharges to air so as to ensure that any potential adverse effect on the environment is avoided or mitigated.
- 4. There must be no noxious, dangerous, offensive or objectionable dust or odour that, in the opinion of an authorised officer of the Otago Regional Council, causes an adverse effect at or beyond the boundary of the site.



Advice Note: The determination of an offensive or objectionable effect must take into account the FIDOL factors and be made based on the guidance provided in Section 4.1.1 and Table 6 of the Ministry for the Environment Good Practice Guide for Assessing and Managing Odour (2016) or Section 4.2.1 and Table 8 of the Ministry for the Environment Good Practice Guide for Assessing Dust (2016).

Odour

- 5. The Landfill Development Management Plan required by General Condition 6 must include practices and procedures for odour management, including but not limited to management of the size of the active landfilling area, application of daily cover, use of odour suppression sprays and odour monitoring.
- 6. To minimise odour emissions during handling of highly odorous wastes the following measures must be implemented:
 - a) Deliveries of highly odorous wastes must be pre-booked, to ensure preparations are made including ensuring cover material is available at the pit location;
 - b) Where practicable, wastewater sludges, biosolids and screenings must be treated with stabilised lime or an alternative that performs to an equivalent or higher standard of treatment for odour, prior to delivery to the site, and loads must be confirmed by the commercial waste transporter as meeting this requirement with the Dunedin City Council at the time of pre-booking delivery;
 - c) Holding deliveries of unexpected highly odorous waste loads on site until preparations identified in (a) above are in place to enable disposal;
 - d) Prioritising deliveries of highly odorous wastes for disposal ahead of more general waste and loads and covering highly odorous wastes immediately to meet the requirements of General Condition 25;
 - e) The Landfill Development Management Plan required by General Condition 6 must include practices and procedures for the pre-acceptance, handling and placement of highly odorous wastes, including contingency measures in the event of an unexpected highly odorous waste load. This must include as a minimum requirement for prioritising the placement and covering of highly odorous waste as required by part (d) of this condition and using waste placement areas that maximise separation distances to receptors.
- 7. Any excavations carried out in the landfill must be done in such a manner as to minimise the generation of odour. The Landfill Development Management Plan required by General Condition 6 must include practices and procedures for the management of excavations into old waste. In the event of offensive odour being generated or a complaint of odour from the public being received during an excavation procedure, the excavations must cease and the exposed refuse re-covered until such time as the wind conditions are more favourable.



Odour Monitoring

- 8. The Consent Holder must conduct odour field inspections to confirm the effectiveness of odour controls, or whether additional controls are needed.
 - a) The field inspections must be carried out by a representative of the Consent Holder who has been trained in undertaking field odour inspections by a suitably qualified and independent person.
 - b) The methodology for the field odour inspections should also include provision for detecting odours that may be indicative of subsurface landfill fires.
 - c) The field inspections must be carried out at least twice weekly at varying times of day when activities with the highest potential for odour emissions are occurring, or times when atmospheric conditions are least conducive to dispersion such as early mornings. The inspections must be conducted in accordance with a methodology set out in the LDMP.
 - d) If requested by Otago Regional Council following investigation of complaints received in relation to odour or following review of information provided in the Annual Report, or following Otago Regional Council's own independent monitoring, the Consent Holder must engage a suitably qualified and independent person to monitor odour at the site boundary in accordance with a methodology and duration approved by Otago Regional Council.
 - e) The Consent Holder must investigate the cause of any odour detected by these odour field inspections and must remedy any faults identified as soon as practicable. A record of each field inspection must be recorded in writing, including weather conditions, the location of any odours identified, the intensity, duration and hedonic tone of any odours, and the findings of any investigation. This information must be provided to Otago Regional Council upon request and additionally as part of the Annual Report required by General Condition 59.

Dust

9. Effective measures must be implemented to minimise dust emissions to meet the requirements of Condition 4 of this consent. The Landfill Development Management Plan required by General Condition 6 must include practices and procedures for dust management, including but not limited to imposing vehicle speed limits within the landfill site, maintaining and grading of access tracks, water suppression of dust on unsealed tracks, cleaning of the site access and dampening of dust generating wastes.

Complaints

- 10. In addition to the requirements of General Conditions 56 to 58, if a complaint is received by the Consent Holder relating to odour, the investigation and record to be made by the Consent Holder must include:
 - a) The nature of the odour exposure detailed in the complaint, including (where made available by the complainant) time and date the odour was noticed, the duration of the odour, a description of the type of smell, and the intensity of the odour.
 - b) Weather conditions at the time of the odour exposure detailed in the complaint, including wind direction and wind speed;



- c) Known activities occurring on site at the time of the odour exposure detailed in the complaint and over the preceding 24 hours; and
- d) Any highly odorous wastes received at the time of the odour exposure detailed in the complaint and over the preceding 24 hours, the times of receipt, and the method of management and placement of those wastes.
- 11. The additional landfill gas (LFG) wells shown on drawing 12547621-C501 must:
 - a) Be installed progressively as soon as practicable as the placement of waste occurs in each stage, and no later than 12 months following the final acceptance of waste at the landfill;
 and
 - b) Be installed such that landfill gas is collected throughout the full vertical profile of placed waste; and
 - c) Meet the minimum requirements of the WasteMINZ Technical Guidelines for Disposal to Land 2022 for a class 1 landfill; and
 - d) Be installed in accordance with the Landfill Gas Masterplan, prepared by Tonkin and Taylor, dated September 2023, and subsequent addendum dated May 2024.
- 12. The Consent Holder must ensure that landfill gas treatment capacity is at all times sufficient to treat all captured landfill gas, even during periods of downtime of the flare/engine, and that treatment capacity takes into account the expected increase in landfill gas collection rates in the future.
- 13. Any LFG extraction wells must be connected to the gas extraction system as soon as practicable and in any case not longer than three months after placing wastes within the radius of influence of the wells, with care taken not to introduce oxygen into the waste mass. Passive flares with flame arresters within the landfill extent must be allowed to burn the gas venting from the wells prior to connection to the gas extraction system.
- 14. All LFG extracted from the gas extraction system must be combusted in gas to energy (GTE) engines and/or flares at the Green Island Wastewater Treatment Plant which meet the following requirements:
 - a) LFG engines and/or flares must be provided sufficient for the anticipated rate and quantity of LFG generated by the landfill.
 - b) Either the LFG engines or the flares must be operational at all times.
 - c) Any new LFG flare must be designed, installed, maintained, and operated to meet the requirements in Regulations 26 and 27(2) of the Resource Management (National Environmental Standards for Air Quality) Regulations 2004.
- 15. The operation of the LFG collection and destruction system must be designed, constructed, operated and maintained to minimise potential oxygen ingress into the landfill waste (including to prevent the risk of sub-surface landfill fires) and maximise the rate of extraction of LFG.
- 16. There must be no visible emissions (excluding water vapour, visible flame, light or heat haze) from the LFG engine or new flares connected to the gas extraction system.



