

11 June 2008

Nelson Regional Sewerage Authority
C/O Donna Hills
Opus International Consultants
Private Bag 4
Nelson 7042



Dear Sir/Madam

DECISION ON RESOURCE CONSENT APPLICATION NO. NN000539V2 TO CHANGE CONDITIONS OF RESOURCE CONSENT NO. NN000539V1 – NELSON REGIONAL SEWERAGE AUTHORITY – DISCHARGE TO THE WAIMEA INLET

Pursuant to Section 114 of the Resource Management Act 1991 ("the Act"), please find enclosed a copy of the Council's decision on your application to change consent conditions of the resource consent referred to above.

Section 357A of the Act provides you with the right to lodge an objection with the Council in respect of this decision and/or any associated conditions. Any such objection must be made in writing setting out the reasons for the objection and must be lodged with the Council, together with a fixed fee of \$125.00 (GST inclusive), within 15 working days of receiving this letter.

At this stage the Council has not calculated the final costs of processing your application. Should the final costs exceed the deposit already paid, then as previously advised, you will be invoiced separately for these costs. Should the final costs be less than the deposit already paid, then you will receive a refund. Where the costs are equal to the deposit already paid, no further action is required. You will receive a letter shortly regarding the final costs of processing your application.

The changes to your consent take effect immediately unless you lodge an objection to this decision.

Please feel free to contact me if you have any questions regarding any aspect of your consent or its conditions. My contact details are listed at the top of this letter.

Yours faithfully

Michael Durand
Co-ordinator Natural Resources Consents

DECISION ON APPLICATION TO CHANGE CONSENT CONDITIONS

Resource Consent Being Changed: NN000539V1
New Resource Consent Number: NN000539V2
Consent Holder: Nelson Regional Sewerage Authority

Pursuant to Section 104B of the Resource Management Act 1991 ("the Act"), the Tasman District Council ("the Council") hereby authorises changes to Resource Consent NN000539. The changes authorised are as follows:

Advice Note: Only those consent conditions which are changed are presented below and the changes are shown either as underlined for additions or ~~striketrough~~ for deletions. For the purposes of clarity, a complete amended set of conditions for the consent is attached at the end of this decision. The revised set of conditions is hereinafter referred to as Resource Consent NN000539V2.

- 8 The mean daily flow of effluent discharges over a one year period shall not exceed 20,000 cubic metres per day (m³/day). The total volume of discharges shall not exceed 25,000 cubic metres (m³) during any 24 hour period, including the 1,040 cubic metres per day (m³/day) spray irrigated to land approved under RM071151.

REASONS FOR THE DECISION

Background to the Application and Conditions Requested to be Changed and Reasons

This is an application made pursuant to Section 127 of the Resource Management Act ("the Act") to change/cancel Condition 8 of Resource Consent NN000539V1, which authorises the discharge of effluent into the Coastal Marine Environment. The changes relate to a discharge consent granted to discharge to land from the Bells Island Sewerage Plant. These are discussed in more detail below.

1 Condition 8

Condition 8 relates to the daily and total discharge into the Waimea Estuary. Consent was granted in March 2008 (RM071151) to allow discharge from the Bells Island Sewerage Plant onto land. However, under RM000539V1, the total maximum discharge for the plant, both onto land and into water, is to remain at the level of 25,000m³ during any 24 hour period. This means that if the maximum 1,040m³ were discharged to land then the maximum that could be discharged into the estuary would be 23,960m³ in that same 24 hour period. The applicant proposed this as part of the discharge to land application and this subsequent application to change Condition 8 of NN000539 is to ensure that the total discharge amount is clearly set out.

Principal Issues (Actual and Potential Effects on the Environment)

The principal issue(s) associated with the application to change the conditions of consent involve the actual and potential effects on the environment associated with the change. The Council considers that the adverse effects on the environment as a result of the changes will be no more than minor for the following reasons:

- (a) the change does not change the maximum discharge from the plant and when discharge to land occurs it means that the discharge to the estuary is decreased. The change ensures that no confusion arises to the maximum discharge from the plant and in this regard is a positive change.

