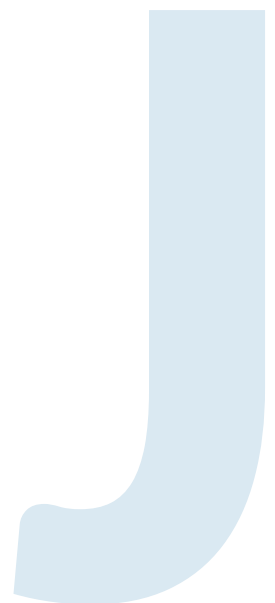


Appendix J

Proposed conditions of consent



Definitions

Aftercare period	The date that commences on the Landfill Capping Completion Date and which finishes on the satisfaction of Condition 55 (which requires the production of a report demonstrating that the leachate and landfill gas no longer present an unacceptable risk to the environment, to the satisfaction of Council.
Auckland Regional Landfill Full Opening	The date on which the Auckland Regional Landfill (Wayby Valley) is open for the acceptance of all waste streams, as determined by the Consent Holder and confirmed in writing to Auckland Council. For the avoidance of doubt, the period during which the Auckland Regional Landfill accepts only certain materials (for example, to establish a protective layer over the landfill liner) does not constitute Auckland Regional Landfill Full Opening.
BPO	As defined in the Resource Management Act 1991: best practicable option, in relation to a discharge of a contaminant or an emission of noise, means the best method for preventing or minimising the adverse effects on the environment having regard, among other things, to— (a) the nature of the discharge or emission and the sensitivity of the receiving environment to adverse effects; and (b) the financial implications, and the effects on the environment, of that option when compared with other options; and (c) the current state of technical knowledge and the likelihood that the option can be successfully applied
Class 1 area	An area of the landfill which accepts waste meeting the Class 1 landfill waste acceptance criteria including municipal solid waste (MSW), construction and demolition waste, some industrial wastes and contaminated soils.
Class 2 area	An area of the landfill which accepts waste meeting the Class 2 landfill waste acceptance criteria including construction and demolition (C&D) waste, managed fill material, controlled fill and clean fill material.
Class 2 extension area	Landfill extension outside of the existing footprint for waste that can be accepted in a Class 2 landfill. This area is located in the south-west of the current landfill boundary over the former Class 3 (Managed Fill) area.
Community Liaison Committee (CLC)	A forum for communication between the consent holder and the community surrounding Redvale Landfill as set out in Condition 15.
Council	means, unless otherwise stated, Auckland Council, Council Monitoring Inspector.
Existing sensitive receptor	means an existing location in proximity to the landfill as identified on the map in Schedule Three.

GD05	means the Council's Guideline Document 2016/005 "Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region".
Landfill Management Plan	Management plan which sets out how the landfill should be operated in accordance with the relevant resource consents the site holds. Specific management plans are contained within the LMP.
Peer Review Panel (PRP)	Panel established to ensure that the design, construction, operation and maintenance of the landfill are consistent with the requirements of the conditions of these consents and good practice and that the work is undertaken by appropriately qualified personnel (in accordance with Condition 6).
Putrescible waste	Biodegradable organic waste with high putrescible content that readily decomposes and can generate odour, leachate, and landfill gas (e.g., food scraps and similar rapidly degradable materials).
Non-putrescible waste	Waste with low biodegradable organic content that does not readily decompose and is less likely to generate odour and landfill gas (e.g., managed fill, controlled fill, contaminated soils and construction and demolition waste).
Site	Redvale Landfill as shown on Tonkin + Taylor Assessment of Environmental Effects Drawing Figure 2, "Site Areas", dated August 2026.
TL1	Trigger Level 1 limit or lower response limit
TL2	Trigger Level 2 limit or upper response limit

1 General Conditions

- 1 The landfill and associated activities shall be carried out in accordance with the plans and all information submitted with the application as follows:

- XXX
- XXX

2 Lapse

Under section 125 of the RMA, these consents lapse on 1 March 2029 unless:

- a The consents are given effect to; or
- b The Council extends the period after which the consents lapse.

3 Commencement

These consents commence upon written notice given by the consent holder to Auckland Council and within the period provided for in condition 2 above.

4 Monitoring charges

The Consent Holder must pay the Council an initial consent compliance monitoring charge of \$XX inclusive of GST. The Consent Holder must then pay all subsequent charges relating to the recovery of cost for the administration, monitoring and supervision of these consents fixed by the Council under section 36 of the RMA.

5 Duration

All waste placement on the site shall cease at the latest on 31 December 2036 or the date of the Auckland Regional Landfill Full Opening, whichever occurs first. This limitation does not apply to final restoration works. In the event that the Auckland Regional Landfill Full Opening occurs prior to 31 December 2035, the consent holder shall progressively reduce waste disposal activities at Redvale Landfill and complete all waste placement within 12 months of the Auckland Regional Landfill Full Opening. Final grading, capping and site rehabilitation shall then proceed in accordance with an approved Closure Plan. The Consent Holder shall provide written notice to Auckland Council within 10 working days of the Auckland Regional Landfill Full Opening.

6 Peer Review Panel

The consent holder shall maintain a Peer Review Panel at its cost. The objective of the PRP will be to ensure that the design, construction, operation and maintenance of the landfill are consistent with the requirements of the conditions of these consents and good practice and that the work is undertaken by appropriately qualified personnel.

- 7 The PRP shall consist of a maximum of five members, including a minimum of two with appropriate technical skills and qualifications, to be appointed by the consent holder following consultation between the consent holder, Auckland Council and any Community Liaison Committee (CLC). One of the members of the PRP shall be appointed as the nominee of the CLC and shall be available to consult with the CLC at all reasonable times. The consent holder shall consult with the CLC as to the appropriate member of the PRP to fulfil this role.

- 8 The consent holder shall provide a report from the PRP at six monthly intervals ending 31 March and 30 September each year to the Auckland Council, on the following matters as relevant to each report period:

- a final design of areas completed;
- b construction undertaken;
- c lining system performance and design of any new lining system installed;
- d approvals given by the PRP for any activity for which their approval is required in accordance with this consent;
- e gas monitoring at the boundary, on the landfill cover, and at wellheads;
- f groundwater, surface water and leachate level monitoring programme.;
- g More frequent reporting or special reports shall be made as determined by the Auckland Council or the PRP.

- 9 The results of all monitoring shall be reported to the PRP monthly. These tests shall include, but not be limited to, the following:
- a Liner and final cover: Visual evaluation. In-situ and laboratory testing.
 - b Landfill Gas: Well head vacuum monitoring. Boundary gas monitoring well evaluation. Surface emission methane monitoring. To be undertaken at four locations across the landfill's final cover surface quarterly, to the satisfaction of the PRP.
 - c Groundwater, Surface water and Leachate level monitoring: in accordance with the conditions of these consents.
 - d Monitoring of land movement.
 - e General: Brief summary of failures or events contrary to the Landfill Management Plan and the actions taken to alleviate the consequences (including but not limited to fires, slope failures, liner failures or damage, dumping of toxic or hazardous wastes, failures or blockages of the leachate collection and gas extraction systems).
- 10 The consent holder shall construct the works generally in accordance with the design concept, as described in the plans in Schedule Two. The final landfill design and any more than minor modifications to the design or methodology chosen for operation and construction of the landfill, shall require the approval of the PRP and the Auckland Council prior to implementation. The consent holder shall consult with the CLC on any more than minor modifications.
- 11 The consent holder shall ensure that daily records are kept of any site investigations for any engineering works associated with all consents granted for the landfill operation and that these records are forwarded monthly to the PRP.
- 12 The consent holder shall retain an independent liner testing organisation to the satisfaction of the PRP to monitor the lining of the landfill and carry out the regular testing of the liner as set out in the Landfill Engineering Design Report (dated August 2026 and accompanying the application as Technical Report A), prepared by Tonkin and Taylor.
- 13 The LMP shall address:
- The stages and order of landfill development.
 - Right of use of the landfill.
 - Traffic management.
 - Erosion and sediment management.
 - Construction and testing of the liner.
 - Monitoring procedures.
 - Gas, leachate and water management.
 - The method of disposal of leachate.
 - Types of waste to be accepted.
 - Restricted and prohibited materials.
 - Methodology of monitoring type of refuse accepted.
 - Methods of placing refuse.
 - The width of the working surface in relation to the rate of refuse deposition.
 - Methods of handling special wastes, including biosolids.
 - Nuisance control procedures.
 - Operation and maintenance of stormwater devices
 - Pest control plan.
 - Emergency procedures.
 - Contingency plans.
 - Community liaison.
 - Height and timing of bund construction.
 - Final height, shape and contours of the land, in accordance with the plans in Schedule Two.
 - Odour management, including best practice methods to manage odour.

- Complaints response procedure for odour effects.
 - The method for odour patrols and odour field inspections, including managing the risk of desensitisation.
 - Landscape Mitigation and Restoration Plan
 - Technique and programming of land restoration.
 - Erosion and Sediment Control Plan
 - Leachate Monitoring and Contingency Plan
 - Environmental Management Plan
 - Stormwater Monitoring and Contingency Plan
 - Landfill Gas Management Plan
 - Odour Management Plan
 - Dust Management Plan
 - Leachate Evaporator Management Plan
 - Site Emergency Management Plan
 - Monitoring and records.
 - After-care.
 - Such other matters as considered appropriate from time to time by the PRP or the Auckland Council.
- 14 The LMP shall be subject to review annually from the date of commencement of the consent. Such a review should include an assessment of the performance of the practices and procedures specified in it. Any amendment required by the PRP and the Auckland Council arising out of this review and/or the reporting stipulated in Condition 8 shall be incorporated into the LMP without delay. The consent holder shall lodge a copy of the approved LMP with the Auckland Council and CLC. Auckland Council may waive the annual review requirement for that year if no amendments are required by the PRP and Auckland Council.
- 15 **Redvale Landfill Community Liaison Committee**
The consent holder shall maintain and provide reasonable support and resources to the Redvale Landfill Community Liaison Committee (CLC) in order to enable the CLC to carry out its role for the operating life of the landfill, in consultation with representatives of local residents, tangata whenua, and the Auckland Council.
- 16 **Role of CLC**
The role of the CLC shall be to:
- Establish and maintain a forum for communication between the consent holder and the community surrounding Redvale Landfill;
 - Disseminate information about Redvale Landfill to the local community;
 - Hear the concerns of residents and people working in proximity to the landfill, and to review complaints;
 - Hear and recommend proposals to alleviate those concerns relating to the landfill from complainants, the consent holder and other parties;
 - Receive, discuss and consider as it sees fit any material provided to it by the consent holder, including material provided in accordance with Condition 19, and to provide such feedback to the consent holder as it deems appropriate and to.
 - Consult with the consent holder on relevant matters in the LMP.
- 17 **Membership of CLC**
The consent holder shall take all reasonable steps to ensure that the CLC has a range of representation, including, to the extent able:
- Local residents including:
 - Up to 6 resident members being at least one from each of Richards Road, Dairy Flat Highway, Horseshoe Bush Road and Tender Road locations and up to 2 from the Dairy Flat Community Trust Area.