- 17. LFG gas flow rate (m³/hr) must be continuously monitored at the inlet to the LFG engine and flares.
- 18. The following parameters must be monitored weekly at each LFG well head during operation, and bi-weekly following closure:
 - a) Gas pressure (mbar)
 - b) Gas flow rate (m³/hr);
 - c) Composition (methane (%v/v)), carbon dioxide (%v/v), oxygen (%v/v), carbon monoxide (ppm), hydrogen sulphide (ppm), and residual nitrogen (%v/v));
 - d) Gas temperature (°C);
 - e) Ambient temperature (°C);
 - f) Barometric pressure (mbar)
- 19. On-site standby electrical supply must be provided to ensure the operation of any landfill gas flare equipment is not interrupted through loss of mains power supply.
- 20. The LFG collection and destruction system must be maintained to enable ongoing operation at all times and restored as soon as practicable in the event of a malfunction or fault.
- 21. The Landfill Development Management Plan required under General Condition 6 and Landfill Closure Management Plan required under General Condition 10 must include practices and procedures prepared by a suitably qualified person to ensure:
 - a) LFG is collected and destroyed;
 - b) The escape of fugitive LFG and any potential exposure of people to LFG or LFG related odour is minimised;
 - c) Risk of landfill fires is prevented as far as practicable; and.
 - d) Achievement of the conditions of this consent.
- 22. As a minimum the LFG management practices and procedures of the Landfill Development Management Plan and Landfill Closure Management Plan must include the following:
 - a) Estimates of LFG generation and recovery for the landfill, including method, assumptions and results;
 - Description of the design of the LFG collection and destruction system, including wells, laterals, manifolds, engine and flare system and the staging and timing of the installation of those components;
 - c) Operation and maintenance procedures for the LFG collection and destruction system, including operating criteria and parameters, system monitoring plan (parameters, frequencies, locations) trigger levels for relevant parameters including methane, carbon dioxide, oxygen, and carbon monoxide, response actions for trigger level exceedances, system operation and adjustment and system maintenance;
 - d) LFG perimeter and surface monitoring locations, parameters, frequencies, trigger levels and methodology for each monitoring location and monitoring parameter, including contingency response procedures in the event of trigger level exceedance. As a minimum this must address the monitoring requirements in Conditions 23 30 of this consent; and
 - e) Record keeping and reporting requirements.



Landfill Gas Perimeter and Surface Monitoring

- 23. The existing landfill gas monitoring wells shown on drawing 12547621-C501 (GHD, 2023) must be maintained on site to enable detection of LFG escaping laterally from the landfill.
- 24. All monitoring wells must be maintained to enable ongoing monitoring. In the event of a bore being destroyed or unsuitable for sampling, the Consent Holder must replace it with a bore in the same general location within 3 months.
- 25. The Landfill Development Management Plan under General Condition 6 and Landfill Closure Management Plan under General Condition 10 must include practices and procedures for the long-term monitoring of LFG emissions during operation to achieve the following:
 - a) Identify potential escape of fugitive LFG to the environment at or near source to confirm the efficacy of the LFG management system or need for remedial actions;
 - b) Protection of the health and safety of people on and beyond the site who may be at risk of being exposed to LFG emissions; and
 - c) As far as practicable prevent and identify any landfill fires that occur.
- 26. The concentration of methane measured at the surface of the landfill areas within intermediate or permanent final capping must not exceed 5,000 parts of methane per million parts of air (ppm) in any single location.
- 27. During operation, closure, and aftercare of the landfill, a Flame Ionisation Detector (FID) or equivalent must be used to carry out surface emissions monitoring for methane over the entire surface of the landfill on at least a 30 m by 30 m grid basis excluding the working face at least once every three months on areas with final cover, reducing to six-monthly after five years of landfill closure, and at least once every month on areas with thickened daily cover or intermediate cover. The results must be reported annually to Te Rūnanga o Ōtākou and Otago Regional Council in accordance with General Condition 59.

Advice Note: Favourable metrological conditions for methane surface monitoring include those where weather and ground conditions are dry with less than 0.5 millimetres of rain having fallen for at least two days, and instantaneous wind speed is less than 25km/hr (ideally 5 – 10km/hr). Monitoring of surface emissions and subsurface geology must also target falling or low atmospheric conditions.

- 28. Following a significant rain event equal to or exceeding 130 mm in 24 hours, the Consent Holder must undertake daily walkovers of the landfill for 3 consecutive days. Any evidence of actual or potential landfill gas leaks such as odour, cracks in the landfills surface, gas bubbles, leaks in the gas extraction system or vegetation damage or evidence of leachate seeps must be investigated and the concentration of methane at the site of potential gas leak must be measured in accordance with Condition 27.
- 29. If monitoring and methane measurement carried out in accordance with Conditions 27 and 28 demonstrates that the surface methane gas concentration limit specified in Condition 26 is exceeded, then remedial action must be carried out and the methane concentration re-tested



within 14 days. If this is not practicable, the Consent Holder must obtain the approval of the Otago Regional Council for a proposed programme of remedial action, including a timetable, within 7 days of the measured exceedance the surface methane gas concentration limit specified in Condition 26. The proposed programme must be implemented to the satisfaction of the Otago Regional Council within the proposed time period.

30. The results of surface methane emission monitoring described in Condition 27 and any remediation work carried out described in Condition 29 must be included in the Annual Report required by General Condition 59.

Review of odour Management

- 31. The Consent Holder must engage a suitably qualified independent consultant experienced in landfill gas and odour management to annually:
 - a) Review all odour complaints received for the Green Island Landfill and Resource Recovery Park (RRP) over the past 12 months, including in comparison to the previous annual review.
 - b) Review the results of odour field inspections undertaken.
 - c) Review the Consent Holder's response to odour complaints.
 - d) Review the odour management practices for the landfill including (but not limited to) waste acceptance and placement, handling of highly odorous wastes, the size and management of the open tipping face, placement of intermediate cover (including extent, physical nature and thickness), and the extent and operation of the landfill gas management system.
 - e) Recommend any changes to odour management practices at the landfill cell and recommended timeframes for undertaking the work.
 - f) Recommend any changes to the method or frequency of odour field inspections.
 - g) The findings and any recommendations arising from each review must be detailed in a report. The Consent Holder must provide Otago Regional Council with a copy of the report and the Consent Holder's response to any recommendations within one month of receiving the report from the independent reviewer.

Landfill gas/biogas combustion

- 32. The concentration of hydrogen sulphide combusted in the primary flare and/or the biogas engine at the Green Island Wastewater Treatment Plant must not exceed 500 ppm.
- 33. The Consent Holder must monitor the following parameters at the primary flare and biogas engine used to combust LFG from the landfill:
 - a) Gas flow rate as an hourly average (m³/h)
 - b) Average hydrogen sulphide concentration (ppm) over a one-hour period monitored once a week using a landfill gas analyser
- 34. Monitoring results from Conditions 32 and 33 must be included in the Annual Report required by General Condition 59.



Issued at Dunedin this 14^{th} day of May 2025

Alexandra King

Manger Consents



Schedule 1 - General Conditions Relevant to All Consents

- 1. The operation, closure and aftercare of the landfill (including all associated discharges of contaminants to land, water and air) must be undertaken in general accordance with the following documents, except where modified by other conditions of this consent. In the event of differences or conflict between the contents of the documents and the conditions, the conditions prevail:
 - a) Green Island Landfill Closure, Assessment of Environmental Effects, Boffa Miskell, March 2023 (Updated October 2024), including attached Appendices 1 19.
 - b) Waste Futures Green Island Landfill Closure, Design Report, GHD, September 2023 and associated design drawings listed on drawing sheet 12547621506381-G001.
 - c) Green Island Landfill, Development and Management Plan, Stantec, September 2023, except as updated in accordance with General Conditions 6 9.
- 2. An alternative design or methodology to that proposed in the consent documents specified in General Condition 1 may be used if:
 - a) The adverse effects of the activity are demonstrated by the Consent Holder to be the same or less than the consented design or methodology; and
 - b) The alternative design or methodology has been provided under General Condition 17 to the Otago Regional Council and written certification is obtained from the Otago Regional Council; or
 - c) The alternative design or methodology has been incorporated into the Landfill Development Management Plan required under General Condition 6 or Landfill Closure Management Plan under General Condition 10 and provided to the Otago Regional Council and written certification is obtained from the Otago Regional Council.
- 3. These resource consents and a copy of the Otago Regional Council certified version of any management plan and design details required by these consents must be kept on site at all times, and the Consent Holder must ensure all relevant personnel are made aware of each document's contents.

