Before Hawkes Bay Regional Council and Hastings District Council

In the matter of	the Resource Management Act 1991
And	
In the matter of	Applications by Hastings District Council and Napier City Council (**Applicants**) for approvals relating to Area B at Ōmarunui Landfill (**Landfill**)

Proposed Conditions – Agreed and Disagreed as at 28 October 2021

May it please the Commissioners

1. The Commissioners' Third Minute directed that the Applicants file a set of conditions following discussions with the reporting officers for the District and Regional Council, identifying any provisions not yet agreed, by 5pm Thursday, 28 October 2021.

2. In accordance with that direction, attached as **Appendix A** is a version of the proposed regional consent conditions. By way of explanation of the document:

   (a) The base document is the conditions proposed by the Applicants prior to the s 42A Report;

   (b) Changes to that version included in the Hawke's Bay Regional Council s 42A Report are shown as track changes. Where the Applicants agree with the HBRC change, no comment box is included.

   (c) Where the Applicants disagree with the s 42A Report version of conditions, or seek further amendments, the track change is accompanied by a comment box with explanation. These changes were all included in Ms Brabant's Appendix A or recommended by Mr Bryce's supplementary evidence;

   (d) For most comment boxes, HBRC has advised whether it agrees or does not agree with the Applicant's change. In one case, HBRC has recommended the addition of a new condition.

3. As discussed in the Applicants' legal submissions, it is understood that HBRC may wish to advance further changes to conditions, including to the version it included in the s 42A Report, at the hearing. Those changes are not included in the attached version.

4. Attached as **Appendix B** is a version of the Designation conditions showing changes proposed from the version currently included in the Hastings District Plan. As discussed in the legal submissions filed today, there are no areas of disagreement.

Asher Davidson

28 October 2021

Appendix A - Proposed Regional Consent Conditions

Solid Waste Consent

This consent covers the following:

- *Discharge of contaminants to land and water for Area B*
- *Diversion and discharge of stormwater for Area B*
- *Diversion and discharge of drainage water for Area B*

1. The consent holder shall undertake all operations generally in accordance with any drawings, specifications, statements of intent, proposed mitigation measures and other information supplied to the Regional Council in relation to this resource consent. Specifically, this includes the following documents:
   a. Resource consent application to change conditions of consent, received by Regional Council December 2019, including Omarunui Landfill – Area B – Assessment of Effects on the Environment, dated December 2020.
   b. Omarunui Landfill – Area B: Further Information (s92 RMA), report prepared for Hastings District Council by Tonkin & Taylor, August 2020.
   c. Omarunui Landfill – Area B: Further Information (s92 RMA), report prepared for Hastings District Council by Tonkin & Taylor, September 2020.
   d. Omarunui Landfill Operations and Maintenance Manual prepared by ~~Stantec Ltd for~~ Hastings District Council updated in accordance with condition 5 below.

Where a conflict arises between any conditions of this consent and the application documentation, the conditions of this consent prevail.

Peer Review Panel

2. The consent holder shall establish and retain, at its own cost, an Independent Peer Review Panel, to review the design and construction of all stages of the Area B landfill as well as the ongoing operation and aftercare of Area B. The Independent Peer Review Panel shall comprise at least two persons who together shall be:
   - Independent of the Consent Holder
   - Experienced in landfill design, construction and management
   - Experienced in landfill geotechnical, landfill gas, groundwater and surface water aspects
   - Recognised by their peers as having such experience, knowledge and skill
   - Approved in writing by Hawke's Bay Regional Council.

3. Prior to commencing the construction of a new landfill stage, the Consent Holder shall submit a design report and design drawings for the relevant stage to the Peer Review Panel for certification that it meets the requirements of the consent. The Peer Review Panel shall communicate this certification to Council.

4. The Peer Review Panel shall prepare an annual report ~~for Hawke's Bay Regional Council~~ to be submitted to Council (Manager Compliance) prior to 1 March each year, on the adequacy of the following matters in relation to meeting the requirements of the consents:
   - Any management or monitoring plans reviewed during the year
   - Any designs reviewed during the year
   - Construction activities undertaken including:
     - Site preparation, including hydrogeological and geotechnical issues
     - Liner construction
     - Leachate collection system installation

Commented [TB1]: Applicant's change – incorrect reference

Commented [GU2R1]: HBRC agrees

Commented [LA3]: Applicants' change

Commented [GU4R3]: HBRC agrees

Commented [LA5]: Council change – Agreed by Applicants

- Landfill gas collection system installation
- Landfill operation including
  - Water control, including stormwater and leachate management
  - Waste compaction, including method and degree
  - Waste acceptance
  - ~~Cover material used~~
  - Daily and intermediate cover material used
  - Landfill gas collection system
  - Leachate collection and irrigation
- Monitoring and records
- Rehabilitation.

This report shall be based on:

- A review of the landfill annual monitoring report
- Review of designs submitted during the year
- Review of construction QA reports
- Any further enquiries and inspections required by the Peer Review Panel to allow them to undertake their duties.

Operation and Maintenance Manual

5. Within three months of the commencement of this consent (acceptance of waste into Area B) the consent holder shall update the Omarunui Landfill Operations and Maintenance Manual (O & M Manual) and submit the updated version to Hawke's Bay Regional Council for certification, to confirm that the activities undertaken in accordance with the O & M Manual will achieve the objectives of the O&M Manual and compliance with the relevant consent conditions.

6. The O & M Manual shall address how the following matters will meet any limits or restrictions set out by the consent conditions:
   - Site access, security and sign in
   - Landfill emergency procedures
   - Contingency plans, including management and offsite disposal of leachate
   - Monitoring and reporting
   - Complaints register
   - The use of daily and intermediate cover
   - Bird control
   - Wheel cleaning
   - Litter control including collection of off-site litter originating from the landfill
   - Pest control
   - Weeds and noxious plants
   - Management procedures for the working face
   - Waste compaction
   - Landfill fires
   - Natural disasters
   - Stormwater and sediment control including inspection based monitoring for cyanobacterial blooms.
   - Waste acceptance
   - Leachate control and spray drift monitoring procedures
   - Odour control
   - Landfill gas management
   - Health and safety.

Commented [LA6]: Applicants' Change

Commented [GU7R6]: HBRC agrees

Commented [LA8]: Applicants' change – see evidence of Dean Miller, para 55

Commented [GU9R8]: HBRC agrees.

Further comment from PDP - We also note that a separate Erosion and Sediment Control Plan is proposed (Tony Bryce supplementary evidence para 24 and Robert Munckhof evidence para 25) and a separate condition for this would be appropriate.

Waste disposal

7. The discharge of solid waste and leachate onto or into land is authorised only on the area of the site identified as landfill Area B shown on the Figure XXX provided as Attachment 1. The extent of waste shall be generally as shown on Figure XXX with allowance for reasonable variations that may result from the detailed design of the landfill.

8. The total airspace volume of waste deposited in Area B of the Omarunui Landfill during the term of this consent shall not exceed 3.5 Million m^3 calculated between the base of the landfill and the post settled ~~top of the~~ landfill envelope.

Design and construction

9. The lining system for the landfill shall, as a minimum, comprise one of the following lining systems:

a. For base areas, flatter than 1V:4H, from top to bottom:
   - o 300 mm drainage aggregate leachate collection layer;
   - o Protection geotextile;
   - o 1.5 mm HDPE geomembrane;
   - o GCL ($k \leq 3 \times 10^{-11}$ m/s); and
   - o Selected compacted soil layer, 600 mm thickness, comprising predominantly silt or sandy silt soils with a permeability k likely expected to be in the range of $1 \times 10^{-6} < k < 1 \times 10^{-8}$ m/s.

b. For side slope areas, steeper than 1V:4H, from top to bottom:
   - o 300 mm drainage aggregate leachate collection layer;
   - o Protection geotextile;
   - o 1.5 mm HDPE geomembrane;
   - o GCL ($k \leq 3 \times 10^{-11}$ m/s); and
   - o Selected compacted soil layer, 300 mm thickness, comprising predominantly silt or sandy silt soils with a permeability k likely expected to be in the range of $1 \times 10^{-6} < k < 1 \times 10^{-8}$ m/s.

~~For both lining systems types, an Electric Leak Location survey shall be undertaken on all sections of completed lining system and any leakage found from this survey shall be repaired.~~ For the lining systems described in condition 9a and 9b an Electric Leak Location survey shall be undertaken on all sections of completed lining system and any defects found from this survey shall be repaired.

Commented [LA10]: Council change – opposed by Applicants. Amended wording to improve clarity (refer para 75 of Tony Bryce's evidence)

Commented [GU11R10]: HBRC agrees - ELL is done to address the fact that the selected compacted soil layer is not in accordance with the guidelines.