Relevant Statutory Provisions

Section 119A states that where the Minister of Conservation has granted a coastal permit for a restricted coastal activity, the regional council which would otherwise have decided the application for that permit shall have powers under Section 127 to 132 but shall not exercise any of those powers without obtaining the written consent of the Minister of Conservation to do so and shall comply with any conditions imposed by the Minister. In this case written consent from the Minister to proceed with the processing of this application was received on 16 May 2008. The only condition was to the wording of the new Condition 8 and this has been complied with.

Section 127(3)(a) of the Act states that any application to change consent conditions is deemed to be a discretionary activity.

In considering this application, the Council has had regard to the matters outlined in Section 104 of the Act. In particular, the Council has had regard to the relevant provisions of the following planning documents:

- (a) the Tasman Regional Policy Statement (TRPS);
- (b) the proposed Tasman Resource Management Plan (PTRMP).

How the activity relates to the objectives and policies contained within the TRPS and PTRMP were covered in the original decision. It is considered that the changes being sought by the Consent Holder do not change these considerations.

Part II Matters

The Council has taken into account the relevant principles outlined in Sections 6, 7 and 8 of the Act and it is considered that granting these changes to the conditions achieves the purpose of the Act as presented in Section 5.

Notification and Affected Parties

The adverse environmental effects of the changes being sought are considered to be no more than minor. The Council's Resource Consents Manager has, under the authority delegated to him, decided that the provisions of Section 94(2) of the Act have been met and therefore the application has been processed without notification. In making this determination the Resource Consents Manager has considered the matters outlined in Section 127(4) of the Act.

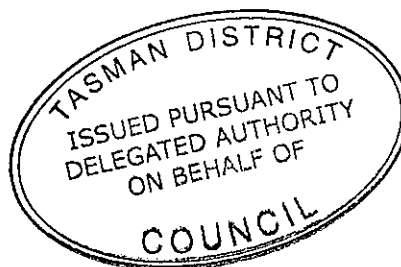
Duration of the Consent

No change to the duration of consent is being sought and in any case cannot be changed under Section 127 of the Act.

This consent is granted on **11 June 2008** under delegated authority from the Tasman District Council by:



Michael Durand
Co-ordinator Natural Resources Consents



FULL SET OF AMENDED CONSENT CONDITIONS FOR NN000539V2

Application NN000539:

Date of commencement of consent:	As provided in Section 116 of the Resource Management Act 1991.
Term of consent:	Fifteen (15) years.
Date of lapsing of consent (if not given effect to):	Two (2) years from date of commencement in accordance with Section 125 of the Resource Management Act (1991).
Purpose of consent:	Renewal of an existing coastal permit to discharge up to 25,000 m ³ /day of treated sewage effluent to the coastal waters of Waimea Inlet.
Legal Description of the Land:	The relevant parts of the land described in Schedule A (below), otherwise as more specifically described in this permit and in the various plans and other information submitted by the applicant.

Schedule A:

A	Crown land comprising foreshore and seabed
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GENERAL CONDITIONS

- 1 The consent holder shall undertake all authorised activities in general accordance with the descriptions and plans submitted with the application or as modified in evidence.
- 2 This resource consent is granted in accordance with Section 332 of the Resource Management Act 1991, and subject to Tasman District Council's staff or agents being permitted access to the relevant parts of the site at all reasonable times for the purpose of carrying out inspections, surveys, investigations, tests, measurements or taking samples.
- 3 In accordance with Sections 128-133 of the Resource Management Act 1991, Tasman District Council may annually, on any of the last five working days of May in each year, serve notice of its intention to review the conditions of the consent for the purpose of:
 - a) dealing with any adverse effect on the environment that may arise from the exercise of this consent that was not foreseen at the time of granting the consent, and which is therefore more appropriate to deal with at a later stage; or
 - b) requiring the consent holder to adopt the best practicable option to remove or reduce any adverse effect on the environment resulting from the discharge; or
 - c) requiring compliance with any relevant rule of an operative Regional Plan; or
 - d) reviewing the contaminant limits in these conditions if it is appropriate to do so;
 - e) addressing any issues identified in a cultural impact assessment.