Certification Process

4. Subject to Condition 5, the following management plans must be prepared by the Consent Holder and submitted to Otago Regional Council for written certification by as required by these consents:

Landfill Development Management Plan – General Conditions 6 - 9.

Landfill Closure Management Plan – General Conditions 10 – 14.

Adaptive Management Plan – General Conditions 51 – 53.

Vegetation Management and Restoration Plan - RM23.185.01, Conditions 43 – 45.

Advice Note: The written certification process is confined to confirming that the management plans adequately give effect to the relevant condition(s).

5. The Consent Holder must follow the process set out below for any plans, documents, designs or specifications (hereafter referred to as 'documents') requiring written certification from the Otago Regional Council:



- a) Documents requiring written certification must be submitted to the Otago Regional Council in electronic and hard copy form.
- b) Subject to (c) and (e) below, works to which the documents relate must not commence until the Consent Holder has received written certification from the Otago Regional Council.
- c) If the Consent Holder has not received a response from the Otago Regional Council within 20 working days of the date of submission under (a) above, or 40 working days in the case of the design of the extended leachate trench required by General Conditions 17(b) and 18, the documents must be deemed to be certified.

Advice Note: If the Otago Regional Council's response is that that they are not able to certify the documents the Council is expected to provide the Consent Holder with reasons and recommendations for changes to the documents in writing.

- d) The Consent Holder must consider the Council's reasons and recommendations and resubmit amended documents for written certification .
- e) If the Consent Holder has not received a response from the Otago Regional Council within 10 working days of the date of resubmission under (d) above, the documents must be deemed to be certified.
- f) If the Otago Regional Council's response is that that they are still not able to certify the resubmitted documents then the Consent Holder must nevertheless implement the resubmitted documents with a notation that written certification of them has not occurred.
- g) Condition 5(f) does not apply to the detailed design of the extended section of leachate trench required by Condition 5 of Discharge Permit RM23.185.01. Written certification of the detailed design of the extended section of leachate trench must be obtained prior to its construction.
- h) Certified documents may be amended at the request of the Consent Holder at any time subject to written recertification undertaken in accordance with Conditions 5(a) to (f) with references in those clauses to certification to be read as recertification.

Landfill Development Management Plan

- 6. The operation of the landfill and waste diversion and transfer facilities must be undertaken in accordance with a Landfill Development Management Plan (LDMP), with the overall objective of setting out details of the practices and procedures to be adopted to achieve compliance with the conditions of these resource consents.
- 7. The Landfill Development Management Plan must be prepared by a suitably qualified and experienced person and must address how the following matters will meet any requirements, limits, or restrictions set out in the conditions of these resource consents:
 - a) The LDMP must, to the extent practicable, be in accordance with best industry practice.
 - b) The stages and order of landfill development, including matters to be completed prior to each stage.
 - c) Landfill gas, leachate, groundwater and stormwater management.
 - d) Erosion and sediment controls during construction and operation.
 - e) Types of waste to be accepted and those that are prohibited.
 - f) Waste acceptance control and monitoring the types of waste accepted.



- g) Methods of placing and covering waste, including highly odorous and special waste.
- h) Management of the active landfill area and waste diversion and transfer facilities.
- i) Fire preparedness and response management.
- j) Odour and dust management.
- k) Noise management.
- l) Litter management.
- m) Plant and animal pest management, including bird control.
- n) Monitoring procedures, including locations, parameters, and frequency.
- o) Landfill inspections and maintenance.
- p) Emergency management and contingency response procedures.
- q) Complaints response procedures.
- r) Record-keeping and reporting requirements.
- s) Final landfill capping, post settlement height, shape and contours of the land.
- 8. Within 6 months of the commencement of these resource consents the Landfill Development Management Plan that was current in April 2025 must be updated in consultation with Te Rūnanga o Ōtākou to achieve the conditions of these resource consents and be provided to the Otago Regional Council for written certification in accordance with General Condition 5.
- 9. By 1 July each year the Consent Holder must, in consultation with Te Rūnanga o Ōtākou, complete a review of the certified Landfill Development Management Plan to ensure that the management practices contained within it remain adequate to ensure compliance with the conditions of these consents. If amendments are made to the Landfill Development Management Plan, the amended Plan must be submitted to the Otago Regional Council for written recertification in accordance with General Condition 5.

Landfill Closure Management Plan

- 10. The closure and aftercare of the landfill must be undertaken in accordance with a Landfill Closure Management Plan (LCMP).
- 11. The Landfill Closure Management Plan must be prepared by a suitably qualified and experienced person and in consultation with Te Rūnanga o Ōtākou, with an overall objective of setting out details of the practices and procedures to be adopted to achieve compliance with the conditions of these resource consents.
- 12. The Landfill Closure Management Plan must address how the following matters will meet any requirements, limits, or restrictions set out in the conditions of these resource consents:
 - a) The LDMP must, to the extent practicable, be in accordance with best industry practice.
 - b) Long term use of the landfill site including the incorporation of mana whenua values and pūrākau associated with the Kaikorai Estuary.
 - c) Post closure landfill gas, leachate, groundwater and stormwater management.
 - d) Post closure maintenance of the landfill cap.
 - e) Post closure monitoring procedures, including locations, parameters, and frequency.
 - f) Any ongoing requirements of the VMRP required by Condition 43 of RM23.185.01.
 - g) Landfill inspections and maintenance.



- h) Emergency management and contingency response procedures.
- i) Complaints response procedures.
- j) Record-keeping and reporting requirements.
- 13. The Landfill Closure Management Plan must be submitted to the Otago Regional Council at least 3 months prior to the final acceptance of waste at the landfill for written certification in accordance with General Condition 5.
- 14. Every three years following the final acceptance of waste at the landfill, the Consent Holder must, in consultation with Te Rūnanga o Ōtākou, complete a review of the certified Landfill Closure Management Plan to ensure that the management practices contained within them remain adequate to ensure compliance with the conditions of these consents. If amendments are made to a management plan, the amended plan must be submitted to the Otago Regional Council for written recertification in accordance with General Condition 5.

Management Plan Amendment

15. The Consent Holder may make amendments to the certified Landfill Development Management Plan or Landfill Closure Management at any time. Any amendments must be made in consultation with Te Rūnanga o Ōtākou and submitted to the Otago Regional Council for written recertification in accordance with General Condition 5.

Design and Construction

- 16. All investigations, detailed design and supervision of construction of the landfill must be undertaken by suitably qualified personnel experienced in such works, or works of a similar nature.
- 17. Within 20 working days prior to commencing the construction of any:
 - a) Landfill perimeter bund;
 - b) Leachate collection system, including the extension to the leachate collection trench;
 - c) Flood resilience improvements;
 - d) Permanent landfill gas treatment system;
 - e) Stormwater treatment and discharge system;
 - f) Defence against water along the Kaikorai Stream; or
 - g) Final capping.

The Consent Holder must submit a design report with specifications and design drawings to the Otago Regional Council for written certification in accordance with General Condition 5.