10. The consent holder may use an alternative lining system comprising one of the following:

a. Type 1 Lining system, from top to bottom
   - 300 mm layer of leachate drainage material
   - Protection geotextile
   - 1.5 mm HDPE geomembrane
   - 600 mm compacted soil (clay) with a coefficient of permeability $k < 1 \times 10^{-9}$ m/s

b. Or Type 2 lining system, from top to bottom:
   - 300 mm layer of leachate drainage material
   - Protection geotextile
   - 1.5 mm HDPE geomembrane
   - Geosynthetic clay liner (GCL) ($k \leq 3 \times 10^{-11}$ m/s)
   - 600 mm compacted soil with a coefficient of permeability $k < 1 \times 10^{-8}$ m/s

~~For both lining systems types, an Electric Leak Location survey shall be undertaken on all sections of completed lining system and any leakage found from this survey shall be repaired.~~

~~Lining systems which include a GCL, i.e. either a Type 2 Lining System or the lining system described in Condition 9, shall cover a minimum of 20 percent of the total landfill footprint.~~

~~The Consent Holder may use an alternative lining system demonstrated to provide equivalent or better performance compared with the specified systems. Use of an alternative lining system shall be subject to prior written approval of the Peer Review Panel and Hawkes Bay Regional Council.~~

10a The combination of lining systems adopted shall be such that a GCL is incorporated into the lining system over a minimum of 50 percent of the total Area B footprint area.

11. The Consent Holder may use an alternative lining system demonstrated to provide equivalent or better performance compared with the specified systems. Use of an alternative lining system shall be subject to prior written approval of the Peer Review Panel and Hawkes Bay Regional Council.

12. The installation of the lining system shall be subject to independent quality assurance (QA), to include the soil and geosynthetic components of the lining system and the electric location survey. On completion of each stage of lining system construction a QA report shall be prepared and shall include all of the test results, a description of the observations undertaken and certification that the lining system has been installed in accordance with the specification. This report shall be submitted to the PRP.

13. The design leachate head shall not exceed 300 millimetres on the base liner. This requirement does not apply in sump areas.

14. Final cover and capping shall be constructed to the following minimum specification, from the top of waste to the surface.
    - Intermediate cover immediately over the waste. ~~The interim cap layer shall be at least 500 mm of compacted soil ($1 \times 10^{-6} < k < 1 \times 10^{-8}$ m/s).~~
    - 600 mm of compacted soil (~~k >~~ 1×10^{-8} m/s ~~,~~ < $k < 1 \times 10^{-6}$ m/s)
    - 300 mm soil growth layer
    - 100 mm topsoil (grassed)

15. Permanent stormwater infrastructure shall be designed to manage at least a 1% annual exceedance probability (AEP) design rainfall event. The diversion channels shall be designed such that if this capacity is exceeded the preferential (secondary) flow path is away from the landfill cells and any associated infrastructure. Permanent stormwater infrastructure is infrastructure that forms part of the permanent works on site or temporary works that will be in service for greater than 5 years.

16. Temporary stormwater infrastructure that is intended to be used for less than two years shall be designed to manage at least a ~~1~~20% AEP design rainfall event. ~~flood if it is to be left in place for less than two years, and shall be designed to manage a 20% AEP design flood if it is to be left in place longer than two years and less than 5 years.~~ Temporary stormwater infrastructure that is intended to be used for greater than two years shall be designed to manage at least a

Commented [LA12]: Council change – Opposed by Applicants (refer to Para 75 of Tony Bryce's evidence)

Commented [GU13R12]: HBRC agrees - No need for ELL as the proposed liner systems are as per guidelines.

Commented [LA14]: Refer to amendments in condition 10a and Tony Bryce's evidence (para. 76)

Commented [GU15R14]: HBRC agrees

Commented [LA16]: Council change – Opposed by applicants (duplication of Condition 11)

Commented [GU17R16]: HBRC agrees

Commented [TB18]: Applicant's change (refer to Para 77 of Tony Bryce's evidence

Commented [GU19R18]: HBRC agrees.

Comment from PDP - This assumes that the remaining 50% of the area has a clay liner with a coefficient of permeability k <1x10-9 m/s

Commented [TB20]: Council change – Opposed by applicants. Refer Para 78 of Tony Bryce's evidence

Commented [GU21R20]: Not agreed by HBRC

Commented [TB22]: Council change agreed by Applicants but amended to reflect the intent of Council's change

Commented [GU23R22]: HBRC agrees

10% AEP design rainfall event. The ~~system~~ stormwater infrastructure shall be designed such that if this capacity is exceeded the preferential (secondary) flow path is away from waste fill areas.

17. The Area B and Stockpile 1 Stormwater Pond shall be designed to ~~treat a 1 in 2 year storm event to~~ remove at least 75% of suspended solids for the inflows from at least a 50% AEP design rainfall event.

18. Any outflow of water from the ~~stormwater pond~~ ~~Area B~~ Stormwater Ponds shall be effectively dispersed to prevent scouring.

19. In the event of any archaeological site or waahi tapu being uncovered during the exercise of this consent, activities in the vicinity of the discovery shall cease. The consent holder shall contact the Council (Manager Compliance) to obtain contact details of the relevant tangata whenua. The consent holder shall then consult with the relevant local hapu or marae and the Heritage New Zealand Pouhere Taonga, and shall not recommence works in the area of the discovery until the relevant Heritage New Zealand Pouhere Taonga and tangata whenua approvals to damage, destroy or modify such sites have been obtained.

Waste acceptance

20. Medical wastes shall be accepted only in accordance with NZS 4304:2002, Healthcare Waste Management.

21. Asbestos waste shall be accepted only in accordance with the Health and Safety at Work (Asbestos) Regulations 2016.

22. The following wastes shall not be accepted for disposal at the landfill:
    a. Any waste marked with an asterisk on the NZ Waste List (L Code), with the following exceptions:
        i. solid wastes which, following testing using the ~~ESEPA~~ USEPA Toxicity Characteristic Leaching Procedure (TCLP) result in leachable concentrations of contaminants less than the leachable concentration values listed in Attachment 2; or
        ii. solid wastes which, following testing for total concentration, result in total concentration values less than the screening criteria listed in Attachment 2; or
        iii. any waste identified with an asterisk on the L Code identified as containing asbestos – if they are labelled, packaged and disposed in accordance with the requirements laid out in the Health and Safety at Work (Asbestos) Regulations 2016; or
        iv. small quantities of waste products containing potentially hazardous components that are not likely to have adverse effects on the environment, such as can reasonably be expected to be contained in the municipal waste stream.
    b. Any liquid waste. For waste to be considered non-liquid it must meet one of the following requirements:
        i. Contains a solids content of at least 20% and liberates no free liquids
        ii. Liberates no free liquids when tested in accordance with the USEPA Paint Filter Liquids Test (USEPA Method 9095A 1996) and liberates no free liquids when transported.

Commented [AD24]: Applicants' change - See Tony Bryce Supplementary Evidence

Commented [GU25R24]: HBRC agrees

Commented [AD26]: Applicants' change - See Tony Bryce Supplementary Evidence

Commented [GU27R26]: HBRC agrees

Commented [GU28]: PDP Comment for HBRC- Attachment 2 to be provided

c. Wastes or substances classified as explosive, flammable, oxidising or corrosive under the Hazardous Substances and New Organisms Act 1996

23. To minimise the potential for hazardous waste to be disposed of at the landfill the following measures shall be taken:
    a. Notice shall be clearly posted at the landfill entrance to identify the hazardous wastes that are not accepted at the landfill; and
    b. Random inspections of incoming loads for the presence of hazardous waste shall be undertaken on a frequency of no less than 1 in 50 loads.

24. The consent holder shall maintain a record of each load of material accepted at the landfill including:
    a. Date and time material is deposited
    b. Quantity;
    c. ~~Cell Number and Location;~~ and
    d. Description of material

    These records shall be made available on request at the time of a site inspection made by the Council.

Operation

25. The working face of the daily waste cell shall be kept to a practicable minimum and shall not exceed 1,~~5~~200 m^2.

26. Daily cover shall be placed over the entire working face (excluding areas of inert waste) by the end of each operating day and no refuse shall remain exposed overnight. Daily cover shall be a nominal 150 mm thickness of soil, but may also be one of a number of non-soil alternative daily cover (ADC) options of an appropriate thickness where it can be demonstrated that they achieve a comparable level of control with respect to discharges of odour or dust to air, vermin, birds, litter, and visual effects. An equivalent alternative daily cover may be used with the prior certification of the Council.

27. Daily and intermediate cover shall be removed by cutting windows through the previous layer of ~~daily~~ cover before refuse placement at the start of each day.

28. The consent holder shall take all practicable measures to prevent windblown litter from leaving the active landfilling area. The consent holder shall monitor the site for build-up of litter, paper, plastics and other deposits outside the active landfilling area and remove any such material on at least a weekly basis.

29. The level of leachate in the leachate collection pond accepting leachate from Area B shall be managed so that there is at least 1,000 mm freeboard, in order to provide sufficient available capacity to allow for storage during wet weather and potential mechanical failure.

30. Any stormwater infrastructure, including ~~D~~diversion channels and cut-off drains, shall be maintained to minimise infiltration into and run-on of stormwater ~~on~~into the landfill from areas outside the landfill footprint.

31. All stormwater run-off from exposed surfaces shall be treated in the ~~stormwater detention pond~~ Area B Stormwater Pond. All stormwater runoff from exposed surfaces of Stockpile 1 shall be treated in the Stockpile 1 stormwater pond.

Commented [LA29]: Council change – opposed by Applicants. Refer Para 79 of Tony Bryce's evidence

Commented [GU30R29]: HBRC agrees

Commented [LA31]: Applicants' change – changed for consistency purposes

Commented [GU32R31]: HBRC agrees

Commented [TB33]: Applicant's change – added to apply to all temporary cover situations

Commented [GU34R33]: HBRC in agreement with the second "daily" removed

Commented [AD35]: Applicants' change - See Tony Bryce Supplementary Evidence

Commented [GU36R35]: HBRC agrees

32. The Consent Holder shall be responsible for the structural integrity and maintenance of the ~~stormwater treatment ponds~~ ~~Area B Stormwater Pond~~ stormwater treatment ponds and for any erosion control and energy dissipation works that become necessary as a result of the exercise of this consent. All channels shall be engineered to prevent excessive channel erosion at peak velocities.