- Two representatives of the consent holder
- A representative from Dairy Flat School, if available
- A representative from the Rodney Local Board, if available
- A representative from tangata whenua, if available

The CLC shall have an independent chairperson, appointed by the members of the CLC.

Council staff, and members of the PRP may also be invited by the CLC and the consent holder to attend CLC meetings.

18

CLC Meetings

The consent holder shall ensure that:

- The CLC has adequate secretarial support from the consent holder;
- A CLC meeting is called at least four times a year and notice of the meeting is provided to the members at least 5 days prior;
- A draft agenda is circulated to all members of the CLC, Auckland Council and the PRP, and any member of the public who has indicated they wish to attend, at least 5 working days before the meeting;
- The agenda shall include a log of any complaints received in the period since the last agenda was issued;
- Minutes are taken and clear action points outlined with appropriate timeframes. The minutes shall be available within 10 working days of the relevant meeting;
- The Minutes are circulated to the CLC, a copy placed on the WMNZ community webpage, and a copy provided to Auckland Council and the Rodney Local Board;
- The consent holder, or any other CLC member where appropriate and able to attend, reports back at the following meeting on progress with agreed action points.

19

Materials to be supplied by the consent holder to the CLC

To support the role of the CLC the consent holder shall provide the CLC with:

- The six monthly PRP reports provided to the Auckland Council and referred to in Condition 8.
- Details of any more than minor modifications to the design or methodology chosen for operation and construction of the landfill, where such modifications are the subject of a request for PRP and/or Auckland Council approval under Condition 10.
- Proposed changes to the LMP, where such are to be submitted to the Auckland Council for approval or to be reviewed in accordance with Conditions 13 and 14.
- Notification in circumstances where the Auckland Council has advised that it intends to waive the requirement for annual review of the LMP under Condition 14.
- Details of any equivalent alternative daily cover for which Auckland Council approval is sought under condition 49.
- Copies of all reports provided to the Auckland Council relating to odour field inspections under condition 130.
- A copy of the recommendations of the independent odour consultant following their review, as provided to the Auckland Council under Condition 132.
- An annual update on the airspace remaining at the landfill.
- The following records:
 - Degrees of settlement of refuse;
 - Water monitoring records;
 - Weather station data.

The consent holder shall advise the CLC of any resource consents being sought or submissions made by the consent holder in relation to the Redvale Landfill, prior to the application or submission being lodged with the Council. A copy of the application or submission shall be provided to the CLC no later than 5 working days following lodgement of the application or submission with the Council.

The provision of the above information to the CLC from the consent holder shall be made without delay.

20 **Complaints management**

Upon receiving a complaint, the Consent Holder shall:

- a Make efforts to identify the nature of the complaint, the location, date and time of the alleged incident/event(s);
- b Acknowledge receipt of the complaint to the complainant within 1 working day of receipt;
- c Notify the Council of the receipt of the complaint (providing details of the nature of the complaint, the date and time the complaint was received, and the complainant's details and location if available) within 1 working day of receipt;
- d Advise the complainant and the Council as soon as the investigation is complete (if their contact details are provided) of what steps have been taken to investigate the complaint and remedial actions.
- e Ensure that all odour complaints are responded to within half an hour where complaints are made during landfill operating hours, and as soon as reasonably possible where complaints are made outside such hours;
- f Assist the Landfill Manager to ensure that the odour complaint response procedures outlined in the LMP are adhered to.

21 A record of all complaints received shall be kept by the Consent Holder. This record shall include:

- a The name and address of the person(s) who raised the complaints (unless they select not to provide this) and time and nature of the complaint;
- b Weather conditions at the time of the concern or complaint, including wind direction and cloud cover if the complaint relates to noise, dust or air quality;
- c Activities occurring on Site at the time and in the vicinity of the source of the complaint; and
- d Remedial actions taken (if any) including details of location, time and who undertook such works and any resulting improvements in environmental performance that have occurred or are expected to occur.

22 The Consent Holder shall maintain an online form to log and record community feedback.

23 **Waste Acceptance**

Material accepted into the Class 1 area is detailed in the Waste Acceptance Criteria (WAC) and shall be limited to non-hazardous commercial wastes, non-hazardous industrial wastes, residential wastes, construction and demolition debris, and contaminated soils, and treated hazardous waste and asbestos.

24 Material accepted into the Class 2 area is detailed in the WAC and shall be limited to construction and demolition waste, managed fill, clean fill and non-putrescible industrial waste. The maximum incidental or attached biodegradable material (vegetation) must be no more than 5% by volume per load.

25 The Consent Holder must keep sufficient records to show that the any waste accepted for disposal meets the WAC

26 Leachate, condensate and site-generated sludges from the operation of any leachate evaporator unit, cesspits and drains, and landfill gas reticulation system on the Site may also be disposed of into the landfill in areas and by procedures and within volumes and/or weight limits approved by the Council and described in the LMP.

27 If any waste load is rejected at the gatehouse or at the working face because it is hazardous, then the Consent Holder shall notify the Council within 2 working days including details of the generator and transporter of the that hazardous waste.

28 Pre-acceptance testing is required for all special wastes and likely contaminated soils whose contaminant concentrations are not known. The Consent Holder shall ensure that the disposers

- provide appropriate evidence to demonstrate that the waste meets the TCLP limits or the total concentration limits.
- 29 If there are no TCLP limits for the contaminants of concern in a waste, then acceptance of the waste will be based on the case-by-case assessment process described in the LMP.
- 30 The requirements for TCLP testing area:
- a The testing must be done by an accredited laboratory;
 - b The sample must represent the material; and
 - c The sampling programme design shall be aimed at finding worst-case or average concentrations.
- 31 **Bond**
- The consent holder shall maintain the bond existing as at [TBC date at which consent is granted] (\$34,977,000), or an equivalent bond in terms satisfactory to the Council, to provide for early closure, environmental remediation, post closure care and to ensure compliance with both performance and monitoring standards and the terms of any resource consents applying to the landfill operation. Both the bond fund and the increments shall be inflated annually according to the Works Construction Cost Index, or an appropriate replacement index. The bond shall be reviewed by the Council at five yearly intervals.
- 32 **Access restriction**
- The number of truck movements generated per day by the landfill operation shall be limited to a maximum of 650 (325 in and 325 out). Such truck movements shall be counted at the weighbridge station and recorded in a register to be maintained by the operator and to be available to the Auckland Council upon request.
- 33 **Planting and Restoration**
- Planting and restoration on site shall be generally in accordance with the Landscape Mitigation Plan prepared by Boffa Miskell dated June 2026 and form part of the LMP.
- 34 The consent holder shall update a Landscape Mitigation and Restoration Plan, being a section of the LMP, to include the requirements below:
- Description of the objectives of the mitigation planting / landscape treatment, detailing the mitigation intent of each of the planting areas and how this will be fulfilled over time as the plants establish and mature;
 - Identification of areas of existing planting / vegetation to remain or be removed and the methodology for managing, and supplementing this planting / vegetation where necessary in a timely manner to maintain the mitigation objectives;
 - Details of proposed species, grass mixes, plant grades, numbers and planting density;
 - A proposed timetable for planting in relation to the completion of landfill final cap construction and completion of earthworks in the peripheral zones, and;
 - Planting, maintenance and management methodology.
- 35 Exposed areas which are intended to remain unworked for a period of between two and six months shall be grassed forthwith if the Auckland Council reasonably requires that action to be taken, having regard to the size, location, composition and intended use of the area, climatic and topographical conditions, and the potential impact on the amenity of surrounding properties and residents of leaving the area ungrassed, and the area's visibility from beyond the boundaries of the consent holder's land.
- 36 Any older tree specimens surrounding the landfill, which have been lost through age or disease, must be replaced to ensure a visual screen is maintained throughout the life of the landfill activity and until such time as the final landform is complete and planted.
- 37 Screening of the landfill site and operations shall include screen planting and maintenance of existing screen planting around the full perimeter of the site to the satisfaction of the AC and shall be in general accordance with the certified Landscape Mitigation and Restoration Plan. A buffer zone of at least 150 metres shall be left between refuse disposal operations and all houses existing as at the date of granting consent. A buffer zone of at least 130 metres shall be left

between landfill operations and the Horseshoe Bush Road boundary of the site. Around the rest of the perimeter of the landfill a buffer zone of at least 30 metres shall be left. All buffer zones shall be developed and landscaped in accordance with the certified Landscape Mitigation Plan Required by Condition 33.

- 38 Landfill excavations shall be restored to minimise the visual impact from surrounding views. Grass cover, installation of terrace vee drains and piped downspouts on the exposed flanks of the landfill shall be carried out progressively as each cell and phase of the landfill is brought up to its final contour.

39 **Hours of Operation**

The hours of operation for the landfill shall be 6.00am to 6.00pm Monday to Saturday. Operation of the landfill includes all tipping operations and site preparation works that involve the use of landfill machinery, including machinery used to remove temporary cover.

- 40 From the 1 May to 31 August (inclusive) the stripping of daily cover within the Class 1 putrescible area will not commence until after 7:15 am.

41 **Noise**

Any operational noise emitted from activities authorised by this consent shall comply with the following noise limits at the site boundary of any dwelling existing as at the date of granting consent:

Time period	Noise limit
Monday to Saturday 7am – 10pm	55 dB LAeq
Sunday 9am – 6pm	55 dB LAeq
All other times	45 LAeq / 75 dB LAFmax

- 42 Operational noise shall be measured and assessed in accordance with New Zealand Standards NZS 6801:2008 “Acoustics – Measurement of Environmental Sound” and NZS 6802:2008 “Acoustics – Environmental Noise”. Construction noise shall be measured and assessed in accordance with NZS 6803: 1999 “Acoustics – Construction Noise”.

