

Discharge Permit

Under Section 104B of the Resource Management Act 1991, a resource consent is granted by the Southland Regional Council to **AB Lime Limited** of **10-20 Bend Road, Kings Bend, Winton 9741** from **16 July 2021**.

Please read this Consent carefully, and ensure that any staff or contractors carrying out activities under this Consent on your behalf are aware of all the conditions of the Consent.

Details of Permit

Purpose for which permit is granted:	To discharge contaminants into air from combustion processes where combustible refuse matter is flared.
Location	- site locality - GPS reference - groundwater zone - Airshed - catchment
	10-20 Bend Road, Kings Bend, Winton NZTM2000 1242940E 4881050N Lower Oreti Southland Tussock Creek
Legal description of land at the site:	Part Section 71 Block VIII Winton Hundred, and Section 70, 75, 76, 77 & 78 Block VIII Winton Hundred

Expiry date: 6 August 2046

Schedule of Conditions

General Conditions

1. This consent is subject to the general conditions listed in Schedule 1 – General Conditions. Where there may be differences, or apparent conflict, between the general conditions and the conditions below, the specific conditions below shall prevail.

2. The discharge into air shall only be contaminants, including particulate matter, odour, combustion products and landfill gas, from a landfill as described in the application documents. This consent does not authorise the burning of solid waste at the site.

Odour and Dust Nuisance

3. The discharge shall not cause odour or particulate matter that has an objectionable or offensive effect beyond the boundary of the land owned, or covenanted, by the Consent Holder, as determined by the Southland Regional Council. The determination of an offensive or objectionable effect shall 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 Environment Good Practice Guide for Assessing Dust (2016).

Advice Note: *To help the Consent Holder in the management of complaints in accordance with this condition it is requested that all complaints received by the Southland Regional Council are passed on (suitably redacted) to the Consent Holder and where applicable a copy of the FIDOL assessment. An updated map of the boundary shall be kept in the Landfill Air Quality Management Plan for reference for the Southland Regional Council*

Landfill Gas

4. A landfill gas extraction system shall be installed and operated in accordance with the details supplied in the application documents. The gas combustion system shall destroy at least 98% of non-methane organic compounds burned.
5. There shall be no visible emissions, excluding water vapour, light, or heat haze, from any landfill gas flare.
6. Each gas extraction well shall be connected to the main gas extraction system within 12 months of placing wastes within the radius of influence of that well. Passive flares shall burn gas discharged from wells prior to connection to the gas extraction system. These temporary flares shall each have a continuous automatic ignition system, a flame arrestor, and a backflow prevention device.
7. The enclosed principal landfill gas flare or other utilisation system shall have:
 - (a) a flame arrestor and backflow prevention device;
 - (b) a continuous automatic ignition system;
 - (c) an automatic isolation system to prevent the discharge of unburned landfill gas;
 - (d) sampling ports of appropriate design for emission testing, including safe access to the sampling ports;
 - (e) a minimum combustion temperature of 750 degrees Celsius and a residence time in the combustion zone of at least 0.5 seconds; and
 - (f) a permanent temperature indicator with visual readout at ground level.
8. The landfill gas in all operating extraction wells shall not exceed 5% oxygen by volume.
9. (a) The concentration of methane measured in monitoring probes outside the landfill footprint shall not exceed 1.25% by volume.

- (b) The concentration of methane measured at the surface of landfill areas with intermediate or permanent capping shall not exceed 0.5% by volume.

Monitoring

- 10. A walk-over site inspection of the landfill shall be undertaken at least every week. Any evidence of possible landfill gas leaks, including odour, surface cracks, gas bubbles or vegetation damage, shall be investigated and appropriate remedial action shall be undertaken as soon as practicable.
- 11.
 - (a) Methane concentrations shall be measured and recorded at least once each month in accordance with the Landfill Gas Management Plan at the filled boundary located outside the landfill footprint, but within the Consent Holder's property, to demonstrate compliance with Condition (9)(a).
 - (b) Methane concentrations shall be measured and recorded at least once each month at the surface of the landfill to demonstrate compliance with Condition (9)(b).