Limit Conditions

33. There shall be no objectionable discharge of dust beyond any legal boundary of the subject property.
34. ~~There shall be no offensive or objectionable discharge of odour beyond any legal boundary of the subject property. When assessing whether odour is offensive or objectionable, the Council shall follow the procedures outlined in the Hawke's Bay Regional Resource Management Plan (October 2015, section 6.1.4, pp. 117-118).~~ There shall be no offensive or objectionable discharge of odour beyond any legal boundary of the subject property.

35. No stormwater that has come in contact with ~~refuse~~ any waste material shall be discharged as stormwater, but will be considered as leachate and shall discharge into the leachate ~~treatment/disposal~~ management system.

36. The discharge of water from Area B Stormwater Pond shall not cause the clarity in the Upokohino Stream to decrease by more than 20%.

37. The discharge of water from the Area B Stormwater Pond shall not cause any conspicuous oil or grease films, scums or foams, or floatable or suspended material in the Upokohino Stream 50 metres downstream.

Monitoring

38. All sample analysis shall be carried out by an independently accredited laboratory. The results of the sampling shall be forwarded to the Council (Manger Compliance) within one month of the sampling results being received.

Leachate:

39. The consent holder shall record daily the volume of leachate that has been pumped to the Area B leachate pond and the level of leachate in the pond. The record shall be forwarded to the Council (Manager Compliance) each month.

40. The consent holder shall collect a sample of leachate discharged from Area B in ~~January,~~ April, ~~July~~ and October each year and analyse for the determinands set out in Groups 1 and 2, Attachment 3. Results shall be forwarded to the Council (Manager Compliance) within one month of sampling.

41. The consent holder shall collect a sample of leachate discharged from Area B in April each year and analyse for the determinands set out in Group Three, Attachment 3. Results shall be forwarded to the Council (Manager Compliance) within one month of sample results being received.

Groundwater:

42. The consent holder shall measure and record water quality in groundwater monitoring wells at bores BC5, BC6, BC7A (until removed as part of landfill construction), BH9, BC9, BC10, and BC14 during the months of January, April, July and October each year and analyse for the determinands set out in Group One, Attachment 3.

Commented [AD37]: Applicants' change - See Tony Bryce Supplementary Evidence.

Applicants had originally accepted a Council change to refer to Area B Stormwater Ponds, but following Mr Bryce's Supplementary Evidence, considers its original wording is more appropriate.

Commented [GU38R37]: HBRC agrees

Commented [TB39]: Council change – opposed by Applicants. Refer Para 80 of Tony Bryce's evidence

Commented [GU40R39]: Not agreed by HBRC

43. The consent holder shall sample the wells specified in condition **Error! Reference source not found.** during the month of April, each year and analyse for the determinands set out in Group Three, Attachment 3.

44. The consent holder shall sample the wells specified in condition 42 during the months of April, and October each year and analyse for the determinands set out in Groups Two, Attachment 3.

45. The consent holder shall measure and record water level in the wells specified in condition 42 during the months of January, April, July and October each year.

46. Results of monitoring required by conditions 42, 43, 44, 45 shall be forwarded to the Council (Manager Compliance) within one month of sample results being received.

47. ~~The~~ Baseline water quality monitoring for all ~~monitoring sites~~ wells ~~shall be established by the consent holder.~~ listed in condition 42 shall be undertaken to establish trigger levels. Trigger levels for ~~those~~ Groups 1 and 2 determinands ~~relevant to potential landfill leachate effects on water quality in downgradient surface water ways~~ shall be established by the consent holder. ~~When each determined listed in conditions 42 and 43 have been analysed on ten occasions the consent holder shall develop trigger levels for all determinands, set as two standard deviations from the mean calculated from the ten baseline samples.~~ The criteria for setting the trigger levels shall be ~~two~~ three standard deviations of the groundwater quality data from the mean calculated from at least ten baseline samples collected prior to waste being accepted at the site , unless alternative trigger levels are agreed with the Council (Manager Compliance) in writing.

Commented [LA41]: Applicants' change – see evidence of Tony Reynolds, para 101

Commented [GU42R41]: HBRC agrees

48. The consent holder shall review all sample results within two weeks of receipt of results and:

    a. Compare Group 1 and Group 2 determinands with trigger levels (as defined in condition 47) to the trigger levels established in condition 47.
    b. Compare Group 3 determinands to relevant drinking water standards or water quality guidelines.

The consent holder shall then undertake the below actions:

    c. If any of the samples exceed any trigger levels or drinking water standards or relevant water quality guidelines the following shall be undertaken:
        i. A second sample shall be immediately taken from the affected site and analysed for the determinands which have exceeded the trigger levels;
        ii. Results shall be forwarded to the Council (Manager Compliance) within one week of receipt of results.
    d. If the second sample does not exceed the trigger levels or relevant standards or guideline levels the consent holder shall advise the Council (Manager Compliance) of possible explanations and implications for the exceedances(s).
    e. Should the second sample exceed the relevant trigger levels or relevant standards or guideline levels, a risk assessment report shall be produced by a suitably qualified and experienced independent advisor and provided to the Council (Manager Compliance) within four weeks of receipt of the second sample results. The assessment shall include the following:

i. Assessment of the likely source(s) of the contaminant(s) causing the observed trigger level exceedances(s).
ii. Risk to the environment.
iii. Risk to aquifer users.
iv. Proposed remediation measures to be undertaken to minimise the above effects (if necessary).

f. Undertake reasonable measures to minimise any effects identified in (~~c~~b).

49. To ensure the ground water samples are representative, ~~before sampling any well it should be purged of three times the well volume or by pumping at a low rate until the conductivity of the purged water stablished~~ all samples shall be collected using the purge method or low flow sampling methodology and criteria as outlined in the relevant National Environmental Monitoring Standard or equivalent document.

50. The groundwater shall be measured from the top of the casing, and recorded to the nearest 0.01 of a metre, at the time of sampling required by Conditions 42,43,44 and 45. A record of the date, time and water level in each groundwater monitoring well must be kept and results forwarded to the Council as specified in condition 46.

51. The consent holder shall install and maintain groundwater monitoring wells in a satisfactory condition. In the event of a groundwater monitoring well being destroyed or unsuitable for groundwater sampling the consent holder shall replace it with a new well in the same general location, unless otherwise agreed in writing by the Council (Manager Compliance).

Note: This consent does not authorise the drilling of additional bores. A specific "Bore Permit" must be obtained for each bore by the holder of this consent or their agent.

52. All sampling shall be carried out by a person suitably qualified and experienced in sampling procedures as authorised by the Council (Manager Compliance).

Stormwater:

53. The consent holder shall continuously monitor the inlet flow and the outlet flow to the ~~stormwater pond~~ Area B Stormwater Pond for electrical conductivity (mS/m).

54. If continuous monitoring results obtained at the pond outlet show electrical conductivity has exceeded the approved trigger level, then a grab sample of the 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.

55. If the results of any samples obtained from ~~stormwater pond system~~ the Area B Stormwater Pond show ~~that~~ leachate contamination or contamination by other pollutants associated with the consent holder's operations ~~is occurring~~, then the discharge from the ~~stormwater ponds outlet~~ Area B Stormwater Pond~~s~~ shall be ceased immediately. The following shall then occur:
    - Further testing of the stormwater shall be undertaken to characterise the contamination;

Commented [LA43]: Applicants' change – see evidence of Tony Reynolds, para 100

Commented [GU44R43]: HBRC agrees

PDP Comment - Could make it clearer with the start of conditions 48 c, d and e be changed to read ".....if any Group 1 and 2 determinands exceed the trigger levels (established in Condition 47) or if any Group 3 determinands exceed the relevant drinking water standards or water quality guidelines..."

Commented [LA45]: Council change – Applicants oppose. This is a standard procedure that would be expected to be included in a monitoring management plan and not a condition of consent

Commented [GU46R45]: HBRC agrees subject to comment from PDP:

PDP in agreement with referring to a plan e.g. Change condition to read "*All groundwater sampling shall be undertaken as described in the monitoring management plan agreed in writing by the Council (Manager Compliance)*" or similar.

- Downstream testing (of the ~~Farm Drain and~~ Upokohino Stream) shall be conducted to determine whether any contamination has been discharged from or escaped the stormwater pond;
- An investigation shall be undertaken to determine the source of the contamination;
- Measures shall be put into place to prevent further contamination; and
- Discharges of ~~stormwater from the relevant treatment device~~ Area B Stormwater Pond shall not recommence until electrical conductivity at the point of discharge no longer indicates ~~that contamination is occurring~~ the presence of leachate contamination or other pollutants associated with the consent holder's operations.

56. The Consent Holder shall ~~sample water at a point entering the Area B stormwater Treatment pond and the discharge outlet from the Area B treatment pond once a month when flow is present and determine the following:~~ collect water samples from both the point entering and discharging from the Area B Stormwater Pond. Water samples shall be collected when a flow is present, and at least monthly. The following shall be assessed:
    - Estimate of flow at the time of sampling
    - pH
    - Conductivity
    - Absorbance
    - Total Organic Carbon
    - Chloride
    - Potassium
    - Ammoniacal nitrogen
    - Nitrate nitrogen
    - Total phenols
    - Total ~~s~~Suspended solids
    - Total and dissolved ~~h~~Heavy metals (AL, AS, B, Cd, Cr, Co, CU, Fe, Pb, Mn, Ni, Hg, Zn).

