

# AUCKLAND REGIONAL COUNCIL

## RESOURCE CONSENT

Granted pursuant to the Resource Management Act 1991

### PERMIT NO. 34100

**CONSENT HOLDER:** Rodney District Council

**FILE REFERENCE:** 5719

#### CONDITIONS OF CONSENT:

**Duration of Consent:** This consent shall expire on 31 May 2015 unless it has lapsed, been surrendered or been cancelled at an earlier date pursuant to the Resource Management Act 1991.

**Date of Lapsing of Consent:** 31 December 2012

**Purpose of Consent:** To authorise the discharge of up to 1200 cubic metres per day of treated wastewater from Omaha Wastewater Treatment Plant to a disposal site at **Jones Rd, Omaha** and limited to that area shown on Attachment 1 of this permit in accordance with Section 15(1)(b) of the Resource Management Act 1991.

**Works:** One aerated lagoon, an aerated pond, a storage lagoon (to permit discharge of treated effluent to be restricted to optimal conditions), low rate sand filters and UV disinfection, to slow rate irrigation.

**Site Location:** Jones Rd, Omaha

**Legal Description of Land:** Lot 1 DP 134166

**Territorial Authority:** Rodney District Council.

**Approximate Map Reference:** NZMS 260 R09 677 377

**Authorised Quantity:** That the total discharge quantity shall not exceed 210,000m<sup>3</sup>/annum and 1200 cubic metres per day

#### **DEFINITIONS:**

**Council:** Means the Auckland Regional Council.

**Manager:** Means the Manager, Land and Water Quality Section, Auckland Regional Council.



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Wastewater system: The system includes collection, conveyance, management, treatment and discharge infrastructure constructed as part of the Jones Road Wastewater Treatment Plant and used for the management of potential adverse effects arising from the discharge.

**GENERAL CONDITIONS:**

1. That the servants or agents of the ARC shall be permitted access to the relevant parts of the property at all reasonable times for the purpose of carrying out inspections, surveys, investigations, tests, measurements or taking samples.
2. That the Consent Holder shall, as far as practicable, operate the plant and associated processes in accordance with the documentation submitted to the Council as part of Application Number 23115, where not amended by the documentation submitted to the Council as part of Change to Consents Application Number 25419 and not further amended by the documentation submitted to the Council as part of Application Number 28595. No alterations shall be made to the plant or processes that do not, or are not likely to, comply with the provisions of this consent, a regional rule, or regulations under the Resource Management Act 1991.

**SPECIAL CONDITIONS OF CONSENT:**

**Construction Conditions:**

3. That the Consent Holder ensures that the wastewater treatment plant and disposal system shall be upgraded/extended in accordance with the conditions of this permit and in accordance with the Engineer's plans and specifications submitted as the Applicant's proposal:
  - Document by Boffa Miskell Ltd, Bruce Wallace and Partners and Woodward Clyde Consultants for Rodney District Council (and Manapouri Developments Ltd) entitled "Omaha Wastewater Treatment Plant Upgrade – Application and Assessment of Environmental Effects for Resource Consents" dated September 1999.
  - Facsimiles by Bruce Wallace Partners entitled "OMAHA WWTP UPGRADING" dated 14 March 2000, 24 March 2000 and 7 April 2000.
  - Facsimile by Boffa Miskell Ltd entitled "ARC 22 March Memo asking for Clarification" dated 29 March 2000.

Where not amended by:

- Letter by Boffa Miskell entitled "Upgrade of Omaha Wastewater Treatment Plant – Consent Ref Permit No. 23115. Resource Management Act 1991 Section 127. Application to Vary Filtration Construction", dated 17 May 2001.

Consent report prepared in relation to Application Numbers 25419 and 25725, dated 7 September 2001.

Where not amended by:

- Application 28595 Correspondence from Omaha Beach Limited titled "Omaha Beach Wastewater Treatment Plant Permit Nos 23114, 25415 and 25725 (22 September 2003)" with Attachment A by Terraviva (16 September 2004)

All these documents shall form part of this consent.

4. That the construction/upgrading of the wastewater treatment and disposal system shall be carried out under the supervision of a registered Engineer experienced in wastewater treatment and disposal systems. The supervising Engineer shall certify in writing to the Manager, prior to the commissioning of the upgraded system, that all components of the upgraded/extended systems have been inspected and installed in accordance with standard engineering practice, with the plans submitted with the application and with the specifications and conditions of this permit.
5. That pursuant to Section 125 of the Resource Management Act 1991, this permit will lapse on the expiry of five years after the date of commencement unless the permit is given effect to before the end of this period.