Advice Note: *The filled boundary is the area of the landfill footprint that is occupied with waste at any given time.*

- 12. Landfill gas shall be monitored at least once each month at each gas extraction well head and at each temporary flare station. The following parameters shall be measured or calculated and recorded:
 - (a) gas flow rate;
 - (b) gas composition (% methane, % oxygen, % carbon dioxide, % nitrogen, ppm carbon monoxide);
 - (c) gas temperature;
 - (d) gas pressure; and
 - (e) hydrogen sulphide concentration; and
 - (f) Oxygen level percentage
- 13. Once a permanent landfill gas flare or other utilisation system is established, landfill gas shall be monitored. The following parameters shall be measured or calculated and recorded at the following frequencies:
 - (a) *Continuous monitoring:*
 - (i) gas flow rate;
 - (ii) gas composition (% methane, % oxygen, % carbon dioxide, % nitrogen)
 - (iii) gas temperature; and
 - (iv) gas pressure.
 - (b) *Weekly monitoring:*
 - (i) gas composition (ppm carbon monoxide).
- 14. The landfill gas shall be monitored for the following parameters:
 - (a) hydrogen sulphide concentration shall be monitored at a frequency not less than once each month; and

- (b) concentration of total non-methane organic compounds (NMOCs) shall be monitored annually.
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- (a) Within 12 months after giving effect to this consent, the consent holder shall undertake a landfill gas offsite migration risk assessment to determine the risk of landfill gas migration to offsite sensitive receptors. As part of this assessment the consent holder shall provide a recommendation on the necessity of the requirement for additional landfill gas monitoring probes and, if necessary, the location and spacing of such probes, and the appropriate timing of future reviews should they be considered necessary.
 - (b) The conclusions of the assessment provided in (a) shall be provided to the Independent Peer Reviewer(s) for certification and Southland Regional Council for approval, in accordance with the 'Acceptance and Certification' process set out in Schedule 1- General Conditions.

Reporting

16. A record of all monitoring undertaken in accordance with the conditions of this consent and a summary of the monitoring results shall be provided to Southland Regional Council annually.

for the **Southland Regional Council**



Bruce Halligan
Acting Consents Manager

Schedule 1 – General Conditions

The granting of consent AUTH-20202200-04 is subject to the following general conditions, which shall apply to each individual consent:

- GC1. The Consent Holder has five years from the granting of these consents to give effect to the consents in accordance with S.125 of the Act. The surrender of the relevant existing consents will occur at the time these consents are given effect to.
- GC2. (a) Except as required by subsequent or more specific conditions, the development and operation of the solid waste disposal facility and associated operations shall be carried out generally in accordance with the Application Documentation submitted on 29 May 2020; the subsequent information submitted on 2 September 2020 and 23 October 2020; and information provided at the hearing 17 to 20 May 2021. Where there is any conflict between the application and the conditions, the conditions of consent shall prevail.
- (b) The Consent Holder may use an alternative design or methodology to that proposed in the above documents if:
- (i) the adverse effect of the activity will be the same or less than the previously specified design or methodology; and
 - (ii) the alternative design or methodology is approved in writing by the Southland Regional Council, who may require an independent review of the alternative by an appropriately qualified person before giving that approval. The cost of any such review shall be borne by the Consent Holder.

Or

The alternative methodology has been incorporated into the relevant management plan(s) and has been approved and certified following the process identified in Schedule 1 – General Conditions (13)-(16).

Management Plans

- GC3. The solid waste disposal facility and associated operations shall operate in accordance with an Environmental Management Plan (EMP) for the duration of this consent.
- GC4. The Environmental Management Plan shall incorporate or refer to the following management plans, each of which is described in later conditions of this consent:
- (a) Landfill Operations Management Plan;
 - (b) Landfill Gas Management Plan;
 - (c) Landfill Concept, Landscape, Rehabilitation and Aftercare Plan;
 - (d) Landfill Leachate Management Plan;
 - (e) Landfill Air Quality Management Plan;
 - (f) Quarry Management Plan
 - (g) Site Traffic Management Plan
 - (h) Site Stormwater Management Plan
 - (i) Site Archaeological/Koiwi or Taonga Accidental Discovery Plan.