    Monitoring of the Upokohino Stream, for the purpose of determining compliance with Condition 36 ~~55~~ for visual clarity, shall be undertaken at the same time as the Area B Stormwater Pond sampling specified in Condition 56.

57. ~~If runoff from areas of landfill cap on which leachate is being irrigated discharge to water diverted via the by-pass from the Area B site the consent holder shall sample at monthly intervals and analyse the following:~~ The Consent Holder shall collect stormwater runoff from areas where leachate is irrigated onto land. Water shall be collected immediately upstream of the by-pass around the Area B Stormwater Pond; ~~samples shall be collected at least at monthly intervals and when water is flowing.~~ The consent holder shall sample at monthly intervals when water is flowing and analyse for the following:
    - Conductivity
    - Ammoniacal nitrogen
    - Chloride
    - pH
    - COD

Advice Note: Routine sampling shall start once leachate irrigation commences. Should the runoff be from areas recently irrigated with leachate (within the last ~~XX~~14 days), then monitoring shall include the full suite of parameters as outlined in Condition 56.

57b. If the monitoring at the by-pass shows that leachate contamination or other pollutants associated with the consent holder's operations is occurring, then the untreated discharge

Commented [LA47]: Council change –Accept by Applicants subject to the proposed changes in green.

If contamination is shown in the SW pond downstream monitoring in the Farm Drain (in addition to Upokohino Stream) has been proposed by Council. The farm drain is likely to be of very poor quality and there will no baseline data for determining potential additional contamination.

Commented [GU48R47]: Not agreed

Commented [LA49]: Council change – Agreed by the Applicants. Cross referencing corrected to condition 36

Commented [GU50R49]: HBRC agrees

Commented [LA51]: Council change – Agreed by the Applicants subject to edits in green

Commented [GU52R51]: HBRC agrees

of stormwater runoff from areas of landfill cap on which leachate is being irrigated to the bypass shall cease immediately. The following shall then occur:

- Further testing of stormwater runoff shall be undertaken to characterise the contamination;
- Downstream testing shall be conducted to determine whether any contamination has been discharged to downstream surface water bodies (~~the Farm Drain~~ and Upokohino Stream);
- An investigation shall be undertaken to determine the source of the contamination;
- Measures shall be put into place to prevent further contamination; and

The diversion of runoff from areas of landfill cap on which leachate has been irrigated shall not recommence until subsequent sampling indicates that contamination is no longer occurring.

Commented [LA53]: Council change – Agreed by the Applicants subject to edits in green.

Commented [GU54R53]: Not agreed - PDP recommends the Farm Drain is still included

58. The consent holder shall undertake a programme of baseline monitoring to characterise water quality conditions in the Upokohino Stream receiving environment the prior to construction commencing. As a minimum the baseline monitoring programme shall include:

a. Establishment of water quality monitoring sites on the Upokohino Stream upstream of the discharge point to the stream, 50 m downstream of the discharge point and 500 m downstream of the discharge point.

b. Collection of water quality samples from the above sites on ~~six~~ ten occasions, ~~three~~five targeting dry weather and ~~three~~ five targeting wet weather conditions.

Commented [LA55]: Applicants' change. Changed for consistency with condition 59(b)

Commented [GU56R55]: HBRC agrees

c. Analysis of water quality samples by an IANZ accredited laboratory for the following parameters:
   - Suspended solids
   - Turbidity
   - pH
   - Conductivity
   - Total Organic Carbon
   - Chloride
   - Potassium
   - Ammoniacal nitrogen
   - Nitrate nitrogen
   - Total phenols
   - Total suspended solids
   - Heavy metals (AL, AS, B, Cd, Cr, Co, CU, Fe, Pb, Mn, Ni, Hg, Zn).

59. The Consent Holder shall prepare Stormwater Receiving Environment Monitoring Plan (SREMP) for technical certification, by an independent and suitably qualified freshwater ecologist, following completion of the baseline monitoring. The SREMP shall include but not be limited to:

a. The results of the baseline monitoring undertaken in accordance with Condition ~~46~~58.

b. The baseline water quality for all monitoring sites listed in condition 58 shall be ~~undertaken~~ used to establish trigger levels. Trigger levels for suspended sediment effects on water quality in Upokohino Stream shall be established by the consent holder. The criteria for setting the trigger levels shall be two standard deviations of the baseline data from the mean calculated from at least ten baseline samples collected prior to construction, unless alternative trigger levels are agreed with the Council (Manager Compliance) in writing.

Commented [LA57]: Council change – Agreed by the Applicants subject to edits in green.

Commented [GU58R57]: HBRC agrees

c. Construction phase monitoring of the Upokohino Stream comprising water quality sampling at the three Upokohino Stream sites sampled in the baseline monitoring programme and the discharge from the stormwater treatment system. Samples shall be collected at

approximately quarterly intervals when a discharge is occurring and analysed for total suspended solids and turbidity.

d. Operational phase monitoring of the Upokohino Stream comprising water quality sampling at the three Upokohino Stream sites sampled in the baseline monitoring programme and the discharge from the stormwater treatment system. Samples shall be collected at approximately quarterly intervals when a discharge is occurring and analysed for the parameters listed in Condition ~~47~~58(c) above.

e. Annual instream sediment quality and macroinvertebrate monitoring undertaken at the established Upokohino Stream sites. Sediment samples shall be analysed by an IANZ accredited laboratory for total recoverable heavy metals (AL, AS, B, Cd, Cr, Co, CU, Fe, Pb, Mn, Ni, Hg, Zn).

f. The anticipated adaptive management responses should the monitoring identify adverse effects in the Upokohino Stream and consider the potential for adverse effects in downstream receiving environments (Tutaekuri River and Lake Te Rotokare) due to the stormwater discharge.

~~g. The adaptive management plan should include an algal cyanobacteria bloom response plan, this response plan should outline steps the Applicant will do in the event of an algal bloom including testing and mitigation/management.~~

h. Reporting and review SREMP review requirements.

Subsoil drainage:

60. The consent holder shall sample the discharge from the subsoil drains beneath the lining system (if installed) at the downstream extent of the drainage system, prior to mixing with surface water. Sampling shall occur during the months of January, April, July and October each year and analysed for the following:

a. Electrical conductivity; mS/m
b. Temperature °C
c. pH;
d. Total Ammoniacal Nitrogen; gN/m_3,
~~e. Nitrate Nitrogen; gN/m_3~~
~~f. Total Nitrogen; gN/m_3~~

61. All sampling shall be carried out be a person suitably qualified and experienced in sampling procedures as authorised by the Council (Environmental Regulation Section). The results of the sampling shall be forward to the Council (Environmental Regulation Section) within one month of the sampling results being received.

Reporting

62. The Consent Holder shall provide to the Council an Annual report by 30 November each year providing the following:

a. Surface water monitoring results for the year as required by Conditions ~~21 and 22~~ 55, 56 and 57 with a comparison of the results with trigger levels and any relevant water quality guidelines;
b. An interpretation of the surface water monitoring results, including compliance with Condition 22; and
c. Contingency measures undertaken to address any exceedances over the reporting period.
d. Leachate monitoring results for the previous year's results (November to October) as required in conditions 40 and 41.
e. Groundwater monitoring results for the previous year (November to October) ~~as required~~ with a comparison of the results with trigger levels and any relevant drinking water standards or water quality guidelines;

Commented [LA59]: Council change – Agreed by the Applicants subject to changes in green.

Commented [GU60R59]: HBRC agrees

Commented [LA61]: Council change – opposed by Applicants. See evidence of Dean Miller, para 55 and recommended addition to Condition 6

.

Commented [GU62R61]: HBRC agrees (due to subsequent change to Condition 6)

Commented [LA63]: Council change -opposed by Applicants. Refer to Para 80 in tony Bryce's evidence

Commented [GU64R63]: HBRC agrees given ammoniacal nitrogen dominant

f. An interpretation of the results;
g. Contingency measures undertaken to address any exceedances over the reporting period.

Closure

63. Not less than six months prior to completion of filling Area B the consent holder shall provide the Council (Manager Compliance) for approval a Closure and Aftercare Plan addressing at least the following issues:

a. Responsibilities for aftercare;
b. Final contours;
c. Capping and revegetation;
d. Operation and management of leachate management systems;
e. Responsibilities for ongoing monitoring, including groundwater and landfill capping.

Air discharge consent – LFG combustion from Areas A, B and D.

1. The consent holder shall undertake all operations generally in accordance with any drawings, specifications, statements of intent, proposed mitigation measures and other information supplied to the Regional Council in relation to this resource consent. Specifically, this includes the following documents:

a. Resource consent application to change conditions of consent, received by Regional Council December 2019, including Omarunui Landfill – Area B – Assessment of Effects on the Environment, dated December 2020 ~~2019~~.

b. Omarunui Landfill – Area B: Further Information (s92 RMA), report prepared for Hastings District Council by Tonkin & Taylor, August 2004.

c. Omarunui Landfill – Area B: Further Information (s92 RMA), report prepared for Hastings District Council by Tonkin & Taylor, September 2020.

d. Omarunui Landfill Operations and Maintenance Manual prepared by ~~Stantec Ltd for~~ Hastings District Council updated in accordance with condition 2 below.