**Operational and Maintenance Conditions:**

6. The Consent Holder shall complete and implement an Operational Management Program, specifying the operational and maintenance requirements of the wastewater treatment and disposal systems. This Program shall be prepared by a person experienced in wastewater engineering for the upgraded wastewater system and extended disposal system

This Program shall be prepared to an appropriate professional standard and be in accordance with the conditions of this permit and shall include but not be limited to the following:

- (a) An inspection program, including recording, to verify the correct functioning of the wastewater treatment and disposal systems;
  - (b) A schedule for the daily, weekly, monthly and annual operational requirements;
  - (b) A schedule of maintenance requirements for all components of the systems;
  - (d) A contingency programme specifying the actions to be taken in the event of failure of any component of the systems and any other non-compliance with the conditions of this permit; and
  - (e) Details of how the treatment and disposal systems will be managed to ensure design outcomes and performance standards specified within this consent are to be achieved.
7. The Consent Holder shall, prior to commissioning the upgraded wastewater system, obtain written approval from the Manager, for the Program required by Condition 6.
  8. That the Consent Holder shall enter into, and maintain in force, a written maintenance contract with an experienced wastewater treatment plant operator, for the on-going maintenance of the upgraded treatment and extended disposal systems. This contract shall require the operator to perform maintenance functions and duties specified in the Operational Management Programme required by condition 6 of this consent. A signed copy of this contract, and any subsequent amendments, shall be forwarded to the Manager prior to the upgrading of the treatment plant and extension of the disposal system.

9. That the Consent Holder shall record the details of inspection, monitoring and maintenance carried out in accordance with the conditions of this consent. These records shall be made available for inspection by enforcement officers during normal working hours and a summary of maintenance inspections is to be forwarded to the Manager annually

**Access Condition:**

10. That the Consent Holder shall ensure that good vehicular access to the treatment and disposal systems is provided at all times so that maintenance can be carried out.

**General System Maintenance Conditions:**

11. That the Consent Holder shall maintain the treatment and disposal systems in an efficient and professional manner, in accordance with the Operational Management Program and the conditions of this consent, to ensure that they function efficiently such that any impact on the receiving environment is minimised.
12. That the Consent Holder shall advise the Manager in writing immediately in the event problems are detected within the systems that could affect effluent discharge quality or disposal and shall outline a schedule of action proposed to remedy such problems prior to commencement of work.

**Monitoring Conditions:**

13. That the Consent Holder shall, prior to the exercise of this consent, install and maintain a meter which shall measure the total quantity of the treated effluent volume discharged, including nil discharges, and shall record whether any discharge is to the authorised disposal areas, or any horticultural area use (if any). The water meter, its installation and maintenance, shall be in accordance with the details outlined in this consent.
14. That the Consent Holder shall read the meter required under Condition 13, at daily intervals, at the same time on consecutive days, and keep records of the dimensions of the area being irrigated, each date, time and corresponding meter reading. and keep records of the dimensions of the area being irrigated, each date, time and corresponding meter reading shall be submitted annually with the report submitted with Condition 25.
15. That the meter required by condition 13 must be capable of measuring with an error of not more than 5% and to display to at least 1 cubic metre. The meter shall be maintained to the manufacturer's specified requirements and be kept in good working condition at all times.
16. That the Consent Holder shall complete and implement a Monitoring Program, to be contained within the Environmental Management Plan required by Condition 26 of this consent, to an appropriate professional standard which shall stipulate the precise technical details that will:
  - (a) Enable the ongoing efficiency of the treatment plant to be assessed, including, but not limited to, the following aspects:

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- i) The performance of the treatment plant with respect to reducing a range of sewage constituents, specifically including measurement of the following parameters in the final effluent:
    - a. Biochemical Oxygen Demand
    - b. Non-Filterable Residue
    - c. Faecal Coliforms
    - d. Ammonia
    - e. Nitrate
  - ii) Oxygen levels in the aerated lagoons;
  - iii) Sludge accumulation in the ponds; and
  - iv) Soil moisture content of the soils in response to disposal rates within the authorised with disposal areas.
- (b) Enable the potential environmental effects of the discharge on the receiving environment to be assessed, including, but not limited to, the following aspects:
- i) Any effects of the discharge on boundary drains; and
  - ii) Any effects of the discharge on the local groundwater resource contained in the shallow alluvium and overlying the Waitemata Group Rocks
- (c) Enable the daily discharge volumes of treated effluent to be related to soil moisture content data; and
- (d) Encompass field collection methodologies, protocols, data recording procedures and standards, and record keeping.