In the event of an inconsistency between the management plans and a condition of this consent, these conditions shall prevail.

Advice Notes

1. *For completeness all sub-management plans are identified in Condition (4). The sub-management plans relevant to these consents include the Landfill Operations Management Plan, the Landfill Gas Management Plan, the Landfill Concept, Landscape, Rehabilitation and Aftercare Plan, the Landfill Leachate Management Plan, the Landfill Air Quality Plan, the Site Stormwater Management Plan and the Site Archaeological/Koiwi or Taonga Accidental Discovery Plan.*
2. *The objectives for each sub-management plan relevant to this consent are identified in consent General Conditions (21)-(28). There are also other objectives within these sub-management plans not relevant to these consents that are managed by the District Authority.*

Appointment of Management Plan Reviewer(s)

GC5. Prior to the exercise of this resource consent the Consent Holder shall nominate an independent, suitably qualified and experienced person(s) to review the management plans required by this consent, for approval by the Southland Regional Council. The consent holder shall provide information to the Southland Regional Council to demonstrate that the proposed reviewer(s) is independent, suitably qualified and experienced.

Advice Note: *If the Southland Regional Council does not approve the person(s) proposed by the Consent Holder, reasons will be provided in writing to indicate why the person(s) is not considered to be suitable.*

GC6. Acceptance of the plans shall not proceed until the Southland Regional Council confirms in writing that the Independent Management Plan Reviewer(s) meets these requirements.

GC7. The Independent Management Plan Reviewer(s) may be changed at any stage during operations, however, the new reviewer(s) must be confirmed as being appropriate by the Southland Regional Council in accordance with General Condition (5).

Acceptance and Certification Process

GC8. Prior to the exercise of this consent all management plans are to be submitted to the Independent Management Plan Reviewer(s) for acceptance.

GC9. Once a management plan is submitted to the Independent Management Plan Reviewer(s) they may:

- (i) accept the contents of the management plan; or
- (ii) make recommendations to the Consent Holder on the suitability of the contents of the management plan(s) in addressing the relevant conditions of consent. The Consent Holder shall make every reasonable effort to address the recommendations to the satisfaction of the Independent Management Plan Reviewer(s);
- (iii) in the case of substantial disagreement between the Consent Holder and the Independent Management Plan Reviewer(s) in addressing recommendations the Southland Regional Council as certifier of the management plans shall make the final determination on an

outstanding matter. Any costs incurred in determining this outcome shall be borne by the Consent Holder.

GC10. Once the Environmental Management Plan and sub management plans have been reviewed by the Independent Management Plan Reviewer(s), in accordance with General Condition (9) the plan shall be provided to the Southland Regional Council for consideration and certification, if considered appropriate.

Advice Note: *The acceptance process has been assigned to the Independent Management Plan Reviewer(s). The plan is then submitted to Southland Regional Council for final certification. The Southland Regional Council remains the authority for making a final decision on the certification of the document. The role of the Independent Management Plan Reviewer(s) is to provide technical guidance, recommendations, and their acceptance of these documents, where otherwise the Southland Regional Council may not have the internal expertise to carry out this function.*

GC11. (a) Southland Regional Council shall be requested, no less than 20 working days of the receipt of the management plan, to confirm to the Consent Holder that the plan is either certified or declined. If no response is received, certification is deemed to have been given as set out in General Condition (16).

(b) Should Southland Regional Council decline to certify the management plan, the Consent Holder shall resubmit a revised amendment to the management plan(s) following the procedures set out in General Conditions (8)-(10).

GC12. (a) This resource consent and a copy of the Southland Regional Council certified versions of all the management plans required by this consent shall be kept on site at all times, and the Consent Holder shall ensure all personnel are made aware of each plan's contents.