- 18. The pipe contained within the extension to the leachate collection trench must be designed to be resilient to deformations under a ULS seismic event.
- 19. When completed, the works specified in General Condition 17 must be confirmed by a suitably experienced Chartered Professional Engineer (CPEng) that they have been completed in accordance with the design certified by the Otago Regional Council. A Construction Quality



Assurance (CQA) report must be prepared and submitted by the Consent Holder to the Otago Regional Council within 3 months following completion of the works specified in General Condition 17.

Landfill Operation

- 20. The Consent Holder must appoint and retain an appropriately qualified and experienced person to supervise the operation of the landfill.
- 21. The active landfilling area must not exceed 900 m² at any time, except that it may be expanded to 1200 m²:
 - a) During the times of the day where the rate of waste truck arrivals is 25% more than average;
 - b) During waste placement in areas with unusual constraints including shaping to form an extreme corner of the waste pile; or
 - c) Where landfill gas escape from underneath the day's refuse, and odour from the day's refuse are unlikely.
- 22. The active landfilling area must not exceed 300 m² at any time when the daily fire danger rating for the landfill site is very high, extreme, or very extreme for forestry as reported by the New Zealand Fire Weather System.

Advice Note: The New Zealand Fire Weather System (FWS) is operated by the National Institute of Water and Atmospheric Research (NIWA) on behalf of Fire and Emergency New Zealand (FENZ) to monitoring fire danger.

- 23. The active landfilling area must be limited to no more than 30 m wide.
- 24. Except where required by General Condition 25, all waste must be covered at the end of each working day with non-combustible compacted soil cover to a minimum depth of 150 millimetres.
- 25. All special waste, highly odorous waste, and medical waste must be covered no more than 30 minutes following its placement with non-combustible compacted soil cover to a minimum depth of 150 millimetres.

Advice Notes:

The discharge of highly odorous waste is restricted by Condition 32 of Discharge Waste and Leachate to Land Permit RM23.185.01

Discharge to Air Permit RM23.185.06 Condition 6 imposes additional requirements for the discharge of highly odorous wastes.

- 26. There must be no waste that remains uncovered overnight.
- 27. Daily cover must be removed before waste placement at the start of each day. As a minimum, windows must be cut through the previous layer of daily cover sufficient to allow the free flow of leachate from the new waste layer to the underlying layers.



- 28. All areas where further waste will not be placed for three months or more must be covered with non-combustible compacted intermediate soil cover to a minimum depth of 300 millimetres. Grass or vegetative cover must be established on the intermediate soil cover, except within 10 m of the active landfilling area.
- 29. Final capping of the landfill must be undertaken in a progressive manner. The Consent Holder must complete final capping of each landfilling stage as soon as practicable but no later than 2 years following final receipt of waste in that area. Final capping of the landfill must be fully completed no later than two years following the final acceptance of waste at the landfill. The final cap profile in all areas must comply with General Conditions 30 and 31.
- 30. The final capping layer must comprise the following minimum layers, from top to bottom;
 - a) 350 millimetres of sub-soil and topsoil that is grassed, except that grassing is not required within 10 m of the active landfilling area; and
 - b) 600 millimetres of low permeability clay with a permeability coefficient of not more than 1×10^{-7} metres per second; and
 - c) 200 millimetres soil cover (i.e. compacted intermediate cover soils); and
 - d) 300 millimetres of compacted intermediate cover soils.

31. The final cap must:

- a) as far as practicable, have a gradient of 4% or greater, based on the final received waste tonnages; and
- b) be graded and incorporate drainage so as to prevent ponding of stormwater and erosion and cracking of the capping surface.
- 32. A walkover visual inspection of the landfill operational area must be undertaken at least monthly and immediately following storm events greater than 50% Annual Exceedance Probability (AEP), to check for:
 - a) Vegetation die off;
 - b) Cracking of the final cap surface;
 - c) Subsidence or erosion;
 - d) Landfill gas leaks or odour;
 - e) Leachate break out through the cap;
 - f) Waste protruding through the cap; or
 - g) Stormwater system overflows or damage.

Any identified incidences of defects (a) to (g) must be remedied by the Consent Holder as soon as practicable. A report on the inspection and details of any remedial actions must be forwarded to the Otago Regional Council within one month of each inspection.

Monitoring

33. An automatic weather station that continuously and accurately records wind speed and direction, temperature, relative humidity, and rainfall must be operated, and maintained on the site. The weather station must be serviced and calibrated by a suitably qualified and experienced



technician at least annually to ensure accurate monitoring. Data recorded by the weather station must be provided to the Otago Regional Council in electronic format upon request.

Groundwater and Surface Water Monitoring

34. The Consent Holder must install a new monitoring well cluster of 3 wells at the location shown in Attachment A. The wells must be screened in different geological layers, comprising the Upper Kaikorai Estuary Formation (UKEM), Lower Kaikorai Estuary Formation (LKEM), and Abbotsford Mudstone.

35. The Consent Holder must:

- a) lodge a resource consent application to drill the new groundwater monitoring wells specified in General Condition 34 within 3 months of the commencement of these consents, if this is required to comply with the Resource Management (National Environmental Standards for Freshwater Management) 2020, or any other relevant standard or rule;
- b) construct the new wells within 3 months of any consent required under part (a) of this Condition commencing, or within 3 months the commencement of these consents if no resource consent is required under part (a) of this Condition; and
- c) commence groundwater monitoring from the new wells in the next monitoring cycle required under General Condition 39 following the completion of well construction.

Advice Note: General Condition 35 has been agreed by the Applicant and offered on an 'Augier' basis.

- 36. All groundwater monitoring wells must be maintained to prevent the ingress of surface water and to enable accurate monitoring of groundwater levels and groundwater quality.
- 37. In the event of a well being destroyed or becoming unsuitable for monitoring, the Consent Holder must replace it with a well in the same general location within 3 months of the well being destroyed or becoming unsuitable. The Consent Holder must:
 - a) lodge a resource consent application to drill the replacement groundwater monitoring well within 3 months of the well being destroyed or becoming unsuitable, if this is required to comply with any relevant standard or rule;
 - b) Construct the replacement well within 3 months of the commencement of any consent required under part (a) of this Condition, or within 3 months of the well being destroyed or becoming unsuitable if no resource consent is required under part (a) of this Condition; and
 - c) Commence groundwater monitoring from the replacement well in the next monitoring cycle required under Condition 39 following the completion of well construction
- 38. The Consent Holder must undertake the leachate monitoring set out in Table 1.

Table 1: Leachate Monitoring			
Frequency Location as shown in		Parameter	
	Attachment A		
Monthly	Leachate collection	Water Levels	
system pumpstations			
	and manholes		



	Table 1: Leachate Monitoring			
Frequency	Location as shown in	Parameter		
. ,	Attachment A			
Quarterly (reducing to 6	Representative sample of	pH (pH units)		
monthly, two years post	leachate collected from	Electrical conductivity (mS/cm)		
closure)	PS3 sampling point.	Dissolved oxygen (mg/L)		
		Dissolved Boron		
		Ammoniacal nitrogen		
		Nitrate nitrogen		
		Chloride		
		PFOS (first three years)		
		PFOA (first three years)		
		Dissolved Aluminium		
		Dissolved Arsenic		
		Dissolved Cadmium		
		Dissolved Chromium		
		Dissolved Copper		
		Dissolved Iron		
		Dissolved Lead		
		Dissolved Manganese		
		Dissolved Nickel		
		Dissolved Zinc		
Annually	Representative sample of	Sodium		
	leachate collected from	Potassium		
	PS3 sampling point	Calcium		
		Cyanide		
		Magnesium		
		Bicarbonate		
		Sulphate		
		Dissolved reactive phosphorous		
		Volatile organic compounds (VOC)		
		Semi volatile organic compounds (SVOC)		
		BOD		
		COD		

39. The Consent Holder must undertake the groundwater monitoring set out in Table 2. Where trigger levels are required, they are to be established in accordance with General Condition 43.