Commented [LA65]: Applicants' change

Commented [GU66R65]: HBRC agrees

Commented [LA67]: Applicants' change

Commented [GU68R67]: HBRC agrees

Commented [LA69]: Applicants' change

Commented [GU70R69]: HBRC agrees

Operation and Maintenance

2. Within six months of the commencement of this consent the consent holder shall update the Landfill Operations and Maintenance Manual to ensure that it is consistent with the conditions of this consent and shall provide certification of such actions to Council. In particular, the O&M Manual shall describe:

a. Weather monitoring

b. The process and timing for installing landfill gas collection systems, to provide extraction as soon as practicable, including methods to achieve compliance with condition 5.

c. Contingency measures to respond to odour events

d. Management of putrescible and odorous wastes

e. Typical contingency measures for responding to exceedances of trigger levels

3. The consent holder shall cover the refuse at the landfill at the end of each working day, in accordance with condition 26 of the Solid Waste Consent number XXXXX.

Commented [GU71]: HBRC new change as at 28.10.21.

4. The consent holder shall install and maintain a landfill gas collection and combustion system that meets the flaring requirements in the Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Dioxins and Other Toxics) Regulations. ~~The consent holder shall maximise the quantity of landfill gas collected, taking account of the nature of the final capping.~~

~~5. The consent holder shall design, install and manage the landfill gas collection system to optimise the gas collection quantity as early as possible from placement of waste.~~

Commented [LA72]: Council change – opposed by Applicants. Covered by Condition 6, bullet point 4 in the Air Discharge conditions for Area B

Commented [GU73R72]: Not agreed by HBRC

6. The concentration of methane at the surface of landfill area with intermediate or final cover shall not exceed 5,000 parts of methane per million parts of air in accordance with Regulation 26(2)(a) of the Resource Management (National Environment Standards for Air Quality) Regulations 2004 (NESAQ).

7. The principal flare shall be operated and maintained in accordance with protocols set out in Regulation 27 of the Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Dioxins, and Other Toxics) Regulations 2004.

8. A principal flare ~~shall~~ must be operated ~~and operated~~ at all times unless it has malfunctioned or is shut down for maintenance or all of the gas is being utilised for generating electricity.

9. A backup flare must be operated if, and only if, a principal flare is not operating and the gas is not being utilised for generating electricity. The system for the backup flare must comply with NESAQ Regulation 27 (3) a-d.

10. The consent holder shall ensure that maintenance of the landfill gas collection and destruction system occurs at least every six months. This maintenance shall ensure that all mechanical, electrical and process components of the system are functioning properly. The results of these maintenance checks shall be forwarded to the Hawke's Bay Regional Council (Environmental Regulation) within one month of the maintenance check being carried out.

Monitoring

11. A walkover site inspection within the landfill footprint shall be undertaken no less frequently than weekly. Any evidence of actual or potential landfill gas leaks, such as odour, 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.

12. The Consent Holder shall carry out continuous landfill gas monitoring as follows: At the inlet to the flare or gas engine:

a. Gas flow rate
b. Methane (%)
c. Carbon dioxide (%)
d. Oxygen (%)

Within the flare:

e. Temperature of combusted gas within the flare

Reporting

13. The consent holder shall provide to the Council an Annual report by 30 November each year providing the following:

a. Landfill gas monitoring results for the year as required in condition 12;
b. An interpretation of the results; and
c. Contingency measures or action taken to address any fugitive gas discharges, and/or optimise landfill gas capture rates.

14. The consent holder shall nominate a person who is responsible for the maintenance of the landfill gas collection and destruction system and the return of information (as required by condition 13). The consent holder shall advise the Hawke's Bay Regional Council (Environmental Regulation) who this person is within two months of the commencement of this consent. If the nominated person changes then the Regional Council shall be notified of this change within ten working days of the change occurring.

Draft amendments to Air Discharge Consent AUTH-113990-03

Deletions are shown as ~~strike through~~, additions are underlined.

Purpose

To discharge the following contaminants into the air from Areas A and D of the Omarunui Landfill:

i. Odour and landfill gas derived from the decomposition of refuse, and

ii. Dust,

~~*iii. The products of controlled combustion of landfill gas.*~~

General

1. The consent holder shall undertake all operations generally in accordance with any drawings, specifications, statements of intent, proposed mitigation measures and other information supplied to the Regional Council in relation to this resource consent. Specifically, this includes the following documents:
   a. Omarunui Landfill Development: Assessment of Effects on the Environment, report prepared for Hastings District Council by Tonkin & Taylor, April 2004.
   b. Omarunui Landfill Development: Further Information (s92 RMA), report prepared for Hastings District Council by Tonkin & Taylor, August 2004.
   c. ~~Landfill Procedures Manual LFP 13, LFP 19 & LFP 12, Hasting District Council and Napier City Council.~~ Omarunui Landfill Operations and Maintenance Manual prepared by Hastings District Council updated in accordance with condition 6 below.
   ~~d. Resource consent application to change conditions of consent, received by Regional Council on 15 July 2013, including Assessment of Environmental Effects of Proposed Change of Consent Conditions, dated 10 July 2013, T&T Ref: 23254.004, addressed to Martin Jarvis, prepared by Brent Kennedy, Senior Environmental Scientist of Tonkin and Taylor Limited.~~
   e. […]

Where a conflict arises between any conditions of this consent and the application, the conditions of this consent will prevail.

Limit Conditions

2. There shall be no objectionable discharge of dust beyond any legal boundary of the subject property. The consent holder shall operate the landfill in such a manner that the generation of dust is kept to a practicable minimum.

~~3.~~ There shall be no offensive or objectionable discharge of odour beyond any legal boundary of the subject property. ~~When assessing whether odour is offensive or objectionable, the Council shall follow the procedure outlined in the Proposed Regional Resource Management Plan (June 2010, section 6.1.4 pages 143-1445).~~

4. The concentration of methane in monitoring probes outside the landfill footprint shall not exceed 1.25% by volume.

5. The concentration of methane at the surface of the landfill areas with intermediate or final cover shall not exceed 0.5% by volume.

Operation and Maintenance

6. Within six months of the commencement of this consent the consent holder shall update the ~~Landfill Procedures Manual~~ Omarunui Landfill Operations and Maintenance Manual to ensure that it is consistent with the conditions of this consent and shall provide certification of such actions to Council.

Commented [LA74]: Applicants' change – reference updated to O & M Manual

Commented [AD75R74]: HBRC did not comment

Commented [LA76]: Applicants' change – out of date reference.

Commented [AD77R76]: HBRC did not comment

Commented [LA78]: Applicants' change – updated to refer to O & M manual

Commented [GU79R78]: HBRC agrees

7. The consent holder shall cover the refuse at the landfill at the end of each working day.

8. The consent holder shall maximise the quantity of landfill gas collected, taking account of the nature of the final capping.

~~9. The flare shall be operated and maintained in accordance with protocols set out in Regulation 27 of the Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Dioxins, and Other Toxics) Regulations 2004 (Attachment 2). Any electricity generator shall comply with clauses (a) to (c) of Regulation 27.~~

~~10. A principal flare must be operated at all times unless it has malfunctioned or is shut down for maintenance of the gas is being utilised for generating electricity.~~

~~11. A backup flare must be operated if, and only if, a principal flare is not operating or the gas is not being utilised for generating electricity. The system for the backup flare must comply with Regulation 27 (2) a-d (Attachment 2).~~

~~12. The consent holder shall ensure that maintenance of the collection and destruction system occurs at least every six months. This maintenance shall ensure that all mechanical, electrical and process components of the system are functioning properly. The results of these maintenance checks shall be forwarded to the Hawke's Bay Regional Council (Environmental Regulation) within one month of the maintenance check being carried out~~

Monitoring

13. The consent holder shall ensure the surface emissions of landfill gas are monitored during the months of January, April, July and October for percentage (%) methane. Sampling shall be undertaken generally in accordance with the sampling protocols set out in the Ministry for the Environment National Environmental Standards: Control of Landfill Gas 2004 (Attachment 3).

~~14. The consent holder shall carry out landfill gas monitoring at a point incoming to the flare during the months of January, April, July and October and record the following:~~

~~a. Date and time that monitoring started and finished~~
~~b. Gas flow rate~~
~~c. Gas pressure- Barometric pressure~~
~~d. Methane (%)~~
~~e. Carbon dioxide (%)~~
~~f. Oxygen (%)~~
~~g. Gas temperature~~
~~h. Ambient temperature~~

15. A maximum of five monitoring probes shall be installed at representative locations outside of the landfill footprint area in order to assess compliance with condition 13.

16. The consent holder shall measure and record methane concentrations in each of the monitoring probes outside the landfill footprint area during the months of January, April, July and October to demonstrate compliance with condition 13.

Reporting

17. The consent holder shall provide to the Council an Annual report by 30 November each year providing the following:

a. Landfill gas monitoring results for the year as required in condition 13;
b. An interpretation of the results; and
c. Contingency measures or action taken to address any fugitive gas discharges.

18. The consent holder shall nominate a person who is responsible for the maintenance of the gas collection and destruction system and the return of information (as required by condition 13). The consent holder shall advise the Hawke's Bay Regional Council (Environmental Regulation) who this person is within two months of the commencement of this consent. If the nominated person changes then the Regional Council shall be notified of this change within ten working days of the change occurring.