(b) The Southland Regional Council may, in May of each year, instruct the Independent Management Plan Reviewer(s) to review any management plan to ensure that management practices result in compliance with the conditions of these consents. Costs relating to the above review shall be borne by the Consent Holder.

Management Plan Amendment Process

GC13. The Consent Holder may make amendments to the final management plans that may change how any adverse effect is managed at any time subject to the acceptance of the Independent Management Plan Reviewer(s) and certification of Southland Regional Council.

All material changes to a management plan must be appropriately addressed through the mechanisms provided by these consent conditions. Any adjustment that is not material to the performance of these conditions of consent may be made at any time with the approval of the Southland Regional Council (i.e. changes in personnel, minor drafting corrections).

Advice Note: *The independent peer review process remains separate to the management plan acceptance/certification process. Any standard approved through the independent peer review process may be incorporated into the relevant management plan(s) without going through the process specified in Schedule 1 – General Conditions (13)-(16) to stop unnecessary duplication of the acceptance and certification process.*

GC14. All amendments shall be consistent with the objectives and performance requirements of the management plan and these consent conditions.

- GC15. (a) In event of an amendment to a management plan under General Condition (13), the Consent Holder must submit the amendment to Southland Regional Council for certification a minimum of 20 working days before the commencement of the relevant works. Certification shall confirm that the amendment is in accordance with General Condition (2) and meets the objectives and performance requirements of the management plan.
- (b) Southland Regional Council shall be requested, no later than 20 working days of the receipt of the amendment, to confirm to the Consent Holder that the amendment is either certified or declined. If no response is received, approval is deemed to have been given as set out in General Condition (16).
- (c) Should Southland Regional Council decline to certify the amendment or request the incorporation of changes to the amendment the Consent Holder may then resubmit a revised amendment to the management plan(s) following the procedures set out in General Condition (15)(a)-(b).

GC16. If no confirmation of the Plan's suitability is received from Southland Regional Council within 20 working days of submission of any plan or other information provided for certification, the submitted information shall be deemed to have been approved.

Independent Peer Review Process

GC17. Within one month of giving effect to this resource consent the Consent Holder shall nominate independent peer reviewer(s), suitably qualified and experienced person(s) to review the matters specified in General Condition (20), for approval by the Southland Regional Council. The Consent Holder shall provide information to demonstrate that the proposed reviewer(s) is independent, suitably qualified, and experienced.

Advice Note: *If the Southland Regional Council does not approve the person(s) proposed by the Consent Holder, reasons will be provided in writing to indicate why the person(s) is not considered to be suitable.*

GC18. The Independent Peer Review process shall not proceed until the Southland Regional Council confirms in writing that the Independent Peer Reviewer(s) meets these requirements.

GC19. The Independent Peer Reviewer(s) may be changed at any stage during operations, however, the new Independent Peer Reviewer(s) must be confirmed as being appropriate by the Southland Regional Council in accordance with General Condition (17).

GC20. (i) The Consent Holder shall engage, at its own cost in accordance with General Conditions (17)-(19), an Independent Peer Reviewer(s), to review the design, construction, operation, maintenance and monitoring of the landfill and to assess whether or not the work is undertaken by appropriately qualified personnel in accordance with good practice.

- (ii) The Independent Peer Reviewer shall report to the Southland Regional Council by 1 May each year on the following matters:
- site preparation, including hydrogeological and geotechnical issues;
 - liner, leachate collection and stormwater system detailed design (including calculations), construction and quality control and use of on-site materials;
 - landfill operations management;
 - water control, including groundwater, stormwater, and leachate management;
 - waste acceptance;
 - cover material used;
 - landfill gas management;
 - monitoring, modelling and records;
 - site rehabilitation.

Preparation of each annual report shall include at least one site inspection.