	Table 2: Groundwater Monitoring			
Frequency	Location as shown in Attachment A	Parameter	Trigger level required	
Monthly	Line 1-8 A/B/C/D wells	Groundwater Levels		
	BH103			
	New well cluster			
		pH (pH units)		



	Table 2: Groundwater Monitoring			
Frequency	Location as shown in Attachment A	Parameter	Trigger level required	
Quarterly (reducing	Line 1-8 A/B/C/D	Electrical conductivity (mS/cm)		
to 6 monthly, two	wells	Dissolved oxygen (mg/L)		
years post closure)	BH103	Dissolved Boron	Yes	
		Ammoniacal nitrogen	Yes	
	New well cluster	Nitrate nitrogen	Yes	
		Chloride		
		Dissolved Aluminium	Yes	
		Dissolved Arsenic	Yes	
		Dissolved Cadmium	Yes	
		Dissolved Chromium	Yes	
		Dissolved Copper	Yes	
		Dissolved Iron		
		Dissolved Lead	Yes	
		Dissolved Manganese	Yes	
		Dissolved Nickel	Yes	
		Dissolved Zinc	Yes	
		PFOS (first three years)	Yes	
		PFOA (first three years)	Yes	
Annually	Line 1-8 A/B/C/D	Sodium		
	wells	Potassium		
	BH103	Calcium		
		Cyanide	Yes	
	New well cluster	Magnesium		
		Bicarbonate		
		Sulphate		
		Dissolved reactive phosphorous	Yes	
		Volatile organic compounds (VOC)	Yes	
		Semi volatile organic compounds (SVOC)	Yes	

40. The Consent Holder must undertake the surface water monitoring set out outlined in Table 3 below. Where trigger levels are required, they are to be established in accordance with General Condition 43.

Table 3: Surface Water Monitoring			
Monitoring Frequency	Location as shown in Attachment A	Parameter	Trigger level required
3 hourly (using automatic water level pressure transducer)	GI3	Kaikorai Stream levels	
Quarterly (reduced	Surface water	pH (pH units)	Yes
to 6 monthly, two	locations GI 1, GI 2,	Temperature	



	Table 3: Surface Water Monitoring			
Monitoring Frequency	Location as shown in Attachment A	Parameter	Trigger level required	
years following	GI 3, GI 5 and	Electrical conductivity (mS/cm)		
landfill closure)	estuary at Brighton	Dissolved oxygen	Yes	
	Road bridge within	Ammoniacal nitrogen	Yes	
	three hours of low	Nitrate nitrogen	Yes	
	tide	Boron	Yes	
		Chloride		
		Aluminum	Yes	
		Arsenic	Yes	
		Cadmium	Yes	
		Chromium	Yes	
		Copper	Yes	
		Iron		
		Lead	Yes	
		Manganese	Yes	
		Nickel	Yes	
		Zinc	Yes	
		Total suspended solids	Yes	
		E. coli	Yes	
		Enterococci	Yes	
		PFOS (first three years)	Yes	
		PFOA (first three years)	Yes	
Annual	Surface water	Sodium		
	locations GI 1, GI 2,	Potassium		
	GI 3, GI 5 and	Calcium		
	estuary at Brighton	Cyanide	Yes	
	Road bridge within	Bicarbonate		
	three hours of low	Sulphate		
	tide at low tide	Dissolved reactive phosphorus	Yes	
		Volatile organic compounds (VOC)	Yes	
		Semi volatile organic compounds (SVOC)	Yes	

41. The Consent Holder must undertake the sediment pond water monitoring set out in Table 4. Where trigger levels are required, they are to be established in accordance with General Condition 43.

Table 4: Sediment Pond Monitoring			
Monitoring Location as shown Frequency in Attachment A		Parameter	Trigger level
			required
Quarterly (reduced	Western	pH (pH units)	Yes
to 6 monthly, two	sedimentation pond	Temperature	
years following	South western pond	Electrical conductivity (mS/cm)	
landfill closure)	South Western pond	Dissolved oxygen	



	Table 4: Sedim	ent Pond Monitoring	
Monitoring Frequency	Location as shown in Attachment A	Parameter	Trigger level required
	Eastern	Ammoniacal nitrogen	
	sedimentation pond	Nitrate nitrogen	
	South eastern	Boron	Yes
	constructed	Chloride	
	wetland	Aluminum	Yes
		Arsenic	Yes
	Eastern constructed	Cadmium	Yes
	wetland	Chromium	Yes
	After closure, the	Copper	Yes
	northern	Lead	Yes
	sedimentation	Nickel	Yes
	pond.	Zinc	Yes
		Total suspended solids	
		E. coli	
		Enterococci	
		PFOS (first three years)	Yes
		PFOA (first three years)	Yes
Annual	Western	Dissolved reactive phosphorus	
	sedimentation pond	Volatile organic compounds (VOC)	
	South western pond	Semi volatile organic compounds (SVOC)	
	Eastern sedimentation pond		
	South eastern constructed wetland		
	Eastern constructed wetland		
	After closure, the Northern sedimentation pond.		

- 42. All leachate, groundwater, surface water, and sediment pond water sampling required under General Conditions 38 to 41 must meet the following requirements:
 - a) Monitoring must be undertaken at the locations specified in Tables 1 to 4;
 - b) Monitoring of the sediment ponds specified in Table 4 must include a record of whether or not the ponds are discharging freely to the downstream environment;
 - Sampling must be undertaken, or overseen by, a suitably qualified professional and collected in accordance with the relevant National Environmental Monitoring Standard (NEMS):
 - d) National Environmental Monitoring Standards Water Quality Part 1 of 4: Sampling, Measuring, Processing and Archiving of Discrete Groundwater Quality Data;



- e) National Environmental Monitoring Standards Water Quality Part 2 of 4: Sampling, Measuring,
- f) All sample analysis must be performed by a laboratory that has International Accreditation New Zealand ("IANZ") accreditation or otherwise as agreed in writing with the Otago Regional Council.
- 43. Trigger levels for the indicated parameters in Tables 2 to 4 must be set at the lesser of:
 - a) The mean plus three standard deviations for parameter concentrations measured during the previous 5 years of monitoring except:
 - i. For pH mean plus and minus three standard deviations;
 - ii. For PFOS and PFOA annual mean plus three standard deviations;

or

b) Any trigger value specified in Table 5 for the indicated parameter.

Table 5: Trigger Values			
Parameter	Trigger Value		
- arameter	(μg/L – unless stated otherwise)		
pH (pH units)	7.2-8.0 (pH units)		
Dissolved oxygen (mg/L)	11-day minimum: 4.0 mg/L		
	7-day mean minimum: 5.0 mg/L		
Ammoniacal nitrogen	1700		
Nitrate nitrogen	2400		
Aluminium	150		
Arsenic	140		
Boron	2500		
Cyanide	14		
Cadmium	0.8		
Chromium	40		
Copper	2.5		
Lead	9.4		
Manganese	3600		
Nickel	17		
Zinc	21		
E. coli	540 MPN/100 mL		
Enterococci	280 MPN/100 mL		
PFOS	0.13		
PFOA	220		

- 44. The water quality trigger levels for groundwater, surface water, and sediment pond water quality for the indicated parameters in Tables 2 to 4 must be:
 - a) Recorded in the Landfill Development Management Plan and Landfill Closure Management Plan; and
 - b) Updated (with respect trigger levels determined under General Condition 43(a)) annually in the Landfill Development Management Plan and three yearly in the Landfill Closure



Management Plan in accordance with the respective review periods for those Plans specified in General Conditions 9 and 14.