19 The consent holder shall log all odour complaints received. The log shall include:
a. The date and time of the complaint;
b. The nature of the complaint;
c. The name, telephone number, and address of the complainant;
d. Weather information (an estimate of wind speed and direction);
e. Details of key operating parameters at the time of the complaint.

Complaints shall be reported to the Council immediately and the log of complaints shall be made available to the Council on request.

Draft amendments to Leachate Discharge Consent AUTH-122021-01

Deletions are shown as ~~strike through~~, additions are underlined

1. The consent holder shall undertake all operations generally in accordance with any drawings, specifications, statements of intent, proposed mitigation measures and other information supplied as part of the application for this resource consent. Specifically this includes the following documents:

a. Report: "Omarunui Landfill Leachate Irrigation: Assessment of Effects on the Environment", prepared for Hastings District Council by Tonkin & Taylor, February 2016, Job no. 24488.3000 and as modified by the report Omarunui Landfill Area B – Assessment of Effects on the Environment, dated December 202019.

b. Site Plan: ~~"Area A Leachate Irrigation Omarunui Landfill~~ Omarunui Landfill Area B Development Leachate Irrigation Areas", Drawn by: Tonkin + Taylor, Dwg No. 1000647.1000-31 ~~Project No. 24488.300~~, attached as Appendix 1.

Where a conflict arises between any conditions of this consent and the application, the conditions of this consent will prevail.

2. All works and structures relating to this consent shall be installed and maintained to conform to best engineering practices.

3. After completion of installation of the leachate system (irrigation system), the consent holder shall provide the Council (Manager Compliance) with an 'as built' plan of the fixed components of the leachate discharge system and a site plan that clearly shows its location, layout and all setback distances from the surface water bodies detailed by Condition 4.

4. The consent holder shall ensure that no leachate is applied using surface irrigation within 10 metres of any stormwater drain, overland flow paths or other surface water body.

5. Leachate shall be applied at a rate and in a manner which does not cause ponding within the leachate irrigation area or run-off from the leachate irrigation area to the extent that it causes the contamination of surface water (including stormwater).

6. The consent holder shall update the Omarunui Landfill Operation and Maintenance Manual to describe the operation of the leachate irrigation system in accordance with this consent. In particular, the O&M Manual shall describe:

a. Procedures for avoiding run-off to surface water drains

b. Procedures for the control of irrigation to prevent wind drift of leachate to surface water drains.

c. The use of soil moisture probes as a management tool for operating the irrigation field to inform the level of irrigation that is appropriate on any day.

7. The consent holder shall prepare and submit to the Council (Manager Compliance) a leachate irrigation monitoring and record keeping plan. This plan shall, to the satisfaction of the Council (Manager ~~Resource Use~~ Compliance), include but not be limited to the following monitoring and record keeping:

a. Measurement and recording of ~~daily rainfall~~ weather conditions at the site, including temperature, rainfall, barometric pressure wind velocity and wind direction;

b. Volume of leachate ~~pumped from the reservoir~~ irrigated each day;

c. Records of areas irrigated each day;

d. Visual inspections for any overland flow (that may contaminate stormwater) in the irrigation area each day.

Commented [LA80]: Applicants' change

Commented [GU81R80]: PDP in agreement

Commented [AD82R80]: HBRC did not comment

e. Visual inspections of the leachate irrigation system to ensure it is being maintained to prevent leachate leakages and the irrigation pods are calibrated to ensure that application rates are appropriate to prevent ponding.

f. Annual soil permeability and soil sodium concentration monitoring within the irrigation area and non-irrigated area. ~~The frequency of this monitoring will be reviewed after three years upon which it may be reduced with agreement from Hawke's Bay Regional Council~~. This monitoring shall include:

   i. A representative composite sample collected at 6 locations within the irrigated area and assessed for ESP (exchangeable sodium percentage) and compared to non-irrigated areas.

   ii. At least ~~6~~ 3 cores collected for top soil and ~~6~~ 3 cores for subsoil K_{sat} and K_{-40} analysis and compared to non-irrigated areas.

g. Monitoring of surface drains once per month during rainfall downstream of irrigation areas.

h. Sampling of any flow in stormwater drains that occurs during dry weather conditions.

8. For the duration of the discharge, the consent holder shall undertake monitoring and record keeping in accordance with the monitoring plan submitted in accordance with condition 6 and this information shall be made available to Council upon request.

9. In the event that monitoring undertaken in accordance with the monitoring plan, required by condition 7, indicates that leachate has entered stormwater, the consent holder shall:

a. Take all practicable steps to prevent any further contamination of the stormwater system occurring; and

b. Report to the Council, in writing and within 7 days of obtaining the monitoring data which identified the event, describing the manner and cause of the event and the steps taken to control it and prevent is reoccurrence.

10. That where contaminants associated with the discharge of leachate to land accidentally escape to water the consent holder shall:

a. Immediately take all practicable steps to contain and then remove the contamination from the environment; and

b. Immediately notify the Council of the scape; and

c. Report to the Council, in writing and within 7 days, describing the manner and cause of the escape and steps taken to control it and prevent its reoccurrence.

11. The consent holder shall ensure that any staff member of contractor engaged to operate the leachate irrigation system is made aware of the conditions of this consent.

12. The consent holder shall ensure that any Standard Operating Procedures and/or any process procedures manual for the landfill will be updated and amended to reflect the requirements of this consent. Prior to the discharge commencing, the consent holder shall provide confirmation in writing to the Council (Manager Compliance) that these actions have been undertaken.

13. The consent holder shall engage an independent, suitably experienced and qualified person to undertake an assessment of emerging contaminants (in soil and runoff) every 5 years.

Commented [TB83]: Council change – opposed by Applicant. Provides appropriate means for reviewing frequency.

Commented [GU84R83]: Not agreed by HBRC

Commented [TB85]: Council change – accepted by Applicant except permeability samples to number 3 in each layer in accordance with the Applicant's s92 response.

Commented [GU86R85]: Not agreed / different wording sought by HBRC

Leachate Monitoring Determinands referred to in Conditions Above:

GROUP ONE

Determinand	Units	Detection limit
Dissolved Oxygen	g/m^3	on site
pH (field and laboratory)		0.2
Conductivity (field and laboratory)	mS/m	0.1
Absorbance	AU	0.002
Chloride	g/m^3	0.5
Potassium	g/m^3	0.05
Total Organic Carbon	g/m^3	0.5
Ammoniacal Nitrogen	g/m^3	0.01
Nitrate-Nitrogen	g/m^3	0.002
Volatile fatty acids (total)	g/m^3	0.5
Chemical Oxygen Demand (COD)	g/m^3	6.0
Alkalinity (as $CaCO_3$)	g/m^3	1

GROUP TWO

Determinand	Units	Detection limit
Biochemical Oxygen Demand (BOD_5)	g/m^3	1.0
Sodium	g/m^3	0.02
Calcium	g/m^3	0.05
Magnesium	g/m^3	0.02
Sulphate	g/m^3	0.5
Sulphide	g/m^3	0.002
Total Kjeldahl Nitrogen	g/m^3	0.1
Dissolved Reactive Phosphorus	g/m^3	0.004
Total Phosphorus	g/m^3	0.004
Total Phenols	g/m^3	0.002
Total CN	g/m^3	0.001
Al (See Footnote for method)[a]	g/m^3	0.003
As (See Footnote for method)[a]	g/m^3	0.001
B (See Footnote for method)[a]	g/m^3	0.005
Cd (See Footnote for method)[a]	g/m^3	0.00005
Co (See Footnote for method)[a]	g/m^3	0.0002
Cr (See Footnote for method)[a]	g/m^3	0.0005
Cu (See Footnote for method)[a]	g/m^3	0.0005
Fe (See Footnote for method)[a]	g/m^3	0.02
Mn (See Footnote for method)[a]	g/m^3	0.0005
Ni (See Footnote for method)[a]	g/m^3	0.0005
Pb (See Footnote for method)[a]	g/m^3	0.0001
Hg (See Footnote for method)[a]	g/m^3	0.00008
Se (See Footnote for method)[a]	g/m^3	0.001
Zn (See Footnote for method)[a]	g/m^3	0.001

GROUP THREE

Volatile Organic Compounds (VOC)	g/m^3	0.003 – 0.02[b]
Semi Volatile Organic Compounds (SVOC)	g/m^3	0.003 – 0.02[b]
Pentachlorophenol (PCP) (leachate only)[c]	g/m^3	0.0003
Polychlorinated biphenyls (PCB) (leachate only)[c]	g/m^3	0.0001
Organonitrogen & Organophosphorus (ONOP) pesticides (leachate only)[c]	g/m^3	varies

Proposed Air Discharge Consent for Area B - AUTH-127503-01

Purpose

To discharge the following contaminants into the air from Areas B of the Omarunui Landfill:

i *Odour and landfill gas derived from the decomposition of refuse, and*

ii *Dust.*

General

1 The consent holder shall undertake all operations generally in accordance with any drawings, specifications, statements of intent, proposed mitigation measures and other information supplied to the Regional Council in relation to this resource consent. Specifically this includes the following documents.

a Resource consent application to change conditions of consent, received by Regional Council December 2019, including Omarunui Landfill – Area B – Assessment of Effects on the Environment, dated December 202019.

b Omarunui Landfill – Area B: Further Information (s92 RMA), report prepared for Hastings District Council by Tonkin & Taylor, August 2020.

c Omarunui Landfill Operations and Maintenance Manual prepared by Hastings District Council updated in accordance with condition 6 below.