- (iii) The Consent Holder shall provide information to the Independent Peer Reviewer three months prior to the construction of the following aspects of an area:
- base liner construction of an area;
 - construction of gas well installation for an area;
 - stormwater infrastructure for an area; and
 - permanent capping of an area.

The Independent Peer Reviewer shall provide a report on these matters to the Southland Regional Council at least one month prior to the identified construction activities.

Advice Note: *The construction of the above aspects of an area is an iterative process. There may be significant time lags between each aspect of an area and there is no expectation that these should be bundled together.*

- (iv) The Consent Holder shall provide to the Independent Peer Reviewer as-built construction of the base liner prior to the disposal of refuse on an area. The Independent Peer Reviewer shall report on as-built construction of the base liner prior to the disposal of refuse on an area.
- (v) In addition, the Independent Peer Reviewer may report, in writing, to the Southland Regional Council on any matter that he/she considers should be brought to the attention of the Council in respect of the landfill and its operation.
- (vi) Where the Independent Peer Reviewer does not have the expertise in any of the areas required to report on, as detailed above, he/she may, with the agreement of the Consent Holder and the Southland Regional Council, engage the services of an appropriate expert to report on the relevant issue. The report shall form part of the review provided by the Independent Peer Reviewer, as required by this condition.
- (vii) A Terms of Reference, to guide and direct the Independent Peer Reviewer, shall be established, in consultation with the Southland Regional Council.

- GC21. (i) Following independent peer review (as per General Condition (20) of this Schedule), all peer review reports shall be provided to the Southland Regional Council for certification in accordance with the Terms of Reference outlined in General Condition (20)(vii).
- (ii) Southland Regional Council shall be requested, no less than 20 working days of the receipt of an Independent Peer Review report, to confirm to the Consent Holder that the report is either certified or declined.
- (iii) If no confirmation of the report's suitability is received from Southland Regional Council within 20 working days of submission of any report or other information provided for certification, the submitted information shall be deemed to have been approved.

Advice Note: *The independent peer review process remains separate to the management plan acceptance/certification process. Any reports certified by the Southland Regional Council through General Conditions (20)-(21) may be incorporated into the relevant management plan(s) without going through the process specified in General Conditions (13)-(16) to stop unnecessary duplication of the certification process.*

GC22. The overall purpose of the Environmental Management Plan (EMP) is to provide details of the practices and procedures to operate the landfill in compliance with the conditions of consent. The EMP shall comply with the relevant consent conditions and achieve the following objectives:

- (i) to operate in full compliance with the resource consent requirements and demonstrate this through reporting procedures to Consent Authorities;
- (ii) to liaise with neighbours and the local community, including iwi representatives, regarding landfill operations that could affect these parties;
- (iii) to provide a safe working environment for people on the site;
- (iv) to maintain an independent review process for the design, construction, operation, and aftercare of the landfill to confirm the work is undertaken by appropriately qualified personnel in accordance with good practice;
- (v) to identify operational responsibilities, the management structure and staffing;
- (vi) to facilitate the effective training of staff;
- (vii) to facilitate accurate record keeping;
- (viii) to maintain community involvement including details of complaints procedures;
- (ix) to appropriately manage site access, fencing and security;
- (x) to manage site infrastructure and site amenities.

Landfill Operations Management Plan

GC23. The Consent Holder shall prepare and maintain a Landfill Operations Management Plan (LOMP). The LOMP shall describe the operations of the landfill, including demonstrating how compliance with the relevant conditions of this consent will be achieved. The plan shall also achieve the following objectives:

- (i) to utilise an effective cover system to maintain quality site rehabilitation, while minimising long term leachate generation;
- (ii) to limit face access, thus enabling the size of the active area to be minimised;
- (iii) to minimise stockpiling, both within and outside the footprint;
- (iv) to outline Waste Acceptance Criteria and Procedures:
- to protect the receiving environment;
 - to protect the health and safety of people;