- 4 The consent holder shall, within three months of the fifth, and tenth anniversary of the date of commencement of this consent, provide the Co-ordinator Compliance Monitoring, Tasman District Council, with a written assessment of all monitoring and identification of any trends and problems so that the need for a review of conditions can be determined.
- 5 In accordance with Section 127 of the Resource Management Act 1991, the consent holder may apply to the Tasman District Council at any time during the month of January in any year during the term of this consent for:
 - a) a change of these conditions, including the modification, or cancellation of any of these conditions, or the introduction of new conditions if such a change is necessary as a result of any cultural impact assessment carried out or process changes which enhance the methods of wastewater treatment and/or disposal and/or the quality of the wastewater being discharged in accordance with this consent; or
 - b) a change in the nature of the frequency of the monitoring required by the conditions of this consent, if the monitoring carried out pursuant to the conditions of this consent indicates that such a change is reasonable.
- 6 The consent holder shall pay all charges set by the Council under Section 36 of the Resource Management Act (1991), including any charges relating to any transfer of the consent, and to any changes in consent conditions.

Special Conditions

- 7 The consent holder shall maintain a measuring device calibrated to $\pm 5\%$ accuracy to record the times and rates of discharge of effluent into the receiving waters. These records are to be supplied to the Tasman District Council every two months and on request. Calibration checks on the outflow measuring device are to be supplied to the Tasman District Council at least once per year.
- 8 The mean daily flow of effluent discharges over a one year period shall not exceed 20,000 cubic metres per day (m^3/day). The total volume of discharges shall not exceed 25,000 cubic metres (m^3) during any 24 hour period, including the 1,040 cubic metres per day (m^3/day) spray irrigated to land approved under RM071151.
- 9 The discharge of effluent is authorised for a period of up to three hours after any high tide at the outfall, under normal operating conditions.
- 10 The mixing zone, for the purposes of conditions contained in this permit is defined as an area of 250 metres radius north of the outfall and within 45° included angles, as shown on Annex 1, a copy of which has been included in Appendix 9.3.
- 11 Effluent shall meet the following standards:
 - a) The median faecal coliform count over a one-year period shall not exceed 20,000 per 100 mls CFU, and not more than 6.25% of samples shall exceed 100,000 mls CFU, as determined by the membrane filtration technique.
 - b) The median five-day Biological (Biochemical) Oxygen Demand (BOD) concentration over a one-year period shall not exceed $40 \text{ g}/\text{m}^3$, and no more than 6.25% of samples shall exceed $50 \text{ g}/\text{m}^3$.
 - c) The median Suspended Solids (SS) concentration over a one-year period shall not exceed $100 \text{ g}/\text{m}^3$ and no more than 6.25% shall exceed $150 \text{ g}/\text{m}^3$.

- d) Over the period 1 April to 31 July in any year the median mass of total nitrogen discharged daily shall not exceed 500 kg/day and at least 87.5% of samples shall be less than 600 kg/day.
- e) Over the period 1 August to 31 March in any year the mass of total nitrogen discharged daily shall not exceed 500 kg/day for at least 87.5% of samples taken, and shall at no time exceed 600 kg/day.
- f) The mass of total phosphorous discharged daily shall be less than 150 kg/day for at least 93.75% of samples taken and shall at no time exceed 180 kg/day.
- g) The amount of the following substances, in grams per cubic metre (g/m³) of effluent, shall not exceed the following:

Cadmium	0.28
Copper	0.028
Nickel	0.28
Zinc	0.6
Chromium	0.176
Lead	0.176
Arsenic	0.5
Sulphide	0.44
Cyanide	0.16
Phenols	16.0
Mercury	0.016

12 The frequency of sampling to determine compliance with the above limits shall be as follows:

- a) Monthly samples shall be taken for faecal coliform counts, enterococci counts, BOD₅, suspended solids, total nitrogen and total phosphorous.
- b) Once a year during the period April to July, five samples shall be collected in a 30 day period for faecal coliform counts, enterococci counts, BOD₅, suspended solids, total nitrogen and total phosphorous.
- c) Monitoring of metal and other substances shall take place at annual intervals. Composite samples shall be collected when appropriate.
- d) The results of monitoring are to be forwarded to the Tasman District Council every two months and on request. Breaches of any standard are to be reported to the Tasman District Council within five working days of any breach being detected.