The Consent Holder shall prior to the commissioning of the upgraded wastewater system obtain written approval from the Manager for the Monitoring Program.

17. That the treated effluent quality as determined from the results of analyses required by Condition 16 above, shall be better than the following:
- |                               |                      |
|-------------------------------|----------------------|
| (a) Biochemical Oxygen Demand | 30 gO/m <sup>3</sup> |
| (b) Non-Filterable Residue    | 20 g/m <sup>3</sup>  |
| (c) Faecal Coliforms          | 500 cfu/100ml        |
- in 95% of the samples collected during any one calendar year.
18. That the Consent Holder shall take and have analysed an effluent sample from the distribution line following UV treatment and immediately prior to discharge to the irrigation fields, not less than fortnightly, at 1.00 pm on Monday for a period of one year from the date of exercising this consent. Thereafter the sampling shall be in accordance with the schedule and procedure specified in the environmental Management Plan required by Conditions 26 and 27.
19. That the Consent Holder shall ensure that all chemical analyses and sampling techniques are carried out in accordance with the latest edition of "Standard Methods for the Examination of Water and Wastewater", APHA AWWA WEF, or other standards approved in writing by the Manager.

**Other Treatment and Disposal Conditions:**

- 20 That no trade, industrial, non-domestic or other strong wastes shall be discharged into the treatment plant without the written approval of the Manager. In this consent, "trade wastes" refers to anything which is discharged from trade premises as defined in Section 489 of the Local Government Act 1974.
- 21 That the Consent Holder shall manage insects associated with the treatment system in accordance with the strategy appended to this consent. All provisions of the Midge Management Strategy shall be fully implemented within one year of the commencement of this consent.
- 22 That treated effluent shall be discharged to the ground by above or below ground irrigation and that no treated effluent shall be applied within 5 metres of a property boundary or within 15 metres of any drain.
23. That the Consent Holder shall, prior to the exercise of this consent, upgrade the existing disposal lines to eliminate blockages and ensure correct functioning, providing written certification from an experienced irrigation specialist of the same
- 24 That the Consent Holder shall, prior to any disposal to the extended disposal site and areas surrounding the lagoons and operational plant, plant that area in native vegetation and comply with the following criteria:
  - (a) Be sourced from local naturally occurring specimens where possible;
  - (b) Be planted using the plant mix and plant sizes specified and spaced at a maximum of 1.5 metre centres;
  - (c) Be completed in the first planting season (autumn – spring) following substantial completion of the upgrading works;
  - (d) Be protected and maintained to minimise pest and/or weed impacts; and
  - (e) Be planted to a landscape plan that provides reasonable amenity to neighbouring properties adjoining and/or overlooking the wastewater system.

The planting program to meet this condition shall be submitted, for approval, to the Manager prior to any commencement of works to extend the disposal field.

**Reporting**

25. That an annual Performance Report shall be submitted to the manager on 31 May. A template for the performance shall be included in the Operations Management Plan for approval by the manager. The performance report shall:
  - i. Collate, analyse and interpret all relevant data and information pertaining to this consent for the previous year from March 31 to March 31.
  - ii. Include comment on general plant information and any changes in trends with regards to the discharge volume and/or the discharge quality standards over time.
  - iii. Include the consideration of compliance with each consent condition and evaluate against ARC standard compliance scoring protocol.

- iv. Make recommendations and submit a timetable to rectify any non-compliance.

**Environmental Management Plan**

- 26. The Consent Holder shall complete and implement an Environmental Management Plan the purpose of which is to integrate operational practices, environmental monitoring programs and reporting of results required by this consent and Council consents 23114 and 25725.
- 27. Within 3 months of these consents commencing, the Consent Holder shall submit to the Manager for written approval, the Environmental Management Plan required by condition 26. This plan is to be prepared to an appropriate professional standard by a suitably qualified and experienced environmental scientist that includes, but is not limited to the following:
  - (a) Objectives for each element of monitoring;
  - (b) Frequency of sampling to allow the analysis to be statistically significant for any 12 month period;
  - (c) Location of sampling sites;
  - (d) Description of the monitoring methodologies and protocols
  - (e) Methods by which environmental alert and response levels will be generally established.
  - (f) A process for developing and implementing actions should alert or response levels be triggered.
  - (g) A detailed Contingency Program to cover environmental damage detected by the monitoring program. The Contingency Program shall include but not be limited to the following:
    - i) A process for notification and consultation with the Manager and any other agreed parties to determine what remedial action or alteration of operations is appropriate in the event trigger levels are exceeded;
    - ii) A verification process (i.e. more intensive monitoring or environmental audit) to determine whether remedial action has remedied or mitigated the detected effects; and
    - iii) A process for identification of appropriate mitigation should environmental damage be unable to be remedied or avoided.
  - (h) An outline of the annual report, required by conditions of this consent, including the integration with other relevant monitoring required by Council consents 23114 and 25725.