Where a conflict arises between any conditions of this consent and the application, the conditions of this consent will prevail.

Limit Conditions

2 There shall be no objectionable discharge of dust beyond any legal boundary of the subject property. The consent holder shall operate the landfill in such a manner that the generation of dust is kept to a practicable minimum.

3 Beyond the boundary of the site there shall be no offensive or objectionable odour caused by discharges from the landfill operations on the site.

Advice Note:

When assessing whether odour is offensive or objectionable, the Council shall follow the procedure outlined in the Hawke's Bay Regional Resource Management Plan (June 2010, section 6.1.4 pages 117-118).

4 The concentration of methane in monitoring probes outside the landfill footprint shall not exceed 1.25% by volume.

5 The concentration of methane at the surface of the landfill areas with intermediate or final cover shall not exceed 0.5% by volume.

Operation and Maintenance

6 Within six months of the commencement of this consent the consent holder shall update the O & M Manual to ensure that it is consistent with the conditions of this consent and shall provide certification of such actions to Council. In particular, the O&M Manual shall include procedures relating to the following:

– Advance notification, identification and management of odorous and putrescible waste loads.

Commented [AD87]: HBRC has indicated they intend to table changes to this condition, provided to the Applicants on 26 October 2021. Those changes are not currently before the Commissioners and are not included here.

Commented [LA88]: Applicants' change

Commented [GU89R88]: HBRC agrees

Commented [LA90]: Applicants' change

Commented [GU91R90]: No comment from HBRC other than to say "PDP notes condition number to be updated"

- Tipping and placement of waste at the active working face, including minimisation of working face area, exclusion of odorous waste where practicable and application of daily cover.
- Application and maintenance of cover materials to minimise odour emissions from filled areas.
- Installation, operation and maintenance of landfill gas collection and treatment systems, including timing of installation to provide extraction as soon as practicable.
- Collection, storage and recirculation of leachate.
- Monitoring of landfill operations to minimise untreated odour and landfill gas releases.
- Contingency measures to respond to release of odour or landfill gas events.

7 The working face of the daily waste cell shall be kept to a practicable minimum and shall not exceed 1,200 m^2.

8 Daily cover shall be placed over the entire working face (excluding areas of inert waste) by the end of each operating day and no refuse shall remain exposed overnight. Daily cover shall be a nominal 150 mm thickness of soil, but may also be one of a number of non-soil alternative daily cover (ADC) options of an appropriate thickness where it can be demonstrated that they achieve a comparable level of control with respect to discharges of odour or dust to air, vermin, birds, litter, and off-site visual effects. An equivalent alternative daily cover may be used with the prior certification of the Council.

9 Daily cover shall be removed by cutting windows through the previous layer of daily cover before refuse placement at the start of each day.

10 The consent holder shall install a gas collection and flaring system in accordance with *Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Dioxins and Other Toxics) Regulations 2004.* The consent holder shall maximise the quantity of landfill gas collected, taking account of the nature of the final capping.

Monitoring

11 The consent holder shall ensure the surface emissions of landfill gas are monitored during the months of January, April, July and October for percentage (%) methane. Sampling shall be undertaken generally in accordance with the sampling protocols set out in the *Ministry for the Environment National Environmental Standards: Control of Landfill Gas 2004* (Attachment 3).

12 The consent holder shall measure and record methane concentrations in each of the monitoring probes outside the landfill footprint area during the months of January, April, July and October to demonstrate compliance with condition 11.

Reporting

13 The consent holder shall provide to the Council an Annual report by 30 November each year providing the following:

a Landfill gas monitoring results for the year as required in condition 12;

b An interpretation of the results; and

c Contingency measures or action taken to address any fugitive gas discharges.

14 The consent holder shall nominate a person who is responsible for the maintenance of the gas collection and destruction system and the return of information (as required by condition 11). The consent holder shall advise the Hawke's Bay Regional Council (Environmental Regulation) who this person is within two months of the commencement of this consent. If the nominated person changes then the Regional Council shall be notified of this change within ten working days of the change occurring.

15 The consent holder shall log all odour complaints received. The log shall include:

i The date and time of the complaint;

ii The nature of the complaint;

iiiThe name, telephone number, and address of the complainant, where available;

ivWeather information (an estimate of wind speed and direction);

v Details of key operating parameters at the time of the complaint.

Complaints shall be reported to the Council immediately and the log of complaints shall be made available to the Council on request

Appendix B – Proposed Alteration to Designation

OMARUNUI LANDFILL - MANAGEMENT PLAN

1. INTRODUCTION

Although almost all the 178.72 hectares of Part Section 18 Survey Office Plan 2522 is designated, only part will be used for waste disposal, while other areas will be used for activities ancillary to waste disposal and land based primary production.

The extent to which the land may be used is shown on Landfill Development Areas- Site Plan Figure 1, prepared by Tonkin + Taylor, ~~May 2018~~ September 2019.

The use of the site for regional waste disposal operations shall be its designated purpose subject to the conditions, restrictions and prohibitions which are specified below.

2. PERMITTED ACTIVITIES

The following shall be the permitted activities in respect of the designated site.

(a) Disposal of municipal solid waste in accordance with best practice landfill operation in Areas A, B, C and D.

(b) Disposal of cleanfill in Area E.

Cleanfill is defined as “natural materials such as clay, soil, rock and such other materials as concrete, brick, old asphalt or demolition products that are free of:

i. Combustible or putrescible components apart from up to 10% by volume untreated timber in each load.
ii. Hazardous substances or materials (such as municipal waste) likely to create leachate by means of biological or chemical breakdown.
iii. Any products or materials derived from hazardous waste treatment, stabilisation or disposal processes."

(c) Ancillary activities and facilities associated with (a) and (b)above.

(d) All necessary buildings associated with (a) and (b) above.

(e) All works associated with (a) and (b) above.

(f) Combustion of landfill gas and the generation of electricity and the construction, operation and maintenance of associated ~~facilites~~

facilities and infrastructure.

PROVIDED THAT:
All the above shall include, and be restricted to those uses and activities which are contemplated by the conditions and the Management Plan specified in 4 below.

3. STANDARDS

The following standards shall apply to all activities permitted in 2 above.

The conditions relating to the use of the designated site are:

(i) That the site shall be established and operated substantially in accordance with the Management Plan set out in 4 below and any deviation from that plan arising from unexpected contingencies shall require the prior approval of the Hawke's Bay Regional Council.

(ii) That the access to the site shall be limited to approved bulk carriers as set out in the said Management Plan and no public access to the site for cars, trailers and light loads will be permitted unless it is for purpose of disposal of special waste.

(iii) That any necessary resource consents which may be required pursuant to the Resource Management Act 1991 are to be obtained.

(iv) That before starting the preparation and use of new municipal solid waste disposal areas as identified on Landfill Development Areas - Site Plan - Figure 1, prepared by Tonkin + Taylor, ~~May 2018~~ September 2019, complete plans and specifications for that area (including the final landscape plan) shall be prepared and followed.

(v)(a) That as part of the preparation of plans and specifications for Areas A, B, C and D identified on Landfill Development Areas - Site Plan - Figure 1, prepared by Tonkin + Taylor, ~~May 2018~~ September 2019, engineering geology investigationsare to be undertaken. The investigations shall include:-

1. accurate geological mapping of the waste disposal area and the immediately surrounding area;

2. the appropriate number of shallow diamond drill holes with continuous coring and permeability testing in the waste disposal area;

3. shallow investigation trenches to correlate between drill holes

and natural outcrops.

4. grainsize and permeability studies on the naturally occurring soil cover and post Nukumaruan sediments;

5. grainsize, compaction and permeability tests on material potentially suitable as a compacted, impermeable blanket. If such materiel is found on site, borrow areas are to be defined.

6. identification and definition of potential borrow areas of refuse cover material;

7. identification and recording of relatively permeable layers both prior to and during the course of site preparation;

(b) The foregoing investigations and the necessary sealing shall be carried in accordance with the relevant resource consent approvals to the satisfaction of the Hawke's Bay Regional Council.

(c) No waste disposal shall take place in any area until the required resource consent approvals have been obtained from the Hawke's Bay Regional Council. The permeability K value relating to the material forming the seal shall be no greater than that allowed by the relevant resource consent approvals.

(vi) A programme of regular water quality monitoring shall be carried out as agreed with the Hawke's Bay Regional Council. The programme should include:

(a) recording of current and intended land uses;

(b) recording of locations of existing boreholes and current and intended use of the water

(c) establishment of additional sampling points where necessary;

(d) ground water analysis from selected areas to provide baseline data for reference purposes.

(vii) In the event of any archaeological evidence, taonga or koiwi being discovered during the works authorised by this consent, the Requiring Authority shall immediately cease work at the affected site and secue the area. The Requiring Authority shall then consult with the relevant local hapū and Heritage New Zealand and shall not recommence works in the area of the discovery until the relevant Heritage New Zealand Pouhere Taonga archaeological authorities under the Heritage New Zealand Pouhere Taonga

Act 2014 to damage, destroy or modify such sites have been obtained.