43 **Noise Management Plan**

The consent holder shall update the Noise Management Plan (NMP), being a section of the LMP, to include, but not be limited to, the requirements below. The objective of the NMP shall be to outline the methods and measures by which the consent holder will demonstrate the adoption of the best practicable option (BPO), as defined within this condition set, and ensure compliance with consent noise limits. Any material changes shall be certified by Auckland Council.

- a The applicable noise limits for all operational noise;
- b Any restrictions on heavy machinery or plant (excluding generators, flares and ancillary equipment) that may be required to meet the night time noise controls in Condition 48;
- c Any noise mitigation measures required by the conditions of consent or to achieve the BPO;
- d The methodology for the control of low frequency combustion noise from gas flares;
- e Guidance on minimising noise effects on neighbours when using starter pistols and guns as bird and vermin control;
- f Any other noise mitigation measures available (and relevant timings) to reduce noise levels for the surrounding receivers as far as practicable, for example:
 - i Using the quietest machinery and methods practicable;
 - ii Keeping all machinery maintained in good condition e.g. all tracked plant will be greased to reduce squeaking;

- iii Regular checks on machinery and plant to ensure that it is not generating unnecessary noise, and rectifying if necessary;
- iv When selecting any new machinery or plant, the degree of noise generation between models will be considered as an important factor;
- v Fitting exhaust silencers where practicable;
- vi When machinery or plant is not required to be running, it should be switched off and not left idling;
- vii Noisy plant and machinery shall be strategically positioned on the site to reduce the effects on neighbours where practicable;
- viii The methodology for placement and the building of temporary noise bunding from waste piles shall be described, and all operators of landfill machinery shall be familiar with the method and reminded during staff meetings.
- ix All plant and equipment owned or operated by the consent holder shall use broadband reversing alarms in place of traditional pure tone beepers and the consent holder should use its best endeavours to encourage contractors and customers to adopt the same alarms;
- x The consent holder should use its best endeavours to ensure that its employees, contractors and customers exercise care when closing tail gates of waste disposal trucks, so that they are not slammed or allowed to fall closed causing unnecessary noise;
- xi Horns should not be used unless in the case of an emergency;
- xii When generators are to be decommissioned, generator noise will be an important factor in the selection of generators to be decommissioned first;
- xiii All staff should be familiar with the NMP to ensure awareness of the impacts of noise and the above methods that can be used to minimise noise emissions.
- g The appropriate contact person and phone numbers, including out of hours contact details, for any noise complaints.
- h The process for dealing with any noise complaints received, including keeping a register of complaints, any noise monitoring undertaken and the mitigation measures, if any, put in place. The register will be made available to Auckland Council on request.
- i Outline the process for carrying out annual noise monitoring by a suitably qualified expert. The Plan should set out but not be limited to the following:
 - i The relevant measurement and assessment locations;
 - ii The relevant noise limits;
 - iii The relevant operating conditions under which measurements are to be taken; and
 - iv The process for reporting the results of the compliance assessment to Council.

44 **Access**

The landfill shall not be open to the public.

45 All access is to be confined to the rights of way from Dairy Flat Highway. No access (other than for emergency vehicles) may be obtained from Horseshoe Bush Road or Richards Road.

46 **Gates**

Entrance gates across the access to the landfill shall be provided and locked outside the specified hours of operation.

47 **Waste Placement**

Waste placement shall include the following measures:

- a The working face for the placement of Class 1 putrescible waste shall not exceed 900 m². The working faces for Class 1 non-putrescible and Class 2 waste shall not exceed 2,500 m².
- b There shall be no more than one working face within each working area of the landfill (putrescible, non-putrescible and Class 2).

- c The tip face for putrescible waste shall be a minimum of 500 m from any existing sensitive receptor as shown on the map in Schedule Three.
- d Daily cover shall be removed by cutting windows through the previous layer of daily cover before refuse placement at the start of each day.
- e Temporary stormwater diversion berms shall be formed to prevent stormwater running into the current working area.

48 **Cover**

Exposed refuse shall be covered with soil regularly and promptly to a minimum depth of 300mm (daily cover), and no refuse shall remain exposed overnight. An equivalent alternative daily cover may be used with the prior approval of the Auckland Council and the PRP.

Areas where waste placement has not ceased but is anticipated not to be utilised for an extended period of greater than 12 weeks, shall have soil material to a minimum depth of 450mm applied (intermediate cover).

Final cover shall be placed as soon as practical after refuse placement has reached its final height. Final cover shall include at least 150 mm of topsoil overlying 1,000 mm of clay.

49 **Vermin, Insects and Bird Control**

A pest control plan shall be implemented from the time of the use commencing to prevent pest populations from being established at the site, and form part of the LMP as set out in Condition 19. Pest control shall be to the satisfaction of Auckland Council.

50 **Litter**

Effective procedures shall be implemented to control litter in accordance with the LMP. In particular the following measures shall be taken:

- a best practicable options shall be used in the vicinity of the tipping face in order to control windblown litter;
- b Regular patrols (approximately weekly) of the site and all public roads within a 1 kilometre radius of the site boundaries shall be carried out by the landfill operator to collect litter.
- c Any litter which escapes from the site shall be collected one each week or more frequently if found necessary.
- d Where it appears that litter has found its way on to privately owned land within 500 metres of the perimeter of the site, the consent holder will upon request by the owner or occupier of the land, remove it if it appears likely to have come from the landfill operations. Any dispute as to the likely source of any litter on such privately owned land shall be resolved by the Auckland Council whose decision will be final.

51 **Dust**

Effective dust control procedures shall be implemented at the Site including, but not limited to:

- a Watering of unpaved internal access roads and manoeuvring areas in active use during dry periods;
- b Maintenance of all access and manoeuvring areas to the satisfaction of the Council in order to reduce the creation of dust and to prevent the deposition of significant dirt or other material onto public roads; and
- c Maintenance of a permanent water supply of sufficient capacity on the Site to control dust at the working face and to dampen down unsealed access roads.

52 **Wheel Wash**

Wheel washing facilities that are designed to prevent, as far as practicable the deposition of material on Dairy Flat Highway by trucks leaving the landfill shall be maintained at the site.

53 **Aftercare / Post Closure Management Plan**

The Consent Holder shall adopt a minimum post-closure Aftercare Period of 30 years. Monitoring and maintenance requirements for the Aftercare Period shall be set out in the Post Closure Management Plan required by Condition 56.

- 54 The consent holder shall have a continuing responsibility for leachate and gas collection and disposal beyond the life of the landfill as a disposal facility, as described in Condition 56.
- 55 The consent holder shall produce a report at the end of the post-closure aftercare period which shall demonstrate that the landfill no longer presents any undue or unacceptable risk to the environment to the satisfaction of the Council.
- 56 At least 12 months prior to the closure of the landfill, the Consent Holder shall provide a Post Closure Management Plan (PCMP) for certification by the Council. The Consent Holder shall adhere to and maintain the PCMP for the duration of the Aftercare Period. The PCMP shall be updated as necessary and any updates shall be submitted to the Council for certification prior to implementation.
- 57 **Seasonal restriction**
No earthworks for the construction of the Class 2 expansion can be undertaken between 01 May and 30 September in any year, without the submission of a 'Request for winter works' for approval to Council. All requests must be renewed annually prior to the approval expiring and no works must occur until written approval has been received from Council. All winter works will be reassessed monthly or as required to ensure that adverse effects are not occurring in the receiving environment and approval may be revoked by Council upon written notice to the consent holder.
- 58 All access and manoeuvring areas shall be maintained to the satisfaction of the Auckland Council in order to reduce the creation of dust and to prevent the deposition of significant dirt or other material onto the public road or Dairy Flat Highway.
- 59 **Ecology Management Plans**
Where Ecological Management Plans are required, as specified in Condition 60, 61 and 62 below, the Consent Holder shall submit the management plans to Auckland Council for certification 20 working days prior to the construction of the proposed expansion works.
- 60 **Avifauna Management Plan**
The objective of the Avifauna Management Plan is to avoid or minimise the potential effects on New Zealand dabchick and native avifauna. The AMP shall include the following matters;
- Credentials and contact information for the project ornithologist
 - Timing of the implementation of the AMP
 - Summary of affected habitats and species
 - A description of methodology for bird nest surveys and management around active nests. This must include species-specific details for New Zealand dabchick.
- This includes:
- A minimum exclusion zone around active nests of 20m for New Zealand dabchick and 10m for Not Threatened species.
 - Pond dewatering protocols;
 - Vegetation clearance protocols;
 - Protocols for eggs and chicks detected on-site;
 - Details of ongoing monitoring and reporting requirements.
- 61 **Native Fish Capture and Relocation Plan**
The objective of the Native Fish Capture and Relocation Plan (FMP) is to mitigate adverse effects on native fish through recovery and relocation during pond works. The FMP must include:
- A description of methodology for the capture of fish;
 - Details on fishing effort;
 - Details on relocation site(s);
 - Storage and transport measures including best practice for prevention of predation and death during capture;
 - Euthanasia methods for diseased or pest fish species;

- The requirement that a suitably qualified freshwater ecologist (SQEP) must supervise the recovery and relocation of native fauna.

62

Lizard Management Plan

The objective of the Lizard Management Plan is to set out measures to minimise potential adverse effects on native lizards within the construction footprint by way of capturing and relocating any indigenous lizards prior to and during vegetation removal. The Lizard Management Plan must include:

- a Use of current best practice to capture native lizards from vegetation in the footprint prior to and during vegetation clearance and relocating any captured individuals to safe and suitable habitats;
- b Credentials of the ecologist/herpetologist who will implement the plan;
- c Timing of the implementation of the Lizard Management Plan;
- d A description of methodology for survey, trapping and relocation of lizards rescued including but not limited to: salvage protocols, relocation protocols (including method used to identify suitable relocation site(s)), nocturnal and diurnal capture protocols, supervised habitat clearance/transfer protocols, artificial cover object protocols, and opportunistic relocation protocols;
- e A description of the relocation site(s); including discussion of: provision for additional refugia (1 pile per individual), e.g. depositing salvaged logs, wood or debris for newly released native skinks that have been rescued; any protection mechanisms (if required) to ensure the relocation site is maintained; any weed and pest management to ensure the relocation site is maintained as appropriate habitat;
- f Monitoring methods, including but not limited to:
 - i. baseline surveying within the Site;
 - ii. baseline surveys outside the Site to identify potential release sites for salvaged lizard populations and lizard monitoring sites;
 - iii. ongoing annual surveys to evaluate translocation success;
 - iv. pre and post – translocation surveys; and
 - v. monitoring of effectiveness of pest control and/or any potential adverse effects on lizards associated with pest control

2 Discharges to land

63 Leachate

The consent holder shall ensure that the discharge of leachate from the landfill to ground soakage will not exceed a daily discharge limit of 0.3 cubic metres per day.