- 45. The Consent Holder must assess the monitoring results for the parameters listed in Table 2 to 4 against the trigger levels set General Condition 43 and updated under General Condition 44. The assessment must include a trend analysis and a determination of the statistical significance of any trends and be included in the Annual Report required by General Condition 59.
- 46. The Consent Holder must compile the results of all monitoring and assessments required under General Conditions 38 to 43 (including any leachate, groundwater and surface water physiochemical monitoring, groundwater and surface water level monitoring, alerts from the leachate pumping system and monthly records of total leachate volumes pumped from the collection trench), into tables in a digital format (excel spreadsheet file or comma separated value file). One table must be compiled for each site where monitoring is undertaken.
- 47. The Consent Holder must provide the results of all monitoring and assessments to the Otago Regional Council:
 - a) Within 1 week of receiving laboratory results where the trigger levels in set under General Conditions 43 or 44 are exceeded, except where the exceedance is at surface water monitoring sites GI1 and GI2 (which are upstream of the landfill);
 - b) Within 1 week of receiving laboratory results where any historical maximum contaminant (the Table 2 to 4 parameters) recorded for the site is exceeded; or
 - c) Otherwise on request; and
 - d) As part of the Annual Report required by General Condition 59.

Contingency Actions and Adaptive Management

- 48. In the event that the monitored contaminant concentrations exceed the trigger levels at surface water sites GI3 and GI5, and the contaminant concentrations at those sites also exceed the concentrations detected at surface water sites GI1 and GI2 upstream of the landfill, the Consent Holder must undertake two additional rounds of surface water sampling at all surface water sites, firstly no later than 1 week and secondly no later than 2 weeks after receiving the results of the initial exceedance and provide the combined results of the additional sampling to Otago Regional Council within 1 week of receiving the laboratory results.
- 49. If following completion of the additional two monitoring rounds required by General Condition 48 contaminant concentrations continue to exceed the trigger levels at surface water sites GI3 and GI5, and the concentrations continue to be elevated in comparison to the concentrations detected at surface water sites GI1 and GI2 upstream of the landfill, the Consent Holder must undertake an investigation into potential causes of the exceedances and prepare a report which must be provided to Otago Regional Council and Te Rūnanga o Ōtākou no later than 1 month following receipt of the laboratory results of the additional sampling required under General Condition 48. The report must outline likely causes of exceedances, statistical analysis of water quality, actions to be taken to prevent further exceedances and proposed follow up monitoring where necessary.



- 50. Should the groundwater level monitoring required under General Condition 39 identify outward gradients (where water levels are higher in the trench than in the monitoring wells adjacent), or a risk be identified that the gradient into the leachate collection trench may not be maintained, the Consent Holder must notify the Otago Regional Council within one working day.
- 51. Should the results of any monitoring required under General Conditions 38 to 41 indicate adverse effects on water quality directly attributable to landfill leachate from the Green Island Landfill entering the Kaikorai Stream, the Consent Holder must within 3 months prepare an Adaptive Management Plan. That Plan must include at least the following information:
 - Additional investigations and groundwater and surface water monitoring designed to confirm where leachate migration is occurring, including timeframes for completing the investigations and monitoring;
 - Ecotoxicology investigations to establish the chemical characterisation of the leachate and test the toxicity of any leachate contaminants present in the receiving environment on aquatic fauna;
 - c) Further targeted ecological investigations, if the ecotoxicology investigations find leachate contaminants are a risk to aquatic fauna;
 - d) Proposed measures to be implemented to avoid or mitigate effects of leachate migration, including timeframes for the completion of the proposed measures which may include, but are not limited to:
 - i. Physical barriers including sheet piling, slurry or bentonite walls, or secant piles;
 - ii. Targeted groundwater and leachate abstraction using pumped wells; or
 - iii. An additional deep monitoring well on groundwater monitoring Line 3;
 - e) Follow up monitoring to confirm the effectiveness of the implemented measures;
 - f) Contingency actions in the event the implemented measures are not effective in avoiding or mitigating the effects of leachate migration; and
 - g) A review process that includes Te Rūnanga o Ōtākou and Otago Regional Council.
- 52. The Adaptive Management Plan must be submitted to the Otago Regional Council for written certification in accordance with General Condition 5.

Ongoing Monitoring

- 53. The certified Adaptive Management Plan must be implemented in accordance with the timeframes specified in the Plan.
- 54. The Landfill Development Management Plan and Landfill Closure Management Plan must specify practices and procedures for the monitoring of groundwater and surface water for the duration of these consents, including as a minimum:
 - a) Groundwater and surface water monitoring locations, parameters, trigger levels, frequencies and monitoring methodologies for each monitoring location and monitoring parameter, including as a minimum the requirements set out in General Conditions 38 to 45 and Tables 1 to 4; and
 - b) Record keeping and reporting requirements.



Human Health and Environmental Risk Assessment

55. The Consent Holder must commence a review of the interim Human Health and Environmental Risk Assessment, prepared by GHD and dated 20 May 2024, within 3 years of the commencement of these consents. The review must be based on the collection of three years of groundwater and surface water monitoring data in accordance with General Conditions 38 to 45, including for PFAS and PFOA. An updated Human Health and Environmental Risk Assessment based on that review must be provided to Otago Regional Council within 6 months of the commencement of the review.

Complaints

- 56. The Consent Holder must provide contact details on the Dunedin City Council website that enable members of the public to contact the landfill operator at all times, including in case of emergency.
- 57. A complaint management, investigation and reporting system must be maintained by the Consent Holder during construction, operation, closure and aftercare of the landfill to record the receipt and management of all complaints, including those regarding odour or dust. The following details must be recorded:
 - a) Type, date, and time of complaint;
 - b) Name and address of complainant (if available);
 - c) Location from which the complaint arose;
 - d) Wind direction at the time of complaint (if relevant);
 - e) The likely cause of the complaint;
 - f) The action taken as a result of the complaint; and
 - g) The response to the complainant.
- 58. The Consent Holder must notify Otago Regional Council of any complaints received as soon as practicable and within one working day of the complaint being received. All complaints must be investigated, and a response provided to the complainant. The results of investigations, actions, and responses to complainants must be provided to the Otago Regional Council within 10 working days of the complaint being received. The complaints record must be made available to the Otago Regional Council on request, and must be provided in summary form yearly in the Annual Report required by General Condition 59.