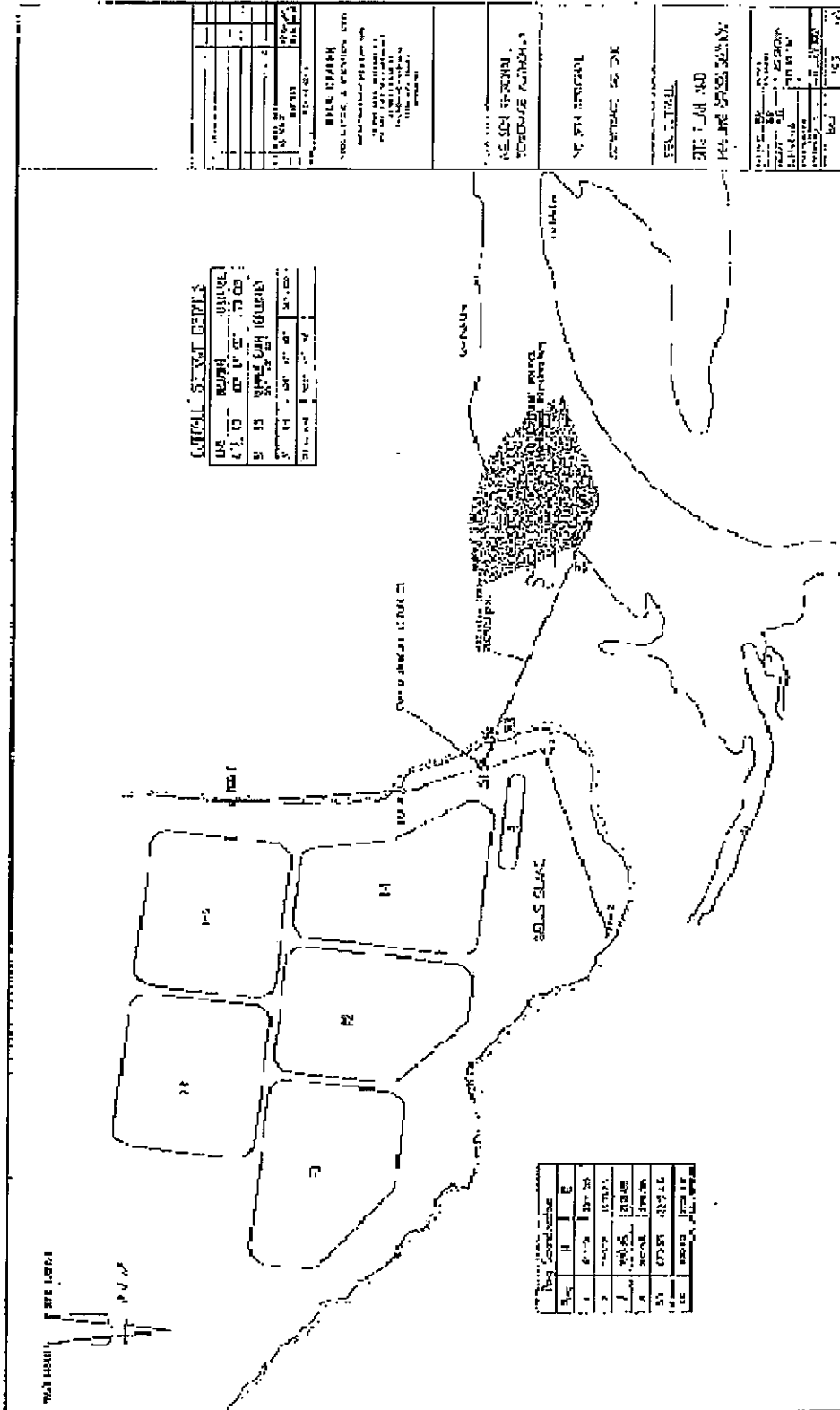
13 The discharge shall not cause any of the following effects in the receiving water outside the mixing zone defined in Annex 1:

- a) the production of any conspicuous oil or grease film, scums or foams, or floatable or suspended material;
- b) any emission of objectionable odour;
- c) any conspicuous change in the colour or visual clarity.