64 Leachate Monitoring and Contingency Plan

The Leachate Monitoring and Contingency Plan (LMCP) shall be included as a sub-section of the Landfill Management Plan. The LMCP shall describe in greater detail proposals for water chemistry monitoring, detection limits, methods of analysis and units of measurement for all parameters listed in Condition 70, 74 and 75, and shall contain guidelines for the determination of whether leachate contamination is occurring and (b) provide contingency plans for remedial actions should leachate or other pollutants associated with the landfill and activities on the site associated with this consent occur.

The LMCP shall (without limitation):

- a describe procedures for water chemistry, ground water level and leachate level monitoring;
- b specify the methods of analysis for samples taken in accordance with these special conditions;
- c specify the units of measurement for reporting of analysis of water samples;
- d specify the trigger levels (response limits) for the Class 1 and 2 area for the analysis of water samples;
- e summarise the results of baseline monitoring;
- f summarise how the results of the leachate levels in the landfill will be compared to ground water levels outside the landfill;
- g provide a definition of leachate contamination;
- h contain guidelines for procedures to determine whether leachate contamination is occurring;
- i state the sources of the criteria and water quality standards used as a basis for the definition of leachate contamination;
- j define the circumstances and times when notification to the Auckland Council is required;
- k provide contingency plans for mitigation and remedial actions should leachate contamination occur;
- l Procedures or systems will also be implemented to monitor and identify potential leachate breakouts or contamination of surface water including:
 - i Weekly inspections of the landfill surface to look out for any evidence of leachate breakouts;
 - ii Continuous monitoring of conductivity at the inlet to the ponds as an indicator of the presence of leachate in surface water including automated notification from Site operated telemetry system if pond inlet conductivity exceeds the trigger limits; and
 - iii Monitoring of contaminants at pond outlets.

65 The Auckland Council may review the LMCP at not more often than five yearly intervals, upon giving three months' notice and require such reasonable modifications as necessary to prevent a repetition of an event reportable under Condition 81.

66 Liners

The consent holder shall construct a liner within the Class 2 footprint extension of re-compacted low permeability material, such as mudstone, clay or similar which has a hydraulic conductivity of not greater than 1×10^{-8} m/s and with a minimum thickness of 900 mm. In all areas the subgrade materials will, on excavation to sub-grade, be inspected in accordance with Condition 67. The type of material used for the re compacted liner shall be approved by the PRP and Auckland

Council. The hydraulic conductivity of the upper 900 mm of the base grade area shall be not greater than 1×10^{-8} m/s.

67 The consent holder shall comply with all requirements for base grade preparation (including, liner placement) agreed jointly by a Liner Review Team (consisting of the consent holder's engineering advisers and a designated member of the PRP experienced in such work), on the basis of an independent sub grade inspection carried out by the Liner Review Team.

All areas of sub grade shall be inspected by the Liner Review Team, and base grade preparation requirements shall be reported in conjunction with the independent quality assurance report required under Condition 68.

68 All base grade preparation work including the lining system shall be independently observed, and an independent quality assurance report on base grade preparation, including the results of any testing, shall be submitted to Auckland Council, prior to the base grade area being covered by refuse or other permanent cover materials.

69 Requirements for independent observation and testing of compacted liner zones (including both test methods and testing frequency sufficient to provide acceptance/rejection criteria to the satisfaction of the PRP and the Auckland Council), shall be agreed by the consent holder, the PRP and Auckland Council, prior to work commencing under this consent.

70 **Baseline sampling**

That baseline sampling and analysis of groundwater and groundwater levels from monitoring bores specified in Schedule One associated with the Class 2 footprint extension, shall be undertaken monthly for 10 monitoring rounds prior to waste placement commencing on that part of the site.

The analysis shall be for the following parameters:

Parameter	Units
Temperature	°C
Sodium	g Na/m ³
pH	
Chloride	g Cl/m ³
Conductivity	mS/m
Potassium	g K/m ³
Total Ammoniacal Nitrogen	g N/m ³
Total Hardness	g CaCO ₃ /m ³
Zinc (soluble)	g Zn/m ³
Manganese (soluble)	g Mn/m ³
COD	g O/m ³
Arsenic (soluble)	g As/m ³
Copper (soluble)	g Cu/m ³
Lead	g Pb/m ³
Nitrate Nitrogen	g N/m ³
Sulphate	g SO ₄ /m ³
Alkalinity	g CaCO ₃ /m ³
Boron	g B/m ³
Nickel (soluble)	g Ni/m ³
Calcium	g Ca/m ³
Iron (soluble)	g Fe/m ³

Magnesium (soluble)	g Mg/m ³
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71 The results of baseline monitoring under Condition 70 will be used to develop indicative trigger levels for operational groundwater monitoring within the Class 2 extension area. All trigger levels are to be developed as triggers for investigation and management and contingency measures to be implemented, rather than a compliance limit. The trigger levels will be prepared by an independent and suitably qualified expert and provided to the Peer Review Panel for review, and with a request that the Peer Review Panel provide any suggested comments on those trigger levels within 20 working days. Upon receipt of that peer review, the consent holder shall finalise the proposed trigger levels and provide them to the Council for certification, along with a copy of the Peer Review Panel's peer review. Where the consent holder has not adopted any of the PRP's proposed changes, the consent holder shall explain the reasons for not doing so.

72 The LMP shall identify the TL1 and TL2 trigger levels (response limits) for the Class 1 and Class 2 extension area for operational monitoring.

73 **Operational monitoring**

Water levels in the bores listed in Schedule One and water quality shall be measured and recorded at quarterly intervals from the date of commencement of this consent. The standing water levels shall be measured from the top of the casing and shall be recorded to the nearest 0.01 of a metre (i.e. the nearest centimetre). The bore should not have been pumped for at least 24 hours prior to the water level measurement being taken.

74 Sampling and analysis of leachate, groundwater and ground water levels from operational bores listed in Schedule One shall be performed quarterly.
The analysis shall be for the following parameters:

Parameter	Units
Temperature	°C
pH	
Conductivity	mS/m
Total Ammoniacal	g N/m ³
Nitrate Nitrogen	g N/m ³
Boron	g B/m ³
Chloride	g Cl/m ³
Turbidity	NTU

75 Sampling and analysis of groundwater and ground water levels from operational bores listed in Schedule One shall be performed annually.

The analysis shall be for the following parameters:

Parameter	Units
Sodium	g Na/m ³
Potassium	g K/m ³
Chromium (soluble)	g Cr/m ³
Total hardness	g CaCO ₃ /m ³
Zinc (soluble)	g Zn/m ³
Manganese (soluble)	g Mn/m ³
COD	g O/m ³

Arsenic (soluble)	g As/m ³
Copper (soluble)	g Cu/m ³
Total Phenols	g/m ³
Lead (soluble)	g Pb/m ³
Sulphate	g SO ₄ /m ³
Alkalinity	g CaCO ₃ /m ³
Nickel (soluble)	g CaCO ₃ /m ³
Cadmium (soluble)	g Cd/m ³
Calcium	g Ca/m ³
Magnesium (soluble)	g Mg/m ³

An ion balance (anion/cation) of 90%–110% shall be achieved.

76 The Consent Holder shall undertake leachate quality monitoring in the Class 1 area for the following parameters and as set out within the Waste Acceptance section of the LMP:

On an annual basis:

- Arsenic
- Cadmium
- Copper
- Chromium
- Lead
- Nickel
- Mercury
- Selenium
- Silver
- Zinc
- pH
- Ammonia
- Conductivity
- Potassium
- Chloride
- Total petroleum hydrocarbons (TPH)
- Benzene
- Chlorinated solvents
- Organochlorine pesticides, including DDT-compounds
- PFAS

77 The Consent Holder shall undertake leachate quality monitoring in the Class 2 extension area for the following parameters and as set out within the Waste Acceptance section of the LMP:

On a quarterly basis for the first 12 months from the commencement of this consent and annually thereafter:

- Arsenic
- Cadmium
- Copper
- Chromium
- Lead
- Nickel
- Mercury

- Selenium
- Silver
- Zinc
- pH
- Ammonia
- Conductivity
- Potassium
- Chloride
- Total petroleum hydrocarbons (TPH)
- Benzene
- Chlorinated solvents
- Organochlorine pesticides, including DDT-compounds
- PFAS

On an annual basis:

- Total petroleum hydrocarbons (TPH)
- Benzene
- Chlorinated solvents
- Organochlorine pesticides, including DDT-compounds
- PFAS

- 78 The consent holder shall ensure that all chemical analysis and sampling, techniques are carried out in accordance with the guideline values for the protection of 95% of the freshwater species or other standard guideline values approved in writing by the Auckland Council.
- 79 Within five working days of receipt of sample results showing contaminants exceeding the TL1 limit (lower response limit):
- Verification of sampling including checking field procedures (purging, weather influences) and stability of field parameters prior to collecting the samples within four weeks.
 - An investigation shall be undertaken to determine why exceedances were detected and to identify any additional source controls or treatment required.
 - Any additional structural or procedural controls, including increased monitoring frequency or parameters proposed by the Consent Holder shall be submitted to the Council for certification prior to their implementation.
- 80 If sample results show contaminants exceeding the TL2 limit (upper response limit) the Consent Holder shall:
- Immediately notify Auckland Council and the Peer Review Panel.
 - Engage a suitably qualified independent reviewer to review the response and determine whether a significant change attributable to leachate has occurred.
 - Undertake a targeted investigation to determine why exceedances were detected and to identify any additional source controls or treatment required.
 - Implement remedial actions as advised (e.g., increased leachate extraction, additional monitoring wells, cut-off measures, in-situ remediation, liner/drainage review).
- 81 Where any leachate contamination associated with the consent holder's operations occurs in surface water, groundwater or stormwater the consent holder shall:
- Undertake appropriate remedial action immediately as prescribed in the LMCP.
 - Immediately notify Auckland Council of the escape of leachate or other pollutant.
 - Provide Auckland Council, immediately on receipt of monitoring results, a written account of the waste character, manner or cause of such escape, remedial actions undertaken and strategy for prevention of future similar occurrences.