Annual Monitoring Report

- 59. The Consent Holder must compile an annual monitoring report on the operation of the landfill, including:
 - a) The status of landfill construction, completion of landfilling of any stage, and closure and aftercare activities completed during the preceding year;
 - b) The details of any upgrades to the landfill gas and leachate management systems undertaken in the previous year;
 - c) Any non-compliance with the conditions of these consents or difficulties in achieving the practices and procedures in the Landfill Development Management Plan or Landfill Closure



- Management Plan which have arisen in the preceding year and the measures taken to address them;
- d) Any emergency management procedures and contingency response procedures specified in the Landfill Development Management Plan or Landfill Closure Management Plan that were implemented during the preceding year;
- e) Landfilling operations and closure and aftercare activities proposed for the next year of the landfill operation; and
- f) Collated summaries and analyses of all monitoring results and other data required under these consents, including:
 - i. The results obtained for all leachate, groundwater, surface water and leachate pumping system monitoring undertaken. Results must be supplied in table format within the report, with a copy of all laboratory analytical reports appended.
 - ii. A description of the dates of monitoring and climatic conditions on those dates, and any other pertinent field observations.
 - iii. Complaint data, including but not limited to odour and dust, and related investigations and responses.
 - iv. Results of landfill surface methane monitoring and thermal imaging surveys and any remedial actions arising.
 - v. The results of odour monitoring, including all field monitoring record sheets.
 - vi. Interpretation of all the data, particularly with regard to landfill performance. Trends must be identified and discussed.
 - vii. Results and monitoring records relating to the thermal monitoring of the active tip face.
- g) A report, prepared at the completion of each planting season, that:
 - i. confirms all areas planted that year;
 - ii. confirms that all plantings have been completed in accordance with the certified VMRP required by Condition 43 of Discharge Permit RM23.185.01;
 - iii. confirms the status of plant maintenance, including survival and canopy closure from prior planting seasons; and
 - iv. includes supporting photographic evidence for points (i)-(iii).

The report must be forwarded to Te Rūnanga o Ōtākou and Otago Regional Council by 1 October each year unless an alternative date is agreed in writing with the Otago Regional Council. The Consent Holder must make the report publicly available on the Dunedin City Council website.

Bond

60. In the event that the landfill changes to private ownership, the Consent Holder must execute and maintain in existence a bond in the form set out in Attachment B.

Review of Conditions

61. Pursuant to Section 128 of the Resource Management Act 1991 the Otago Regional Council may within six months of the anniversary date these resource consents each year serve notice of its intention to review the conditions of these consents for the purposes of:



- a) Determining whether the conditions of these consents are adequate to deal with any adverse effect on the environment which may arise from the exercise of these consents and which it is appropriate to deal with at a later stage, or which becomes evident after the date of commencement of these consents;
- b) Ensuring the conditions of these consents are consistent with any National Environmental Standards, relevant regional plans and the Otago Regional Policy Statement;
- c) Ensuring the waste acceptance criteria conditions of these consents are consistent with applicable Ministry for the Environment and Environmental Protection Authority guidance, standards and notices, including for emerging contaminants;
- d) Reviewing the requirements and frequency of monitoring and reporting required under these consents; or
- e) Requiring the adoption of the best practicable option to reduce any adverse effect on the environment.

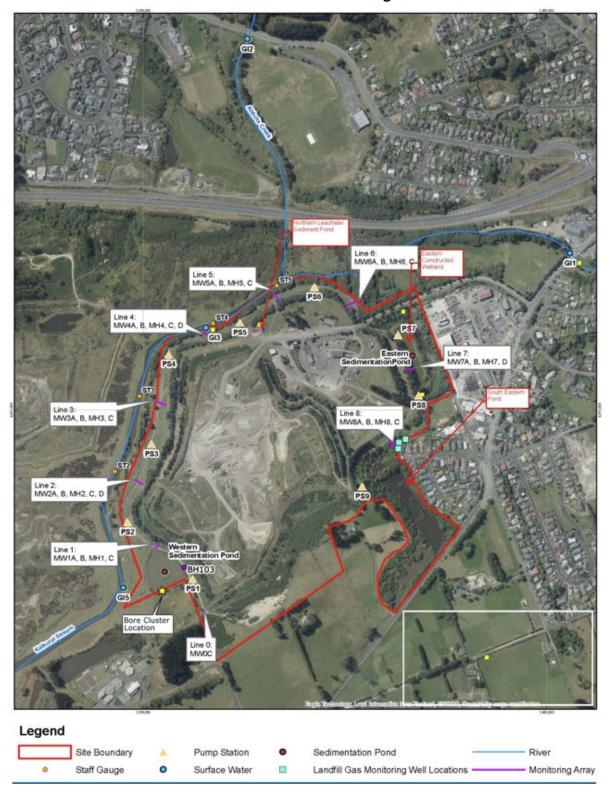
Advice Notes:

For the purposes of these consents:

- 'site' means all land within the designation boundary shown on Figure 8 in section 7.1 of the Green Island Closure, Assessment of Environmental Effects, Boffa Miskell, March 2023.
- 'landfill operational area' means the area shown as such on Figure 8 in section 7.1 of the Green Island Closure, Assessment of Environmental Effects, Boffa Miskell, March 2023.
- 'landfill extent" means the area shown as such on Figure 8 in section 7.1 of the Green Island Closure, Assessment of Environmental Effects, Boffa Miskell, March 2023.
- 'active landfilling area' means the area of exposed waste.
- 'highly odorous wastes' means, but is not limited to:
 - Wastewater treatment sludges, biosolids, and screenings;
 - Wastewater pump station screenings and grits;
 - Animal remains;
 - Waste from meat processes;
 - Wool scour, tannery, and fellmongery waste; and
 - Fish waste.
- 'stormwater' means water running off from any impervious surface such as roads, carparks, roofs, as well as any other surface run-off that is collected and/or intercepted.
- 'liquid waste' means any waste that contains free liquid on arrival at the landfill, or has a solids content of less than 20%, except such waste that passes the USEPA Paint Filler Liquids Test (EPA Method 9095A).
- 'closure' means the completed state of the landfill following:
 - Placement of the capping layer on the final stage of the landfill, and establishing vegetation cover.
 - Completion of the installation of the LFG wells and associated pipework.
 - o Establishment of vegetation over the soil borrow area.
 - Removal of any site facilities and infrastructure that is not required during the aftercare period or modifying such infrastructure for the aftercare period.



Attachment A - Groundwater and Surface Water Monitoring Locations



Bond for Green Island Landfill

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BY THIS BOND dated this xx day of March 2025

THE DUNEDIN CITY COUNCIL, a territorial authority under the local Government Act 2002 (with each of its respective successors, administrators and assigns) but not including any Council Controlled Organisation or other third party operating the Green Island Landfill on its behalf ("DCC") acknowledges that subject to the provisions below it is bound to pay to THE OTAGO REGIONAL COUNCIL, a Regional Council under the Local Government Act 2002 ("the Council") the sum of two million dollars (\$2,000,000), and is subject to the other terms of this bond.

WHEREAS:

- A. DCC is the registered proprietor of an estate in fee simple in the pieces of land described in the schedule hereto ("the land").
- B. DCC applied to the Council for Resource Consents in respect of the land for the Green Island landfill.
- C. The Council granted Resource Consents on conditions that DCC shall enter into this bond to be effective in the event that the land is to be transferred by DCC to private ownership.

THIS BOND shall be void:

- 1. While the DCC:
 - (a) is the owner of the land; and
 - (b) Complies with the conditions of the Resource Consents granted by the Council for the operation, closure and aftercare of the Green Island landfill (consents RM23.185.01-08 ("the obligations")); or
- If DCC transfers the land to a future owner or transfers the resource consents referred to below to another operator including any Council Controlled Organisation or other third party ("Future Owner"), and the Future Owner:
 - (a) Complies with the conditions of the Resource Consents granted by the Council for the operation, closure and aftercare of the Green Island landfill (consents RM23.185.01-08) ("the obligations"); and
 - (b) Agrees with the Council in writing to comply with the terms of this bond which includes to indemnify the Council against all costs (including costs as

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between solicitor and client) damages and expenses, claims, actions and proceedings of or against the Council in consequence of or arising out of any fault, neglect, or sufferance of the owner, its servants, agents or contractors in respect of complying with the obligations and/or the exercise by the Council of its servants, agents or contractors of any of its rights, powers and remedies available under this bond.