The discharge shall not cause any significant adverse effect on marine aquatic life beyond the mixing zone.

- 14 Impact monitoring of the receiving environment shall be commenced in the year starting 1 July 2006 and thereafter at five-yearly intervals. The monitoring shall be in accordance with Annex 2, a copy of which has been included in Appendix 9.3.
- 15 An assessment of microbiological and nutrient levels shall be carried out in accordance with the sampling programme shown in Annex 3, a copy of which has been included in Appendix 9.3.
- 15A In the event that the following effluent trigger levels are exceeded, the monitoring intervals specified in Annex 3 (five-yearly for Part A and six-monthly for Part B) shall be reviewed:
 - Average daily loadings of total nitrogen for summer, (October – March) and winter (April – September) exceed 400 kg.
 - Average daily concentrations of faecal coliforms for summer, (October – March) and winter (April – September) exceed 20,000 MPN or CFU/100 ml.
- 16 The consent holder shall, within one year of commencement of this consent undertake a study of the foam accumulations at the estuary margins and on local beaches. This study shall be designed to allow determination of the level of coliform contamination of this foam and the likely origin of any such contamination.
- 17 In the event of any treatment plant failure that would result in any deterioration in effluent quality that affects the environment, or is in breach of any conditions of this permit, the consent holder shall advise the Tasman District Council and the Medical Officer of Health as soon as practicable.
- 18 Any testing of waters of the Waimea Inlet directly necessitated by a failure of the consent holder to meet the conditions of this permit shall be a financial charge to the consent holder.
- 19 The consent holder shall take all reasonable steps to avoid overflows from pumping stations or the treatment plant of the Regional Sewerage Scheme and to prevent discharges of untreated effluent.
- 20 The consent holder shall advise the Tasman District Council of any significant changes to the flows, composition or loads of trade waste inputs to the Regional Sewerage Scheme, including the addition of any contaminant which is potentially hazardous or toxic or which may otherwise necessitate a review of consent conditions. Where possible, advance notice shall be given.
- 21 This discharge consent applies to the operation of the Nelson Regional Sewerage Scheme at Bells Island and discharge of effluent to Waimea Inlet through the existing outfall described in the application. No alteration should be made to the plant, processing operation, or plant capacity that is likely to alter the location, nature or quantity of any discharge without prior consultation with Council.
- 22 All activities associated with this consent shall be undertaken in such a manner, and by employing appropriate equipment and techniques, that they minimise to the greatest extent practicable the impact on inlet water quality.

ANNEX 1: BELLS ISLAND STP EFFLUENT OUTFALL MIXING ZONE



Note: Annex 1 is the same drawing as was attached to the previous consent, and the mixing zone remains unchanged. The mixing zone is shown shaded.

ANNEX 2

BELLS ISLAND OUTFALL FIVE-YEARLY RECEIVING ENVIRONMENT MONITORING PROGRAMME

Surveys to identify any environmental deterioration in the vicinity of the Bells Island Outfall will be carried out at five-yearly intervals, starting in 2006. The surveys will include:

- 1 A field survey of eleven sites (as described in CAW Report No.677), recording:
 - Sediment type
 - Visible macrofauna
 - Macrophyte species and coverage
 - Sediment profiles
 - Any obvious signs of enrichment or pollution (e.g. microalgal mats, H₂ S, odours, fats, oils, unnatural debris etc)

- 2 Analysis of the following characteristics in sediment samples from sites 4, 5, 7 and 9 (Cawthron Report No.677) along the main channel downstream from the outfall and four additional, subtidal sites outside the Inlet in inner Tasman Bay:
 - Particle size
 - Nitrogen content
 - Organic matter content
 - Chlorophyll a content, and
 - Infauna species and abundance (0.5mm sieve sizes)

- 3 Analysis of composite sediment and shellfish samples from six sites for trace metals:
 - Mercury
 - Arsenic
 - Cadmium
 - Chromium
 - Copper
 - Lead
 - Nickel
 - Zinc

- 4 Analysis of composite shellfish samples from eleven sites for bacteriological quality.