- to maintain that all waste received is compatible with the land filling operation;
- to maintain that all waste landfilled complies with 'Waste Acceptance Criteria' outlined in the relevant consent conditions;
- (v) to outline crisis response and emergency waste acceptance procedures:
 - to manage the identification of all special waste;
 - to pre-arrange the disposal of special waste;
 - to have in place measures and appropriate provisions for disposal of each special waste load are in place before the waste arrives at the landfill.
- (vi) the placing of refuse and daily cover:
 - to achieve a minimum in-situ refuse density of 0.8;
 - to maintain a working face that is as small as possible;
 - to cover all refuse daily;
 - to manage special waste planning;
 - to record the location of special waste by survey;
- (vii) the effective capping of the landfill:
 - to minimise ingress of rainwater into the landfill;
 - to minimise erosion and cracking of the cap through design, planting, and maintenance.

Landfill Gas Management Plan

GC24. The Consent Holder shall prepare and maintain a Landfill Gas Management Plan (LGMP). The LGMP shall describe gas management for the landfill, including demonstrating how compliance with the relevant conditions of this consent will be achieved. The plan shall also achieve the following objectives:

- (i) to provide active LFG extraction throughout the active and post-closure phases;
- (ii) to manage the maintenance of methane concentrations at the nearest site boundary not owned by the Consent Holder;
- (iii) to provide for the treatment of recovered landfill gas by flaring in accordance with the NESAQ;
- (iv) to manage surface emission concentrations above the area of the landfill surface for all future cells that contain permanent capping and temporary capping are maintained at less than 5000 ppm methane;
- (v) to manage landfill gas so that oxygen by volume shall not exceed 5% in all operating extraction wells;

Maintenance:

- (vi) to provide for maintenance of the landfill gas collection system.

Landfill Concept, Landscape, Rehabilitation and Aftercare Plan

GC25. The Consent Holder shall prepare and maintain a Landfill Concept, Landscape, Rehabilitation and Aftercare Plan (LCLRAP). The LCLRAP shall describe the landscaping, rehabilitation, and aftercare of the landfill, including demonstrating how compliance with the relevant conditions of this consent will be achieved. The plan shall also achieve the following objectives:

Aftercare:

- (i) aftercare operation and maintenance of leachate management systems;
- (ii) aftercare operation and maintenance of landfill gas management systems;
- (iii) ongoing monitoring including groundwater, surface water, landfill gas and site capping;

- (iv) Management of stormwater;
- (v) capping and revegetation;
- (vi) post settlement final contours;
- (vii) responsibilities for aftercare;
- (viii) land ownership and liability for contamination.

Landfill Leachate Management Plan

GC26. The Consent Holder shall prepare and maintain a Landfill Leachate Management Plan (LLMP). The LLMP shall describe the management of leachate for the landfill, including demonstrating how compliance with the relevant conditions of this consent will be achieved. The plan shall also achieve the following objectives:

- (i) to provide a robust, effective leachate drainage system with ready access for cleaning and rehabilitation;
- (ii) to control stormwater and moisture ingress into the landfill such that the site is able to be operated as to provide effective waste stabilisation, while avoiding excessive leachate generation;
- (iii) to facilitate gravity drainage of leachate from the landfill;
- (iv) to minimise liner penetrations;
- (v) to manage the removal of leachate from site for treatment to be undertaken safely in accordance with the Code of Practice for Hazardous and Liquid Waste;
- (vi) to provide continued compliance with the requirements of any Trade Waste Permit(s);

Maintenance:

- (vii) to provide for the maintenance of the leachate collection system;
- (viii) to provide for the maintenance of the leachate storage tank.