3. This bond is released and void once all of the consents RM23.185.01-08 have expired and all consent conditions have been complied with as certified in writing by the Council.

IT IS AGREED that:

- 4. IF the DCC or any Future Owner fails to fulfil the obligations the DCC shall on demand by the Council pay to the Council the sum of two million dollars (\$2,000,000) either in cash, or provide a security by a bank or other financer that is approved by the Council, including the terms of any security, or such portion as may be demanded by the Council provided that in the latter case the Council may from time to time thereafter demand and the DCC shall whenever demand is made on it pay the balance or any portion of the said sum of two million dollars (\$2,000,000) until the full amount thereof if required by the Council has been paid, by the DCC to the Council.
- 5. THE Council, and its officers, servants or contractors, may at any time and from time to time enter on the land and take such steps and carry out such work as may be necessary to fulfil the obligations.
- 6. ALL expenses incurred by the Council under the clause 5 shall be recoverable by the Council from the bond paid by the DCC under clause 4.
- 7. WHERE the cost of any work done, and expenses incurred, by the Council under the terms of this bond, including under clause 5, exceeds the bonded amount of \$2,000,000 the amount of the excess cost above \$2,000,000 shall constitute a debt due to the Council by the DCC and shall be a charge on the land. All costs incurred by ORC to recover any debt due from the DCC are payable by the DCC to ORC.
- 8. THIS bond may be varied or cancelled or renewed at any time by agreement between the DCC and the Council.
- 9. THE liability of the DCC hereunder shall not be released varied or affected in any way by any delay, extension of time or other indulgence granted by the Council or by any delay, failure or neglect of the Council to enforce its rights hereunder or any obligation of the DCC hereunder.
- 10. THE powers and remedies hereby given to the Council are in addition to all other powers and remedies conferred on it by the Resource Management Act 1991 or

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by any other Act and the exercise by the Council of any power or remedy under this bond or any such Act shall not prejudice its authority to exercise any other such power or remedy.

O REGIONAL COUNCE

Common

- THIS bond shall be registered by the DCC at its cost under the Land Transfer Act 11. 1952 against the land pursuant to section 109 of the Resource Management Act 1991.
- IT is the intention of the parties that this bond is deemed to be a covenant 12. running with the bonded land.

Signed by THE DUNEDIN CITY COUNCIL under delegated authority by:

S Graham Chief Executive

Signed by THE OTAGO REGIONAL **COUNCIL** under delegated authority by:

Councillor

Robertson Cr Gretchen

Signed by THE OTAGO REGIONAL COUNCIL under delegated authority by:

Councillor Cr Alan Somewille

SCHEDULE TO BOND

- 1. 4.2765 hectares more or Less being Lot 1 Deposited Plan 20582 and being part Sections 41, 42 and 43 Green Island Bush District and part Section 64 Block VII Dunedin and East Taieri District and being all the land comprised and described in Certificate of Title 12C/262 subject to the reservations, covenants, restrictions and conditions as set out in the Certificate of Title.
- 2. 49.0242 hectares more or less being parts Sections 45, 46 and 47 Green Island Bush District and Sections 54, 55, 63, 65 and 119 Block VII Dunedin and East Taieri District and being all the land comprised and described in Certificate of Title 1|B/1241 subject to the reservations, covenants, restrictions and conditions as set out in the Certificate of Title.
- 3. 1.0841 hectares more or less being parts Sections 45, 46 and 47 Green Island Bush District and being all the land comprised and described in Certificate of Title 368/19 subject to order in Council 3714 as to the reservations, covenants, restrictions and conditions as set out in the Certificate of Title.
- 4. 6.36.96 hectares more or less being Section 103 and part Sections 85, 86, 87, 98, 99, 100, 101, and 102 Block V Lower Kaikorai District and being all the land comprised and described in Certificate of Title 13A/566 (Otago Registry) subject to reservations, covenants, restrictions and conditions as set out in the Certificate of Title.
- 5. 6.0424 hectares more or less being Section 120 and part Section 53 Block VII Dunedin and East Taieri District and closed road intersecting Sections 86, 87, 98, 102 and 103 Block V Lower Kaikorai District and being all the land comprised and described in Certificate of Title 11C/1275 (Otago Registry) subject to reservations, covenants, restrictions and conditions as set out in the Certificate of Title.
- 6. 8.2303 hectares more or less being part Sections 38, 39, 40, 44 and 156 Green Island Bush District and being all the land comprised and described in Certificate of Title 7C/934 (Otago Registry) subject to reservations, covenants, restrictions and conditions as set out in the Certificate of Title.



Attachment C - Legal Descriptions

Green Island Landfill Site (as defined by the existing designation in the Proposed Second Generation Dunedin City District Plan)

Site	Legal Description	Record of Title	Area	Owner
9 Brighton Road	Part Section 45-47 Green Island Bush Survey District and Section 54 and 63 Block VII and Section 119 Block VII Dunedin & East Taieri Survey District	OT11B/1241	41.8120 hectares	Dunedin City Counci l
9 Brighton Road	Part Section 45-47 Green Island Bush Survey District	OT368/19	1.0841 hectares	
9 Brighton Road	Section 1 Survey Office Plan 24047	OT15C/1016	4718 square metres	
9 Brighton Road	Lot 6-7 Deposited Plan 572543 and Section 1 Survey Office Plan 24040	1040235	4464 square metres	
9 Brighton Road	Part Section 120 Dunedin & East Taieri Survey District and Part Section 53 Block VII Dunedin & East Taieri Survey District and Closed Road intersecting Sections 86,87,98,102 and 103 Block V Lower Kaikorai Survey District	OT16D/1193	4.0211 hectares	



9 Brighton	Section 103 Block	OT16D/1194	5.5726	
Road	V Lower Kaikorai		hectares	
	Survey District and			
	Part Section 85-87,			
	98 Block V and Part			
	Section 99-101			
	Block V and Part			
	Section 102 Block			
	V Lower Kaikorai			
	Survey District			
9 Brighton	Lot 2, 4 Deposited	1040233	1837 square	
Road	Plan 572543 and		metres	
	Lot 1 Deposited			
	Plan 20826			
114	Part Section 38-40,	OT7C/934	8.2303	
Brighton	Part Section 44 and		hectares	
Road	Part Section 156			
	Green Island Bush			
	Survey District			
140	Part Lot 4	OT12C/261	10.4655	
Brighton	Deposited Plan		hectares	
Road	4550			
170	Lot 1 Deposited	OT12C/262	4.2766	
Brighton	Plan 20582		hectares	
Road				
170	Section 81 Block	OT15A/266	4401 square	
Brighton	VII Dunedin & East		metres	
Road	Taieri Survey			
	District			
Total Area			75.6164	
			hectares	

Green Island Wastewater Treatment Plan Site (location of LFG engine and flare):

Site	Legal Description	Record of Title	Size of entire property	Owner
9 Brighton Road	Section 55 and 65 Block VII Dunedin & East Taieri Survey District	OT11B/1241	7.2122 hectares	Dunedin City Council
9 Brighton Road	Lot 30 Deposited Plan 24758	OT16C/1083	3.7127 hectares	
174 Brighton Road	Part Section 48 Deposited Plan 2323	OT166/158	2.1102 hectares	
174 Brighton Road	Lot 1 Deposited Plan 22230	OT14C/1027	7.1854 hectares	
Total Area			20,2205 hectares	