- 82 If required in writing by the Auckland Council, the consent holder shall submit to Council, no later than the 30th of April each year, the total daily quantity of leachate being extracted and disposed of from the landfill for the preceding 12 months ending the last day of March that year.
- 83 The consent holder shall measure at monthly intervals from the date of commencement of this consent the level of leachate in the landfill through the dedicated leachate borehole listed in Schedule One. The results of the measurement shall be compared to the closest ground water level bores. The standing leachate level shall be measured from the top of the casing and shall be recorded to the nearest 0.01 of a metre (i.e. the nearest centimetre). This comparison shall be to confirm that the inward hydraulic gradient remains in effect. This comparison shall be reported to Council in the quarterly water monitoring results as per Condition 84 Reporting.
- 84 **Reporting**
The consent holder shall forward the results of all groundwater quality analysis, leachate levels and water levels on a quarterly basis to Auckland Council.
- 85 **Groundwater monitoring**
The existing monitoring bores on the subject site, shown on the annotated plan entitled Redvale Landfill Monitoring Bore Locations drawn July 2026 attached to these conditions in Schedule One, and listed in Schedule One, are to be maintained to ensure ongoing monitoring data is obtainable. Should any of the monitoring bores be damaged or become in-operable, then the Council is to be informed and a new monitoring bore, to the same depth or greater, is to drilled at a nearby location in consultation with the Council.
- 86 In the event that groundwater levels drop below the base of any of the deep piezometers installed at this site, new piezometers shall be installed at a deeper level in consultation with Council.
- 87 The Council shall be provided with as-built details of any new or replacement monitoring bores required under Condition 86 (location map, geological log, piezometer construction details, screen depths, RL at top of bore casing to an accuracy of 10mm), within one month of bore construction.
- 88 An updated Schedule One and revised plan is to be provided within one month of a new monitoring bore being drilled and updated in relevant management plans.
- 89 The consent holder shall measure groundwater levels quarterly each year, ending 31 March, in all bores listed in Schedule One, and shall submit a return of all water levels since installation from each piezometer, no later than 30 April each year.
- 90 The measured leachate level in proposed leachate monitoring well LM1 shall not exceed a level of RL51.0m and in addition the leachate level in LM1 shall be maintained, at all times, at least 0.5m below the groundwater level measured in adjacent monitoring bore WL3S and or any replacement bore agreed in writing by Auckland Council.
- 91 **Monitoring Frequency**
Leachate levels in bore LM1, or any replacement bore agreed in writing by Council shall be measured in accordance with Condition 83. Groundwater levels in bores WL3D1 and WL3S1 or any replacement bore agreed in writing by Auckland Council, shall be measured in accordance with Condition 89 at a minimum of monthly intervals.
The records of measurement in reduced level (RL) and the date of measurements shall be provided to Auckland Council at quarterly intervals.

3 Stormwater and ITA

92 Maintenance Report

Details of all inspections and maintenance for the stormwater management system for the preceding three years shall be retained by the consent holder.

93 The maximum rate of discharge from stormwater detention ponds 1, 2, 3, and 4 shall be less than the predevelopment flows for the critical 2, 10, and 100 year Average Recurrence Interval storms.

94 All permanent surface water diversion channels shall be constructed to convey the critical 50 year Average Recurrence Interval storm flow with minimum drainage channel freeboard values to be set 300 mm for cover berm drains and 300 mm for surface drainage channels, measured from the crest of the channel.

95 All permanent diversion channels shall be designed, constructed and maintained so as to minimise erosion of the channel in all circumstances.

96 All structures authorised by this consent including earth fill dams, stormwater detention ponds, spillways, pipes and permanent erosion protection shall be maintained by the consent holder to ensure that they perform at all times to the standards specified in this consent.

97 Stormwater Monitoring and Contingency Plan

The Stormwater Monitoring and Contingency Plan (SMCP) shall be included and maintained as a sub-section of the LMP. The SMCP, which applies to surface water discharges from the site, shall (without limitation):

- describe procedures for water sampling and water chemistry monitoring;
- specify the methods of analyses of water samples;
- specify the units of measurement for the reporting of analyses of water samples;
- specify the detection limits for analyses of water samples;
- describe the sampling locations;
- summarise the results of baseline monitoring;
- provide a definition of leachate contamination;
- provide a definition of contaminant discharge to water;
- provide response limits for the results of analyses and guidelines for the determination of whether leachate contamination is occurring, for the purposes of Conditions 98 and 100;
- state the sources of criteria and water quality standards used as a basis for the definition of leachate contamination;
- provide contingency plans for remedial actions should either leachate contamination or leachate breakout occur;
- detail contingency measures to be undertaken in the event of the stormwater detention ponds becoming contaminated with leachate

98 The consent holder shall continuously ("continuously" shall mean at intervals of not more than 30 minutes) monitor the flow into the stormwater detention ponds for electrical conductivity (mS/m3), and from the discharge for the following:

- Flow rate — L/min
- Electrical conductivity — mS/m
- Temperature — °C

99 The consent holder shall calibrate the meters required for continuous monitoring in accordance with the manufacturer's specifications.

100 If continuous monitoring results obtained at the pond outlet in accordance with Condition 98 shows electrical conductivity exceeded the approved trigger levels, a grab sample of the diverted stormwater shall be taken at the point of discharge (outlet) and analysed for the following parameters.

- Temperature — °C
- pH;

- Total Ammoniacal Nitrogen; — gN/m³
 - COD; and — gO/m³
 - Chloride — gCl/m³
- 101 If the results of samples obtained show that leachate contamination is within the pond system (as defined in the Stormwater Monitoring and Contingency Plan required by Condition 97), the outlet valve to the stormwater pond will be shut off and discharge from the stormwater ponds outlet shall cease. The following shall then occur:
- a Further testing of the stormwater shall be undertaken to characterise the contamination;
 - b Downstream testing shall be conducted to determine whether any contamination has been discharged from or escaped the stormwater ponds;
 - c An investigation shall be undertaken to determine the source of the contamination;
 - d Measures shall be put into place to prevent further contamination; and
 - e Discharges of stormwater from the relevant treatment device shall not recommence except over the service spillway after the ponds are full until electrical conductivity at the point of discharge indicates that contamination is no longer occurring.
- 102 Where any leachate contamination or other pollutants associated with the Consent Holder's operations occurs in surface water, the consent holder shall undertake appropriate remedial action as prescribed in the Stormwater Monitoring and Contingency Plan (SCMPSMCP).
- 103 Within 5 working days of receipt of sample results showing contaminants exceeding the agreed trigger levels in the SCMPSMCP:
- a An investigation shall be undertaken to determine why exceedances were detected and to identify any additional source controls or treatment required;
 - b The results of the investigation shall be reported to Auckland Council
 - c Any additional structural or procedural controls proposed by the Consent Holder shall be approved by Auckland Council, in writing prior to their implementation.
- 104 That the consent holder shall maintain three receiving water monitoring stations in the Rangitopuni Stream: Site 1 (upstream from the landfill), Site 2 (at the Horseshoe Bush Road bridge), Site 3 (downstream from the landfill).
- 105 The Stormwater Monitoring Programme specified in Conditions 123 and 124 (industrial and trade activity) shall also include monitoring parameters for analysis from the four stormwater outlets in addition to the stream (Site 1, Site 2 and Site 3) on a quarterly basis (on going) and shall include:
- Total Hardness — g CaCO₃/m³
 - Total suspended particulate — mg/L
 - Alkalinity — g CaCO₃/m³
 - Turbidity — NTU
 - Temperature — °C
 - Electrical Conductivity — mS/m
 - Total Ammoniacal Nitrogen — gN/m³
 - Aluminium (soluble) — g Al/m³
 - Iron (total) — g Fe/m³
- 106 Discharging into the Rangitopuni Stream shall only be undertaken once the consent holder shows that the stormwater is no longer contaminated and parameters analysed by Condition 105 are within the approved trigger limits described in the SMCP required by Condition 97.
- 107 **Environmental Management Plan**
- The site shall be operated and managed in accordance with an approved Environmental Management Plan (EMP) to ensure the risks from the site are managed appropriately. The EMP shall form part of the LMP established in accordance with Conditions 13.
- 108 The EMP shall include, but not be limited to:
- a Identification of the specific activities conducted on the site;

- b Identification of potential contaminants associated with these activities;
 - c Methods used to prevent identified contaminants contacting stormwater runoff as far as practicable and methods to manage environmental risks from site activities;
 - d An Emergency Spill Response Plan (which includes the provision that all spills over 20 litres, or any spill of Environmentally Hazardous Substances that has entered the stormwater system, a water-body or has contacted unsealed ground, shall be reported immediately to the Auckland Council's 24 Hour Pollution Hotline (09 377 3107));
 - e Stormwater Monitoring and Contingency Plan (as described in Conditions 97);
 - f An up to date and accurate site drainage plan showing the location of all site catchpits and the final discharge point(s) of the site stormwater system;
 - g An appropriate auditing programme to ensure site performance with all components of the EMP;
 - h methods for providing and recording staff training;
 - i an Operation and Maintenance Plan as outlined in Condition 117; and
 - j a Stormwater Monitoring Programme as outlined in Condition 124.
- 109 Within 60 days of commencement of this Industrial Trade Activity consent a final updated EMP shall be submitted to Auckland Council for approval.
- 110 The EMP shall be reviewed and updated annually from the date of commencement of this consent, to ensure all components of the EMP are still relevant.
- 111 In the event that any minor modifications to the stormwater management system are required, the following information shall be provided:
- Plans and drawings outlining the details of the modifications; and
 - Supporting information that details how the proposal does not affect the capacity or performance of stormwater management system.
- All information shall be submitted to, and verified by Auckland Council, prior to implementation.
- 112 **Construction Meetings**
- At least five working days prior to the initiation of construction of changes to Pond 1 on the site, a pre-construction site meeting between Auckland Council and all relevant parties, including the site stormwater engineer, shall be arranged.
- 113 The following information shall be provided at the pre construction meeting:
- a Timeframes for key stages of the works authorised under this consent;
 - b Contact details of the site contractor and site stormwater engineer; and
 - c Approved (signed/stamped) construction plans.
- Any resulting modifications to the stormwater management system may be reviewed by Auckland Council at this time and shall be verified in accordance with special Condition 111.
- 114 Within 30 days of practical completion, a post construction site meeting shall be arranged and conducted between Auckland Council and all relevant parties, including the site stormwater engineer.
- 115 **Certification of Construction Work**
- Within 30 days of practical completion, As Built certification and plans for the changes to Pond 1, which are certified (signed) by a suitably qualified registered surveyor or engineer as a true record of the management system, shall be provided to the Auckland Council.
- The As Built plans shall include, but not be limited to:
- a The surveyed location (to the nearest 0.1m) and level (to the nearest 0.01m) of the discharge point from the site, with co ordinates expressed in terms of NZTM and LINZ datum;
 - b Location, dimensions and levels of any major overland flow paths including cross sections and long sections;