4. MANAGEMENT PLAN

The operation of the municipal solid waste landfill and cleanfill shall be in accordance with the following Management Plan:-

MANAGEMENT PLAN FOR THE OPERATION OF THE OMARUNUI LANDFILL AND CLEANFILL

This Management Plan shall apply to the land situated on Omarunui Road, Omarunui, more particularly described as Part Section 18 Survey Office Plan 2522 comprising 178.726hectares.

The regional waste disposal site will be operated in accordance with accepted national and international best landfill practice and will comply with all relevant designation, by-law and resource consent requirements.

To comply with these requirements, the following measures will be implemented:

1.0 AREA OF SITE TO BE USED

1.1 Waste Disposal Area

Areas A, B and D and part of Area ~~C~~~~The first part of the site to be used for municipal solid waste disposal shall be'Area A' with subsequent use of those areas identified~~ on Landfill Development Areas - Site Plan - Figure 1, prepared by Tonkin +Taylor, ~~May 2018~~ September 2019 have been identified as being suitable for municipal solid waste disposal ~~in the future~~. The balance of 'Area C' ~~and 'Area B' have~~ has not yet been investigated to a stage where ~~they~~ it can be confirmed suitable for municipal solid waste disposal andshall not be used for waste disposal purposes until allowed by an alteration tothe designation.

Area E identified on Landfill Development Areas – Site Plan - Figure 1, prepared by Tonkin + Taylor, ~~May 2018~~ September 2019 shall be used for the disposal of cleanfill only.

1.2 Buffer Area

The buffer area shown on Landfill Development Areas- Site Plan- Figure 1, prepared by Tonkin + Taylor, ~~May 2018~~ September 2019 shall not be used for waste disposalor for the collection and disposal of leachate.

1.3 Tree Planting

Tree planting on the site shall be implemented in accordance with the final landscape plan prepared and approved for each waste disposal area. Prior to

the use of Area B for waste disposal this shall include the planting in indigenous species of the area identified on the Area B Landscape Plan (Sheet 04) prepared by Wayfinder Landscape Planning & Strategy Ltd, dated 31 August 2021.

1.4 Landfill Gas to Energy Plant

The Landfill Gas to Energy Plant will be located on the Omarunui landfill site adjacent to Area A as identified on the drawings Landfill Development Areas – Site Plan - Figure 1, prepared by Tonkin + Taylor, May 2018. The site will be used for the combustion of landfill gas and the generation of electricity and will house the appropriate infrastructure for this purpose.

The Landfill Gas to Energy Plant shall be appropriately designed to minimise potential adverse landscape and visual effects through the use of neutral grey colours to blend into the landscape.

The Landfill Gas to Energy Plant shall be designed and operated to ensure District Plan noise limitations are met at the nearest legal boundary or notional boundary (measured 20m from the façade of any dwelling-house).

2.0 SITE MAINTENANCE

2.1 Fencing

Sufficient security and stockproof fencing together with the necessary gates, will be provided to control illegal access to the site. Stock shall be excluded from landfill areas while they are being used for waste disposal and from leachate ponds and stormwater ponds at all times.

2.2 Buildings

An entrance gate office will be provided near Omarunui Road for control of users. A staff building with amenities, and a plant and stores building will be provided at the site. Communications by telephone and/or radio will be maintained.

2.3 Foundation Preparation

Temporary drains will be provided to intercept surface run-off and direct it around the waste disposal areas, their grades being such as to limit velocity and minimise scour. Silt traps shall be constructed to treat silt-laden water occurring from all associated earthworks.

The municipal solid waste disposal areas will be prepared in accordance with the approved waste disposal plans.

Ground disturbance and edge cutting should be kept to a minimum. Should any weaknesses be discovered in the course of excavations as would allow a

rise in ground water level, then suitable under-drainage systems will be installed to lead such water to stormwater disposal outlets. Similarly, when any pervious or semi-pervious layers are encountered during benching operations, then measures will be taken to prevent the ingress of liquid to such layers.

2.4 Leachate Collection and Treatment

Leachate collection, treatment and disposal for municipal solid waste disposal areas shall be undertaken in accordance with the approved engineering plans and the relevant resource consent approvals.

Regular sampling and analysis of stream water below the waste disposal areas shall be undertaken as required by the relevant resource consent approvals.

2.5 Fire Protection

The intentional burning of waste will not be permitted. For control of inadvertent fires, an adequate water supply will be maintained by construction of a water retention dam. In dry periods the water retention dam shall be topped up by the site water supply system as necessary. Portable fire fighting pumps will be maintained in good working condition on site and stockpiles of spoil will be kept within reasonable distance of the working area for smothering purposes. Suitable fire extinguishers will be maintained in working order at each site building.

3.0 LANDFILL OPERATIONS

3.1 Times of Opening

The hours of operations, other than in emergencies, will not be in excess of 7am to 5pm Mondays to Saturdays inclusive.

The landfill or cleanfill will not be open without an attendant being on duty. The attendant shall be positioned where vehicles may be inspected prior to entering into the area where active landfill operations are taking place.

3.2 Users

Normal public access will not be available to the Omarunui landfill.

3.2.1 Vehicles entering the site to deposit waste will be:-

(a) bulk haulage vehicles from transfer stations operated by or on behalf of any Local Authority.
(b) Vehicles with a current road user distance licence (or such other licence as may be required by an Act passed in substitution for the Road User Charges Act 1971) specifying a maximum gross weight of not less than 8 tonnes.

3.2.2 Before any vehicle of the type mentioned in 3.2.1 will be permitted to enter the site, the prior written approval of the site operator shall be required and no person in charge of a vehicle which has such approval shall bring any waste onto the site in such a vehicle unless the waste is:

(a) completely enclosed and accessible only by means of a dustproof lid or dustproof door; or

(b) contained by complete enclosure at the bottom and sides and covered by a tarpaulin so lashed down on top as to contain the refuse; or

(c) so lashed to the vehicle that none of it can fall or be blown there from; or

(d) contained in a mesh or board enclosure; or

(e) of a nature that covering is not required.

PROVIDED THAT:
Paragraph (d) shall apply only if the refuse is in the bags or is properly wrapped or is of such a nature that no dust can arise from it.

3.3 Placing and Compacting of Wastes: Areas A, B C, and D

Filling will be undertaken in accordance with the approved engineering plans with the surface of each day's waste input temporarily covered. Filling will proceed in layers in accordance with the approved engineering plans to the approved finish levels, but allowing for the final approved cover system ~~of approximately 0.6m of subsoil or clay and 200mm of topsoil~~.

The exposed waste disposal area shall be kept as small as possible to minimise bird attraction, prevent windblown waste, and facilitate daily servicing.

The final grade for the waste disposal areas shall be in accordance with the approved engineering plans.

Cover material will be excavated from approved areas. Compaction of waste and cover will be carried out in accordance with accepted best landfill practice but with a maximum density always in view.

Grassing will be undertaken progressively on completed areas as seasonal conditions permit ~~but with the constant aim of returning the land to agricultural use as rapidly as possible~~. All areas not required for waste disposal and associated activities shall continue to be used for land uses permitted by the District Plan or authorised by resource consent.

The waste disposal areas as shown on Landfill Development Areas - Site Plan - Figure 1, prepared by Tonkin + Taylor, ~~May 2018~~ September 2019 will be used in accordance with the proceduresset out in this Management Plan.

3.4 Dust Control

During dry weather, should it prove necessary, a water cart will be employed to reduce dust nuisance on unsealed road.

3.5 Wind Blown Debris

This will be controlled as necessary by use of mesh fences (with fences erected around Area B to be in accordance with the Area B Landscape Plan (Sheet 04) prepared by Wayfinder Landscape Planning and Strategy Ltd, dated 31 August 2021. In the event of any windblown waste escaping from the working area beyond the mesh fences or beyond the immediate vicinity of the site (whether protected fences or not) it will forthwith be collected and placed in the working area. Any windblown waste escaping from the siteonto or near to adjacent properties will immediately be collected and removed.

3.6 Recycling

While recycling will be provided for at the Transfer Stations, no retrieval of any type of materials will be permitted at the landfill site and pedestrians will be totally excluded from ~~form~~the operating area.

3.7 Equipment Maintenance

Provision will be made for the routine operational maintenance of equipment at the site. In the event of a breakdown, prompt repairs will be made or standby equipment procured. Advance arrangements for this contingency will be made.

3.8 Noise Control

All equipment used on site will be fitted with effective mufflers to keep noise to a minimum.

3.9 Vermin Control

While filling procedures over a small area will maintain a constantly advancing face, nevertheless a regular vermin control programme will be instituted.

3.10 Accident Prevention and Safety

At least one employee will be instructed in the principles of First Aid and Accident Prevention. Adequate stocks of first aid supplies will be maintained on site.

3.11 Special Waste

Special waste will only be accepted in accordance with the procedures set out in the Omarunui Landfill ~~Environmental Management System Manual~~ Waste Disposal Conditions.

3.12 Supervision

The regional landfill and cleanfill operation will be under the supervision of suitably qualified and experienced personnel.

The attached Landfill Development Areas- Site Plan - Figure 1, prepared by Tonkin + Taylor, ~~May 2018~~ September 2019 shall be read in conjunction with and form part of the Management Plan.

3.13 Closure and Aftercare Plan

The Closure and Aftercare Plan required under the regional consents for the Landfill shall also provide details on the ongoing use of the site as a recreational reserve, including the ongoing management of all native regeneration vegetation that has been planted as visual mitigation, any additional native regeneration vegetation that has been or will be undertaken, and any additional earthworks on the site to provide for recreational or amenity use.