Any amendments to the Environmental Management Plan shall be approved by the Manager in writing prior to implementation

**Wastewater Reuse**



28. That prior to the first review of this consent (May 2002) the Consent Holder shall complete to an appropriate professional standard, and provide to the Manager, a feasibility report for the wastewater reuse from the Omaha Sewage Treatment Plant including but not limited to the following matters:
- (a) Outline cultural issues, including an analysis of issues, outcomes desired and methods to achieve those outcomes by the Tangata Whenua;
  - (b) Market demand for treated wastewater in the Omaha Flats locality;
  - (c) Seasonal pattern of demand for treated wastewater;
  - (d) Treatment standards necessary to meet that demand in accordance with the Department of Health, Public Health Guidelines for the safe use of sewage effluent and sewage sludge on land, 1992;
  - (e) Infrastructural requirements and specifications necessary to consistently attain the water quality standards during the period of demand;
  - (f) Any constraints in terms of attaining the standards required or meeting the demand;
  - (g) An analysis of costs including any potential for cost sharing, and benefits of implementing necessary works to provide wastewater for any potential uses; and
  - (h) Outline any problems and risk associated with wastewater reuse from the wastewater treatment plant or to the potential receiving environment.

**Review Condition**

29. That the conditions of this consent (including any specified quantity) may be reviewed pursuant to section 128 of the Resource Management Act 1991, by the giving of notice pursuant to Section 129 of the Act, in the year of 2002 and subsequently at two yearly intervals thereafter commencing in the month of May of that year, for any of the following purposes:
- (a) To alter monitoring requirements in light of previous monitoring results and/or changed environmental conditions; or
  - (b) To deal with any significant adverse effect on the environment which may arise from the exercise of the consent and which was not apparent at the time of the granting of the consent; or
  - (c) To require a Consent Holder to adopt the best practicable option to remove or reduce any adverse effect on the environment; or
  - (d) To deal with any adverse effect on the environment arising or potentially arising from the exercise of this consent through altering or providing specific performance standards; or
  - (e) To vary the maximum daily discharge volume in light of changed circumstances or the results of monitoring; or

- (f) To vary the size or design requirements of the treatment or disposal systems in light of changed circumstances or the results of monitoring; and/or
- (g) To consider the report required by condition 28 of this consent and implement conditions that would provide for wastewater reuse.

**ADVICE NOTES:**

1. That the Consent Holder will be required to pay the Auckland Regional Council any administrative charge fixed in accordance with Section 36(1) of the Resource Management Act 1991, or any additional charge required pursuant to Section 36(3) of the Resource Management Act 1991, payable in respect of this resource consent.
2. This consent and attached conditions should form part of the various contractual arrangements between the Consent Holder and its contractors with respect of the works to be carried out under this consent.
3. That the treated wastewater irrigation system should comply with and be subject to conditions set out in the department of Health Public Health guidelines for the safe use of sewage effluent and sewage sludge on land, 1992.
4. The Consent Holder is advised that the date of the commencement of this consent will be as determined by Section 116 of the Resource Management Act 1991, unless a later date is stated as a condition of consent.
5. The Consent Holder is referred to Section 124 of the Resource Management Act 1991, which provides for the exercising of consent while applying for a new consent for the same activity.
6. The Consent Holder is advised that, pursuant to Section 125 of the Resource Management Act 1991, this resource consent lapses on the expiry of five years after the date of commencement of this consent unless the consent is given effect to or other criteria contained within Section 125 are met.
7. The Consent Holder is advised that, pursuant to Section 126 of the Resource Management Act 1991, if this resource consent has been exercised, but is not subsequently exercised for a continuous period of two years, the consent may be cancelled by the ARC unless other criteria contained within Section 126 are met.

**This consent has been granted by the Auckland Regional Council pursuant to the Resource Management Act 1991.**



Greg Murphy  
Acting Manager – Wastewater Consents  
Consents & Consents Compliance  
Auckland Regional Council

Date:

1/8/07