Landfill Air Quality Management Plan

GC27. The Consent Holder shall prepare and maintain a Landfill Air Quality Management Plan (LAQMP). The LAQMP shall describe the air quality management for the landfill, including demonstrating how compliance with the relevant conditions of this consent will be achieved. The plan shall also achieve the following objectives:

- (i) to control odours so that there shall be no objectionable and offensive effect of odours beyond the boundary of the land owned, or covenanted, by the Consent Holder;
- (ii) to manage the disposal of odorous loads - to take place when effective mitigation measures are in place;
- (iii) to manage effective daily cover of at least 150 mm of soil or equivalent alternative material;
- (iv) to keep the working face as small as practicable;
- (v) to limit excavation into old areas of refuse as far as practicable;
- (vi) to minimise water ingress to the working face;

Dust:

- (vii) to control dust so that there shall be no objectionable and offensive effect of dust beyond the boundary of the land owned or covenanted by the Consent Holder;
- (viii) to minimise the extent of unvegetated areas
- (ix) to enforce vehicle speed limits on site;

- (x) to keep unsealed road surfaces and working areas moist where potential for dust emissions beyond the boundary of the land owned or covenanted by the Consent Holder exists;

Maintenance and Data Management:

- (xi) to provide for maintenance and calibration all monitoring equipment;
- (xii) to detail data management procedures.

Site Stormwater Management Plan

GC28. The Consent Holder shall prepare and maintain a Site Stormwater Management Plan (SSMP). The SSMP shall describe the stormwater management for the site, including demonstrating how compliance with the relevant conditions of this consent will be achieved. The plan shall also achieve the following objectives:

- (i) to enable comprehensive stormwater control, with all catchment runoff routed via a sedimentation system;
- (ii) to divert as much stormwater as possible away from the active face of the landfill so that operational leachate volumes are minimised;
- (iii) to provide effective drainage of the final surface of the landfill so that scour of the cap is minimised and long-term seepage into the landfill is minimised;
- (iv) to keep all stormwater runoff from landfill activities within the AB Lime catchment, to maximise runoff available for other purposes, and minimise environmental impacts on the receiving environment;

Erosion and Sediment:

- (v) to enable comprehensive sediment control, with a majority of catchment runoff routed via a sedimentation system;
- (vi) to control silt runoff from the site;
- (vii) to detain flows from runoff so that deposition of transported sediment can occur through settlement;
- (viii) to maintain the site stormwater capture, conveyance, detention, and treatment devices so that they perform as designed.

Site Archaeological/Koiwi or Taonga Accidental Discovery Plan

GC29. The Consent Holder shall prepare and maintain a Site Archaeological/Koiwi or Taonga Accidental Discovery Plan (SAKTDP). The SAKTDP shall describe the accidental discovery protocols for the site, including demonstrating how compliance with the relevant conditions of this consent will be achieved. The plan shall also achieve the following objectives:

- (i) to ensure familiarity with accidental discovery protocols;
- (ii) protocols are followed in the event of an accidental discovery.

Monitoring of Management Plans

GC30. The Environmental Management Plan and sub-management plans (where applicable) shall include monitoring with respect to surface water, groundwater, leachate, landfill gas, odour and nuisance. Each monitoring element shall include:

- (i) monitoring locations;

- (ii) monitoring parameters;
- (iii) monitoring frequency;
- (iv) detection limits;
- (v) reporting; and
- (vi) trigger levels (for each monitoring location) for implementing contingency/remedial actions.

Operational Conditions

GC31. A geological map of the base grade of the landfill shall be prepared and upgraded in the Landfill Operations Management Plan from time to time as the base grade is exposed. The geological mapping shall include detailed logging of the location, extent and nature of fractures, fracture zones, Karst features and other defects.

GC32. All investigations, design, supervision of construction, operation, monitoring and after-care shall be undertaken by suitably qualified personnel experienced in such works, or works of a similar nature, and to the satisfaction of the Southland Regional Council.

GC33. The Consent Holder shall submit a revised Landfill Concept, Landscape, Rehabilitation and Aftercare Plan to the Southland Regional Council at least twenty-four months prior to planned landfill operations ceasing on this site. The revised plan shall be prepared after consultation with the owners of adjacent properties and the Southland District Council and Te Rūnanga o Awarua, Waihōpai Rūnaka and Hokonui Rūnanga.