NOTES:

- 1 The monitoring programme will be based on previous studies with modifications as recommended in CAW Report No.677.
- 2 The above benthic monitoring may be co-ordinated with the annual testing programme outlined in Appendix 3.
- 3 The sites will be located to reflect the likely dispersal patterns of the effluent discharge and the location of the mixing zone.
- 4 The monitoring programme shall be agreed upon with the Co-ordinator Compliance Monitoring, Tasman District Council, and the Regional Conservator Department of Conservation.

ANNEX 3

BELLS ISLAND OUTFALL

MICROBIOLOGICAL AND NUTRIENT ASSESSMENT PROGRAMME

The objective of this programme is to provide a statistically and scientifically rigorous assessment of the effects of the Bells Island sewage discharge on the microbial and nutrient status of the receiving waters (the Waimea Inlet) and the microbial status of the Rabbit Island and Tahunanui beaches.

The programme will consist of two parts (Part A and Part B).

Part A

A full receiving water survey shall be undertaken at five year intervals and may be carried out as part of, or in conjunction with, other water quality monitoring programmes in the area, including the five year benthic monitoring programme attached as Annex 2. Sampling shall be scheduled to commence during the ebb tide during favourable weather conditions and after periods of at least three days with no significant rainfall. For site locations see the attached Figure 1, which was taken from Cawthron Report No 1198.

Sampling (as described in Cawthron Report No 1198) shall consist of:

- at least three effluent samples collected at timed intervals during the ebb tide discharge period;
- at least 12 seawater and at least 8 shellfish samples taken from the Waimea Estuary;
- at least 10 seawater samples and 4 shellfish samples taken from Tasman Bay (including Rabbit Island and Tahunanui beaches along transects extending offshore from the eastern and western estuary outlets).

A composite of the effluent samples shall be tested for:

- nutrients (nitrate, nitrite, ammonia, total Kjeldahl nitrogen, soluble reactive phosphorous and total phosphorus).

The individual effluent samples shall be tested for:

- faecal indicator bacteria (faecal coliforms and enterococci using membrane filtration technique).

The seawater samples shall be tested for:

- nutrients (nitrate, nitrite, ammonia, total Kjeldahl nitrogen, soluble reactive phosphorus and total phosphorus);
- faecal indicator bacteria (faecal coliforms and enterococci, MPN or CFU/100 ml);
- phytoplankton species and abundance (Tasman Bay sites only); and
- depth profiles of conductivity, temperature, and chlorophyll *a* (Tasman Bay transect sites only).

The shellfish samples shall be tested for:

- faecal indicator bacteria (faecal coliform and enterococci, MPN or CFU/100 g).

Part B

Part B shall be undertaken twice yearly (once during summer and once during winter) and shall include analyses of at least five shellfish samples for faecal indicator bacteria (faecal coliform and enterococci, MPN or CFU/100 g). Shellfish samples shall be comprised of Greenshell TM mussels (*Perna canaliculus*) deployed in baskets at a subset of the inner Tasman Bay sites surveyed in Part A. Mussel deployments shall be of at least seven days duration with preferably minimum rainfall. Seawater samples shall also be

collected from mussel deployment sites and analysed for faecal coliform and enterococci (MPN or CFU/100 ml).

The assessment programme shall be structured and revised if necessary, based on six-monthly monitoring reports, so as to best achieve the study objectives. A revision of the programme set out in this Annex is also required by Condition 15A should one or more of the trigger levels in that condition be exceeded. The programme and any subsequent revisions shall be agreed upon with the Co-ordinator Compliance Monitoring (Tasman District Council), the Regional Conservator (Department of Conservation) and the Senior Health Protection Officer (Community Health Office).

This assessment programme may be carried out as part of or in conjunction with other water quality monitoring programmes in the area, including the five year programme attached as Annex 2.