- c Plans and cross sections of all structural controls, including confirmation of the Water Quality Volume (where relevant), storage volumes and levels of any outflow control structure; and
 - d Documentation of any discrepancies between the design plans and the As Built plans.
- 116 Within one year of the commencement of this consent the consent holder shall provide updated As Built plans for all modifications to existing permanent stormwater treatment devices to the satisfaction of Auckland Council.
The As Built plans shall be certified (signed) by a suitably qualified registered surveyor or engineer as a true record of the device.
The As Built plans shall include, but not be limited to:
 - a Location, dimensions and levels of any major overland flow paths including cross sections and long sections;
 - b Plans and cross sections of all structural controls, including confirmation of storage volumes and levels of any outflow control structure.
- 117 **Operation and Maintenance**
An updated Operation and Maintenance Plan shall be submitted for the approval of Auckland Council within 90 days of the commencement of this consent.
- 118 The Operation and Maintenance Plan shall set out how the stormwater management system is to be operated and maintained to ensure adverse environmental effects are minimised.
The Operation and Maintenance Plan shall include, but not be limited to:
 - a A programme for regular maintenance and inspection of the stormwater management system;
 - b A programme for the collection and disposal of debris and sediment collected by the stormwater management devices or practices;
 - c A programme for post storm maintenance;
 - d General inspection checklists for all aspects of the stormwater management system, including visual checks;
 - e Details of who will hold responsibility for long term maintenance of the stormwater management system and the organisational structure which will support this process.
- 119 The stormwater management system shall be managed in accordance with the approved Operation and Maintenance Plan.
- 120 Any amendments to the Operation and Maintenance Plan shall be submitted to and approved by Auckland Council, in writing prior to implementation.
- 121 Stormwater discharges from the roofs and paved areas within the energy compounds shall be controlled and discharged into one of the four stormwater detention ponds that facilitate discharge from the site.
- 122 Stormwater discharges from the central fuel area shall be controlled in a bunded area with all discharge flowing into the existing stormwater detention ponds (specifically pond 1) via an oil interceptor.
- 123 As a sub-section of the LMP, a revised Stormwater Monitoring Programme to assess the ongoing adequacy of all stormwater management practices shall be submitted to Auckland Council for certification.
- 124 The Stormwater Monitoring Programme shall include, but not be limited to:
 - a Sampling location for final discharge from the site stormwater detention ponds outlets;
 - b Sampling locations from the Rangitopuni Stream;
 - c Methods and procedures for stormwater discharge sampling;
 - d Monitoring parameters for analysis from the four stormwater pond discharges on a fortnightly basis and shall include:
 - pH

- Temperature — °C
 - Total Suspended Solids (TSS) — mg/L
 - Alkalinity — g CaCO₃/m³
 - Chloride — g Cl/m³
 - Total ammoniacal Nitrogen — g N/m³
 - Electrical Conductivity (EC) — mS/m
 - Dissolved Oxygen — g O/m³
- e Monitoring parameters for analysis from the four stormwater pond discharges and the stream on a quarterly basis and shall include:
- Temperature — °C
 - Total heavy metals (dissolved copper, lead, cadmium, chromium, nickel and zinc) — mg/L
 - Oil & grease — mg/L
 - Chemical Oxygen Demand (COD) — g O/m³
 - Total petroleum hydrocarbons — mg/L
- f Sampling location for discharges from the site truck wash holding pond;
- g Monitoring parameters for analysis from the truck wash holding pond shall include:
- pH
 - Total suspended solids (TSS) — mg/L
 - Electric conductivity — mS/m
 - Oil and grease — mg/L
 - Temperature — °C
 - Total ammoniacal nitrogen — g N/m³
- h Identified trigger levels for each of the above parameters. Trigger levels for contaminants not included in the schedule submitted with the application (Redvale Landfill Management Plan: Section 3.19 – Stormwater Monitoring and Contingency Plan) shall be developed with reference to the 95% trigger value for freshwater ANZECC Guidelines for water quality where applicable.
- 125 Within 5 working days of receipt of sample results showing contaminants exceeding the agreed trigger levels:
- a an investigation shall be undertaken to determine why exceedances were detected and to identify any additional source controls or treatment required;
 - b the results of the investigation shall be reported to Auckland Council. And
 - c any additional structural or procedural controls proposed by the consent holder shall be approved by Auckland Council, in writing prior to their implementation of sample results showing contaminants exceeding the agreed trigger levels:
- 126 **Reporting Requirements**
- An Annual Report evaluating the site's environmental performance for the preceding year shall be submitted to Auckland Council from the date of granting of this consent.
- 127 The Annual Report shall include but not be limited to:
- a all aspects of the performance of the EMP relating to this consent;
 - b a summary of all revisions and revised sections of the EMP;
 - c summary details of all inspections and maintenance of the stormwater system for the preceding 12 months;
 - d details of the person(s) or body responsible for maintenance of site and the organisations structure supporting this process;

- e results and analysis of the preceding 12 months stormwater monitoring, along with an interpretation of those results and suggestions for improvement to the site operations; and
- f records of any spills or incidents which occurred within the previous 12 months and the response which was undertaken.
- g results of continuous monitoring specified in Conditions 98 and 100.

4 Air Discharge

128 Odour

The consent holder shall retain a full time equivalent odour technician on site. The odour technician's role description shall include:

- Employing best practice odour management techniques;
- Managing odour sources from the site in accordance with the conditions of this consent and the LMP
- Monitoring odour management devices onsite and ensuring that they are appropriately maintained and operated;
- Ensuring that all odour complaints are responded to within half an hour where complaints are made during landfill operating hours, and as soon as reasonably possible where complaints are made outside such hours;
- Assisting the Landfill Manager to ensure that the odour complaint response procedures outlined in the LMP are adhered to.
- Undertaking a daily odour patrol, with the patrol locations based on:
 - Meteorological conditions
 - the location of the tip face or working area
 - the complaints record and any consultation with the CLC
- Ensuring the odour field inspections required by Condition 129 a) and b) are carried out; and
- Making recommendations to the Landfill Manager, when necessary, to proactively address any actual or potential odour effects or complaints about odour effects.

129 Regular odour field inspections shall be undertaken either at or as close as practical to the notional odour around the landfill site. The field inspections shall:

- a be carried out daily by a representative of the consent holder whenever waste is being received to the Site; and
- b be carried out monthly by a suitably qualified external person approved by the Auckland Council
- c be conducted in accordance with the methodology approved by Auckland Council and set out in the LMP.

130 The Consent Holder shall investigate the cause of any odour detected by these odour field inspections in accordance with the conditions of this consent and the LMP and shall remedy any faults located. A record of each field inspection shall be maintained including weather conditions, the location of any odours identified, the intensity, duration and hedonic tone of the odour and the findings of any investigation. These records shall be provided to Auckland Council on a quarterly basis for the first 12 months and at least annually thereafter. The records shall also be made available to either one of the CLC, PRP or an Enforcement Officer if requested.

131 Independent Review of Odour Complaints and Odour Management

The Consent Holder shall engage an independent consultant experienced in landfill gas (LFG) and odour management to prepare a report to be submitted to the Council and the CLC annually. The report shall:

- a Review monitoring data related to odour field inspections and LFG collection and control recorded in accordance with the conditions of this consent over the past two years;
- b Review all odour complaints received over the reporting period;
- c Review the response to odour complaints;
- d Review the adequacy of the landfill odour and LFG management practices in the Landfill Management Plan in light of the findings of the reviews in clauses (a) to (c); and
- e Recommend any changes to landfill odour and LFG management practices.

132 All discharges of contaminants into air arising within the Site boundary are the responsibility of the Consent Holder.

- 133 Any person responsible for operations and discharges to air associated with the process or site shall be made aware of the relevant conditions of this consent.
- 134 All processes on Site shall be operated, maintained, supervised, monitored and controlled to ensure that emissions authorised by this Consent are maintained at the minimum practicable level.
- 135 Without prejudice to the generality of Condition 134 above, the discharge of specified air pollutants from the Generators shall not exceed the corresponding emission limits set out below. To demonstrate compliance with this condition, emissions shall be averaged over all test results measured for each pollutant, from each generator tested.
- 136 Emissions from energy generators are not to exceed:
Carbon Monoxide (CO) — 1,400 mg/Nm³ (average from three generators)
Nitrogen Oxides (NO_x) — 550 mg/Nm³ (average from three generators)
- 137 Beyond the boundary of the Site, there shall be no odour caused by discharges from the landfill which, in the opinion of an experienced enforcement officer when assessed in accordance with the Good Practice Guide for Assessing and Managing Odour (Ministry for the Environment, 2016) causes a noxious, dangerous, offensive or objectionable effect.
- 138 The Consent Holder must take all reasonable steps to minimise the discharge of dust from operational working areas. Beyond the boundary of the Site, there shall be no dust caused by discharges associated with the landfill operations, in the opinion of an enforcement officer when assessed in compliance with the Good Practice Guide for Assessing and Managing Dust (Ministry for the Environment 2016), causes a noxious, dangerous, offensive or objectionable effect.
- 139 No discharges from any activity on Site shall give rise to visible emissions to an extent which, in the opinion of an enforcement officer, is offensive or objectionable.
- 140 There shall be no visible emission, other than water vapour, light, heat haze, or steam, from any landfill gas flare that is not a backup flare.
- 141 The concentration of methane in monitoring probes outside the landfill footprint shall not exceed 5% by volume.
- 142 The concentration of methane at the surface of landfill areas with intermediate or final cover shall not exceed 0.5%, except where repairs are completed and retests confirm non-exceedance of this limit in accordance with the timeframes specified in Condition 151.
- 143 **Monitoring**
A walkover site inspection shall be undertaken no less frequently than weekly. Any evidence of actual and potential landfill gas leaks, such as odours, cracks in the landfill surface, gas bubbles, leaks in the gas extraction system or vegetation damage shall be investigated. Where necessary remedial action shall be undertaken as soon as practicable to minimise fugitive gas discharges.
- 144 Methane concentrations shall be measured and recorded on a monthly basis in each of the monitoring probes outside of the landfill footprint to demonstrate compliance with Condition 141.
- 145 Monitoring of surface emissions shall be carried out to demonstrate compliance with Condition 14 on a monthly basis for intermediate cover and on a quarterly basis for final cover.
- 146 Landfill gas shall be monitored at each operational extraction wellhead or, if more appropriate, at manifold points on a monthly basis. The following parameters shall be measured and recorded:
- a Gas flowrate.
 - b Gas composition (% methane, % oxygen, % carbon dioxide, ppm carbon monoxide).
 - c Gas temperature.
 - d Ambient temperature.
 - e Gas pressure.
 - f Barometric pressure.
- 147 Landfill gas (blended) shall be monitored within the energy centre on a six monthly basis. The following parameters shall be measured and recorded:

- a Gas flowrate.
 - b Composition (% methane, % oxygen, % carbon dioxide, ppm carbon monoxide).
 - c Gas temperature.
 - d Ambient temperature.
 - e Gas pressure.
 - f Barometric pressure.
 - g Hydrogen sulphide.
 - h Total non -methane organic compounds.
- 148 The Consent Holder shall maintain a meteorological monitoring station, located free from obstructions that accurately records weather conditions representative of the landfill. The data shall be recorded continuously at a minimum ten-minute resolution. The monitoring station shall be calibrated by a suitably qualified and experienced technician at least annually. The parameters measured shall include:
- a Wind velocity;
 - b Wind direction;
 - c Barometric pressure;
 - d Rainfall; and
 - e Temperature
- 149 Emission testing shall be undertaken on at least three representative single generator exhaust stacks.
- These tests shall:
- a Be conducted for carbon monoxide and nitrogen oxides to determine compliance with Condition 136.
 - b Be conducted for sulphur dioxide.
 - c Be conducted within one year after commencement of this Consent and thereafter at least once every three years. Different generators shall be tested on each consecutive sampling occasion.
 - d Be conducted in accordance with:
 - i ISO 7935:1992, ISO 7934:1998, USEPA Method 6 or 8C (sulphur dioxide);
 - ii ISO 12039:2001 or Method 10B (carbon monoxide);
 - iii ISO 10849:1996 or US EPA Method 7E (nitrogen oxides); and/or
 - iv other equivalent methods to the satisfaction of Auckland Council (see Advice Note 7).
 - e Be carried out by a company with International Accreditation New Zealand (IANZ) accreditation for the method(s) required by (d) above.
 - f Be conducted during normal process conditions that will give rise to maximum emissions.
 - g Comprise not less than three separate samples for each type of emission test undertaken.
- 150 The results of all tests carried out in accordance with Condition 149, relevant operating parameters, raw data, all calculations, assumptions and an interpretation of the results shall be submitted to Auckland Council within 30 working days of the samples being taken.
- 151 **Process**
- If monitoring carried out in accordance with Condition 145 demonstrates that the methane gas concentration specified in Condition 142 is exceeded, then remedial action shall be carried out and the concentrations retested within 14 days. If this is not practicable, the Consent Holder shall obtain the approval of Council for a proposed programme of remedial action, including a timetable, within 14 days of the exceedance. The proposed programme shall be implemented to

- the satisfaction of Council within the proposed time period. No breach of Condition 14 shall have occurred where such a programme has been implemented.
- 152 The Consent Holder shall operate the gas extraction system in a manner which ensures that the rate of extraction of landfill gas is maximised, while minimising the risk of landfill fire to due to over extraction
- 153 All extraction wells shall be connected to the gas extraction system as soon as practicable and in any case not longer than 12 months after placing wastes within the radius of influence of the wells.
- 154 Except as provided in Condition 153, all extracted landfill gas shall be combusted in a flare(s) or generator(s) which require the following:
- a The landfill gas flare(s) shall have the following minimum specifications in accordance with Regulation 27 of the national environmental standards for air quality:
 - i Flame arrester and backflow prevention devices, or similar equivalent system.
 - ii Automatic isolation systems to ensure that there is no discharge of unburnt landfill gas from the flare in the event of flame loss.
 - iii Continuous automatic ignition system.
 - iv Minimum temperature of 750 and retention time of 0.5 seconds.
 - v A permanent temperature indicator at half a diameter from the top of the flare with a visual readout at ground level.
 - vi Adequate sampling ports to enable emission testing to be undertaken; and
 - vii Safe access to sampling ports while any emission tests are being undertaken.
 - b The landfill gas fired generators shall comply with specifications (a)(i) to (a)(iii) above.
 - c Any landfill gas back up flare shall comply with specifications (a)(i) to (a)(vii) above in accordance with Regulation 27 of the national environmental standards for air quality.
- 155 When any generator is replaced, this shall be replaced with a generator that has a minimum stack height of 10 m above ground level.
- 156 The gas collection and treatment system shall be restored as soon as practicable in the event of a malfunction or fault. The Consent Holder shall maintain a standby diesel generator or equivalent on site for the purposes of restarting the flare as soon as possible in the event of a mains power failure. The procedures for reducing emissions to air during a mains power failure including the operation of the generators, flare and standby diesel generator and during routine maintenance shall be documented in the Landfill Gas Management Plan required under Condition 13.
- 157 Each generator engine shall be tuned at least once every six months to comply with a maximum concentration of 550 mg/m³ NO_x in the exhaust gas.
- 158 Without prejudice to the generality of Condition 137, malodorous special wastes shall be accepted into the Class 1 area only by prior arrangement on a case-by-case basis and shall be covered immediately upon acceptance.
- 159 Vehicle speed on unsealed roads site shall be limited to 30 kmph by the Consent Holder to ensure that vehicle movements do not cause significant visible dust emissions on the landfill site or access roads.
- 160 Water supply of sufficient capacity shall be maintained within the terms of any other Consent, such that the application of water as a dust control measures is not limited.
- 161 There shall be no burning of waste material on site.
- 162 A summary of landfill gas monitoring results shall be submitted to the Council at the end of each year. The summary shall include:
- a The average volume of landfill gas extracted (m³/hr).
 - b A summary of monitoring required by this Consent.

- c A comparison of the actual landfill gas extraction rate with the predicted gas generation rate. Revised predictions shall be included where significant discrepancies are identified, as well as an explanation for the discrepancies;
 - d An estimate of average waste composition.
- 163 All records, monitoring and test results where applicable required by the conditions of this Consent shall be made available on request, during operating hours, to an Enforcement Officer and shall be kept for a minimum period of 12 (twelve) months from the date of each entry.
- 164 An enforcement officer shall be notified as soon as practicable in the event of any significant increase in the discharge of contaminants to air which may result in an adverse effect on the environment, human health or property or which may result in a breach of these consent conditions including any indication of landfill fire.
- BeneVap**
- 165 **Limit Conditions**
All processes relating to the BV300 LEU must be operated, maintained, supervised, monitored and controlled in accordance with the Leachate Evaporator Management Plan certified in accordance with Condition 171 to ensure that all emissions authorised by this consent are maintained at the minimum practicable level.
- 166 **Process Conditions**
The BV300 LEU and all associated ducting must be maintained in good condition and as far as practicable be free from leaks in order to prevent the escape of fugitive emissions.
- 167 The temperature of leachate within the BV300 LEU must be continuously monitored and recorded and must not exceed 90°C.
- 168 The suspended solids and metals content of leachate entering the BV300 LEU must be continuously monitored and recorded. The measurement methods (nephelometer and electrical conductivity meter or similar) and trigger thresholds for identifying leachate that is likely to cause abnormal air discharges from the BV300 LEU (such as excessive scaling) must be detailed by the Leachate Evaporator Management Plan required by Condition 171 with contingency measures.
- 169 Records marked with the date and time must be maintained regarding the operational parameters of the BV300 LEU, with data recorded on at-least-hourly resolution, detailing:
- a The operating status;
 - b The volumes of leachate processed (hourly and daily);
 - c The volumes of landfill gas utilised (hourly and daily);
 - d The temperature, suspended solids and electrical conductivity of leachate, continuously recorded in accordance with conditions 167 and 168; and
 - e Any unexpected air discharges noted.
- 170 At least once a year analyse samples of raw and treated leachate (pre- and post- treatment through the BV300 LEU) for concentrations of contaminants including Volatile Organic Compounds (VOC), Mercury (Hg), and Per- and Poly-flouroalkyl substances (PFAS). The frequency and methods of sampling must be detailed by the Leachate Evaporator Management Plan (with a frequency of at least once-per-year). The analysis must be undertaken by an appropriately accredited laboratory.
- 171 A Leachate Evaporator Management Plan (LEU-MP) shall be included as a section of the Landfill Management Plan. The LEU-MP must incorporate a series of monitoring, management and operational procedures, methodologies and contingency plans relating to the operation of the BV300 LEU, and together must accurately record all information required to comply with the conditions of this consent. The LEU-MP must include the following:
- a description of the BV300 LEU;
 - b Procedures to minimise discharges of contaminants into air from the BV300 LEU, including details of the inspection, maintenance, monitoring and contingency procedures in place. Without limitation, these shall include details of the inspection, monitoring/investigation, resolution and contingency procedures to address the following issues:

- i Any excessive build-up of scaling material within the BV300; and
 - ii Unusual visible discharges;
 - c Procedures to maximise the efficiency of combustion for the BV300 LEU as far as practicable, including details of the frequency of inspections and testing for the combustion efficiency;
 - d Procedures for the field odour inspections required by condition 129, including details of the methods for the inspections and example log-sheets for recording the results;
 - e Procedures for visually monitoring air discharges from the BV300 LEU, including details of the frequency of the visual inspections and example log-sheets for recording the results
 - f Procedures for the routine sampling and analysis of the raw and treated leachate in accordance with condition 170, including details of the sampling frequency, protocols, contaminant parameters, and laboratory analysis methods;
 - g Procedures for the continuous monitoring of leachate temperature, suspended solids and conductivity with trigger thresholds and contingency measures in accordance with conditions 167 and 168;
 - h The maximum leachate treatment capacity of the BV300 LEU (in m³ per hour) and the procedures for monitoring and recording leachate processing volumes in accordance with condition 169;
 - i Procedures to shut-down the BV300 LEU in the event of the identification of any abnormal air discharges that may contravene condition 137, 139 and 165;
 - j The identification of staff responsibilities; and
 - k The procedures for the receipt, recording and handling of air quality complaints
- 172 Details of all inspections, records, monitoring and test results that are required by the conditions of this consent must be kept for the duration of the consent and must be provided to the Council on request

5 Earthworks

173 Erosion and Sediment Control Plan

The Erosion and Sediment Control Plan shall be included and maintained as a section of the LMP. The Erosion and Sediment Control Plan (ESCP) must be prepared in accordance with Auckland Council Guideline Document 2016/005 'Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region, June 2016, Incorporating Amendment 1' (GD05) and submitted to the Council for written certification.