GC34. The Consent Holder shall retain an appropriately experienced person to supervise the operation of the landfill. That person shall compile an annual report on the operation of the landfill, including:

- the status of landfilling operations on the site and work completed during the preceding year;
- the results of environmental monitoring;
- any difficulties which have arisen in the preceding year and measures taken to address those difficulties; and
- activities proposed for the next year of the landfill operation.

This report shall be forwarded to the Southland Regional Council by 1 May, unless otherwise agreed in writing with the Southland Regional Council.

GC35. In the event that any human remains, Koiwi, or archaeological items are discovered, the works in that area of the site shall cease immediately and the Police, Tangata Whenua (Te Rūnanga o Awarua and Waihōpai Rūnaka and Hokonui Rūnanga), and/or Heritage New Zealand Pouhere Taonga, and the Southland Regional Council, shall be notified as soon as practicable. Works may recommence with the written approval of the Southland Regional Council. Such approval shall be given after the Southland Regional Council has considered:

- (i) Tangata Whenua interests and values;
- (ii) the Consent Holder's interests;
- (iii) any archaeological or scientific evidence; and
- (iv) any requirements of the Police.

GC36. All water quality sample analyses required shall be undertaken using standard methods as detailed in the "Standard Methods for the Examination of Water and Waste Water, 1998" 20th edition by A.P.H.A. and A.W.W.A. and W.E.F. or by some other method approved in advance in writing by the Southland Regional Council.

GC37. Prior to the commencement of any solid waste disposal activities commencing on the site, the Consent Holder shall be required to enter into a bond, as described in Sections 108 and 109 of the Resource Management Act 1991 with surety of \$945,000.00, plus GST. This bond shall be held jointly by the Southland District Council and Southland Regional Council.

The Southland Regional Council may call on a proportion of this bond sufficient to address the following matters:

- secure compliance with all the conditions of this consent, and to enable any adverse effects on the environment resulting from the Consent Holder's activities, to be avoided, remedied, or mitigated;
- secure the ongoing monitoring required by the various resource consents associated with the landfill to ensure adverse effects are avoided, remedied, or mitigated; and
- secure the completion of landscaping and planting works required by the conditions of this resource consent and their ongoing maintenance;
- secure the completion of rehabilitation and closure of the site in accordance with the Landfill Concept, Landscape, Rehabilitation and Aftercare Plan required by General Condition (33).

All costs relating to the formulation and registration against the relevant certificates of title, of this bond shall be borne by the Consent Holder.

This bond shall be released upon the completion of rehabilitation and closure of the site to the satisfaction of the Southland District Council.

GC38. Twelve months prior to landfill operations ceasing the Consent Holder shall obtain two quotes for activities required pursuant to the Landfill Concept, Landscape, Rehabilitation and Aftercare Plan.

Six months prior to the landfill operations ceasing at the site, the Consent Holder shall be required to enter into a bond as described in Sections 108 and 109 of the Resource Management Act 1991 with a value equivalent to the higher of the two quotes obtained.

All costs relating to the formulation and registration against the relevant certificates of title, of this bond shall be borne by the Consent Holder.

This bond shall be released upon the completion of rehabilitation and closure of the site to the satisfaction of the Southland District Council.

GC39. Pursuant to Section 128 of the Resource Management Act 1991, the Southland Regional Council may, at any time, review the conditions of these consents for the purposes of:

- (i) ensuring the adequacy of the conditions in terms of protecting the environment;
- (ii) ensuring that in the event that the consents are transferred, the new Consent Holder can comply with the intent and specific requirements of the conditions;

- (iii) reviewing the bond requirements of General Condition 37 to ensure that it is adequate to address the matters it secures;
- (iv) ensuring consistency with any relevant new government regulation, policy, standard, or guideline in respect of landfill design, operation, monitoring, aftercare, or discharges that has come into effect.

GC40. The Consent Holder may apply to change or cancel any condition of these consents.

GC41. The Consent Holder shall pay to the Southland Regional Council any administrative charge fixed in accordance with section 36 of the Resource Management Act 1991, or any charge prescribed in accordance with regulations made under section 360 of the Resource Management Act 1991.