Earthworks activity on the subject site must not commence until written certification from Council is provided that the ESCP meets the requirements of GD05 and contains sufficient detail to address the following matters:

- a A description of specific erosion and sediment controls
- b Supporting calculations and design drawings;
- c Catchment boundaries and contour information;
- d Details of construction methods;
- e Timing and duration of works;
- f Details of stabilisation measures
- g Monitoring and maintenance requirements

174 Erosion and Sediment Control Certification

Within 10 working days following implementation and completion of the ESCP required by Condition 173 and prior to the commencement of the earthworks activity, a suitably qualified and experienced person must provide written certification to the Council that the erosion and sediment control measures have been constructed in accordance with the approved plans and GD05. Written certification must be in the form of a report or any other form acceptable to the Council.

175 All specified controls shall be operational before earthworks commence. All cleanwater runoff from stabilised surfaces including catchment areas above the site shall be diverted away from earthworks areas via a stabilised system, so as to prevent surface erosion.

176 Sediment-laden runoff shall not leave the site without prior treatment via an approved sediment control device.

177 Pre-Construction Meeting

Prior to the commencement of earthworks, the consent holder shall hold a pre-start meeting that:

- a Is located on the subject site;
- b Is scheduled not less than five days before the anticipated commencement of earthworks, unless an alternative timeframe is agreed between all parties;
- c Includes representation from the Council; and
- d Includes representation from the contractors who will undertake the works.

The meeting shall discuss the proposed works and shall ensure all relevant parties are aware of and familiar with the necessary conditions of this consent.

The following information shall be made available at the pre-start meeting:

- a Timeframes for key stages of the works authorised under this consent;
- b Identification of any higher risk locations on the site;
- c Resource consent conditions;
- d The erosion and sediment control plan (Condition 173); and
- e The chemical treatment management plan (condition 187).

178 Earthworks Abandonment

Upon completion or abandonment of earthworks on the subject site, all areas of bare earth shall be permanently stabilised against erosion to the satisfaction of Council

179 **Erosion and Sediment Control Removal**

Notice must be provided to the Council at least two working days prior to the removal of any erosion and sediment control works specifically required as a condition of resource consent or by the approved ESCP.

180 **Progressive Stabilisation**

The Site shall be progressively stabilised against erosion at all stages of the earthworks activity, and shall be sequenced to minimise the discharge of sediment to surface water in accordance with the approved ESCP. Interim stabilisation measures may include:

- a The use of waterproof covers, geotextiles, or mulching;
- b Top-soiling and grassing of otherwise bare areas of earth; or
- c Aggregate or vegetative cover that has obtained a density of more than 80% of a normal pasture sward.

181 **Maintenance and Monitoring**

The earthworks and construction associated with the landfill and diversion channels shall be designed and carried out in such a way so as to minimise instability of the surrounding land.

182 The consent holder shall repair and rehabilitate any land made unstable by the construction or maintenance of the diversion channels, landfilling operations and any Earthworks.

183 **Discharge Minimisation**

All earthworks must be managed to minimise any discharge of debris, soil, silt, sediment or sediment-laden water beyond the subject site to either land, stormwater drainage systems, watercourses or receiving waters. In the event that a discharge occurs, works must cease immediately, and the discharge must be mitigated and / or rectified to the satisfaction of the Council.

184 The erosion and sediment control measures shall be inspected to ensure effective operation on a daily basis and within 24 hours after a significant storm event during the construction by the contractors. Any maintenance needs identified during the inspections, to ensure the devices continue to operate at full operation capacity shall be carried out as soon as practicable.

A record shall be maintained of the date, time and any maintenance undertaken in association with this condition; which shall be forwarded to Auckland Council upon request.

185 The maximum area of earth exposed at any one time within Stockpile 4 must be no greater than 1.5 hectares.

186 Notwithstanding the conditions above, all erosion and sediment control measures must be constructed and maintained in general accordance with GD05, except where a higher standard is detailed in the conditions above, in which case the higher standard must apply.

187 **Chemical Treatment Management Plan**

If chemical treatment of sediment-laden stormwater is to be undertaken within the sediment retention ponds, a chemical treatment management plan (CTMP) shall be submitted to the Council for certification no less than 10 days prior to the commencement of chemical treatment. .

The CTMP must include as a minimum:

- a Specific design details of a chemical treatment system based on a rainfall activated dosing methodology for the site's sediment retention pond;
- b Monitoring, maintenance (including post-storm) and contingency programme (including a record sheet);
- c Details of optimum dosage (including assumptions);
- d Results of initial chemical treatment trial;
- e A spill contingency plan; and
- f Details of the person or bodies that will hold responsibility for long term operation and maintenance of the chemical treatment system and the organisational structure which will support this system.

- 188 The sediment retention ponds and any other authorised impoundment devices must be chemically treated in accordance with the CTMP certified by Condition 187. All measures required by the CTMP must be put in place prior to commencement of the earthworks activity and be maintained for the duration of the earthworks activity.

6 Dams

189 Maintenance and operation

Every reasonable measure must be taken during any maintenance or repair of the dams to control erosion of exposed earthwork areas and the discharge of sediment into natural waters. Measures to prevent sediment discharges must comply with Auckland Council guideline "*Erosion and Sediment Control Guidelines for Land Disturbing Activities in the Auckland Region*" (GD05).

190 Flood Spillways

The dams must be maintained with a flood spillway capable of safely passing water for the 1% annual exceedance probability storm event without overtopping the dam crest and with minimal damage to the flood spillway. The surface of the flood spillway must be maintained to protect it from significant erosion during operation.

191 All spillways, overflows and bypass arrangements must be maintained in such a way as to minimise erosion of the stream, risk of obstruction of the waterways, and hazards to safety.

192 The entry to the spillways must be protected from becoming restricted by debris.

193 Protection Against Scour

Protection must be provided against wave action and scour if required. Any damage recorded at times of monitoring, or noticed at any other time, must be remedied within a two week period.

194 Stock Protection

The margins, crests and downstream faces of the dams must be protected from stock. If the crest of a dam is to be used as a stock race, the Consent Holder must ensure that:

- a the crest of the dam is covered with gravel for protection of the crest;
- b the crest of the dam is fenced both sides; and
- c any drainage of water from the crest of the dam is diverted away from the upstream and downstream dam face.

195 The dams and associated structures must be operated and maintained to ensure that they are structurally sound, pose no undue risk to life, property or the natural environment, and are able to perform satisfactorily under all foreseeable circumstances.

196 Vegetation Management

The dam structure, spillways and dam bypass must be adequately maintained at all times to minimise surface damage, and trees or vegetation other than grass that would weaken the structural stability of the dam must not be allowed to grow on or near the embankment.

197 Floating Decant Systems

The floating decant systems must be maintained to ensure they remain functional for controlled decanting of water.

198 Telemetry Equipment

Telemetry equipment must be installed at each pump shed to record daily pumping volumes for both operational and potable water takes. The system must provide automated data logging for internal monitoring purposes.

199 Visual Inspections

A visual inspection of the dam embankments and spillways must be carried out at intervals of no more than one month and following any significant rainfall or seismic events in accordance with Figure 4.4. of the ARC Dam Safety Guidelines (Technical Publication 109). Any damage recorded at times of inspection, or noticed at any other time, must be remedied as soon as is practicably possible.

200 Significant Remedial Works

In the event of any significant remedial works being required as a result of damage or safety improvements to the dam structures and spillways, prior to the commencement of the works, a description of the proposed works and the reasons for them must be provided in writing to Auckland Council.

If requested in writing by the Council, within ten (10) working days of completion of the remedial works, a certificate from a Chartered Professional Engineer must be supplied to the Council. The certificate must certify that the engineer has supervised the remedial works and that the subject dam will, in the opinion of the certifying engineer, perform correctly under all foreseeable circumstances.

201 **Water Quality Monitoring**

The consent holder must undertake water quality monitoring at Pond 5 and at one site downstream of the Pond 5 discharge point into the Rangitopuni Stream, in accordance with the following requirements:

- (a) Monitoring must include, at a minimum, turbidity, pH, conductivity, total ammonia, and dissolved metals (aluminium, copper, zinc).
- (b) Sampling must occur annually
- (c) Results must be compared against ANZG (2018) guideline values and site-specific trigger levels in Appendix A of the Ecological and Water Quality Assessment (Bioresarches, 2025).
- (d) Where monitoring identifies exceedances of trigger levels, the consent holder must investigate the cause and implement corrective actions as necessary.

202 **Annual Water Quality Report**

An annual water quality report must be submitted to the Council by 30 June each year. The report must outline results of the previous 12 months water quality monitoring required by Condition 201 above (a) to (d)

203 **Proposed condition in relation to Pond 5 riparian maintenance**

Existing riparian planting around Pond 5 must be maintained in a healthy condition for the duration of this consent. Dead, damaged or failing plants within existing planted riparian areas must be replaced with appropriate native riparian species during the next practicable planting season, where replacement is necessary to maintain existing vegetative cover for bank stabilisation and shading.