

TASMAN DISTRICT COUNCIL

AIR DISCHARGE PERMIT - NN980123D

Applicant: Nelson Regional Sewerage Authority

Purpose: Air discharges in association with the application of biosolids to bark chip areas and forestry stand on Bells Island.

Location: Bells Island, Waimea Estuary

Legal Description: Island No.2 (Bells Island) Block II, Waimea Survey District

Owner: Nelson Regional Sewerage Authority

Date Received: 6 April 1998

Status: Non-notified

Investigating Officer: D R Lewis

1.0 INTRODUCTION

- 1.1 The Nelson Regional Sewerage Authority (NRSA) have consents to apply biosolids to forestry stands on Rabbit Island. However, the total Kjeldahl nitrogen (TKN) levels of the biosolids being produced are far higher than predicted and this, together with an increase in the volume of biosolids produced, means that a greater area of land is required for biosolids application than was originally expected. It has been estimated sufficient land beyond Rabbit Island is needed to discharge an excess of 9,500 cubic metres in 1998 and 16,000 cubic metres in 1999.
- 1.2 Section 15(1)(c) of the Resource Management Act (RMA) requires that no person may discharge any contaminant from an industrial or trade premises into air unless the discharge is allowed by a rule in a Regional Plan, Proposed Regional Plan, by regulations or by a resource consent. The definition of "industrial or trade premises" includes any premises used for the "..... transfer, treatment, or disposal of waste materials or for other waste management purposes." This definition would therefore include the production of the biosolids and their disposal to land.
- 1.3 The Tasman District Council is at present promulgating a Regional Plan for air quality management as part of the Tasman Resource Management Plan, but this is only at the draft stage and, as no regulations exist that permit the proposed discharges, then a resource consent is required.
- 1.4 The transitional provisions of the RMA give some relief for existing activities but, in this case, Section 418(1A) specifies that Section 15(1)(c) shall apply to any discharges from industrial or trade premises used for the storage, treatment or disposal of waste materials commenced after the first day of October 1991. As this is a new undertaking then there is a requirement for an air discharge consent.

9.0 RECOMMENDATION

That discharge permit NN980123D for the air discharges in association with the application of biosolids to Bells Island be granted for a period of twenty-two (22) years from the date of granting of this consent subject to the following conditions:

1. Biosolids Quality

That only aerobic biosolids produced at the Bells Island ATAD plant from any Train that has been upgraded by the provision of a new aerating system be disposed of on Bells Island, except that if the District Environmental Health Officer at Tasman District Council is satisfied that biosolids from any other Train are no more odourous than the biosolids from such an upgraded Train and have an ORP (Oxidation Reduction Potential) reading of greater than -150 mV (millivolts) and a temperature of not less than 50°C then the consent holder may dispose of biosolids from any other Train.

2. Separate Storage Required

That until such time as all Trains for the production of biosolids have had their aeration upgraded then the biosolids as permitted by Condition 1 above shall be stored separately at the Rabbit Island depot.

3. Aeration of Rabbit Island Storage Tanks

The storage tanks at the Rabbit Island depot holding biosolids shall be provided with effective aerators if the biosolids become anaerobic during their storage in these tanks.

4. Cessation of Application if Malodorous

If the quality of the biosolids deteriorates to the extent that in the opinion of the District Environmental Health Officer or as a result of a complaint considered justified by the District Environmental Health Officer, offensive odours are being emitted, then the application of biosolids on Bells Island must cease immediately and biosolids shall not be reapplied to Bells Island until such time as the quality of the biosolids has been improved to the extent that in the opinion of Council's enforcement officer, the offensive odours are not present.

5. Wind Restrictions

No application of biosolids shall take place during conditions when the mean wind speed, which is measured in the Northern Waimea Basin, exceeds the Beaufort Wind Scale of No.4 (i.e. no greater than 8 metres per second). Biosolids shall only be applied at times when the wind is from a southerly direction and the wind remains from this quarter throughout the application period.

6. Odour Complaints

A complaints recording system shall be instituted that records all odour complaints where the complainant considers the odours result from the carrying out of application of biosolids to Bells Island. The record shall include the name of the complainant; the date, time and location of the odour incident; the weather conditions including wind speed and direction when the odour was detected; any possible cause for the odour complaint; any corrective action taken; notification to the complainant of the outcome of the investigation into the complaint.

7. Methods of Application

Biosolids application to the forestry area shall be by the same method as that used for application to Rabbit Island. Application of biosolids to the bark areas shall be by pumping into ploughed furrows that are mechanically cultivated once the biosolids have dried.

8. Biosolids Transport

The tankers used for the transporting of biosolids to Bells Island shall be thoroughly cleaned down prior to leaving the Rabbit island storage depot and no leakage of biosolids from the tankers shall be permitted whilst en route to or return from the disposal site.

9. Contingency Plan

A contingency plan that includes measures for containment and clean-up of accidental spillages on public roads from the tankers shall be provided to the satisfaction of Council prior to the uplifting of this permit.

10. Review of Consent

Within one year of the granting of this consent, the permit holder shall provide Council with a report summarising the performance of the first biosolids application - including compliance with consent conditions and any operational or odour problems or complaints - so that the need for a review of conditions can be determined by Council. If such a review is so determined, then Council may review any of the conditions by giving notice of its intention to do so pursuant to Section 128 of the Resource Management Act 1991 at any time over the duration of the consent after the first anniversary of its grant for the following purposes:

- (a) To deal with any adverse effect on the environment arising from the exercise of this consent;

or

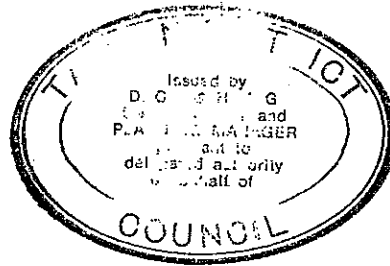
- (b) Requiring the adoption of the best practicable option to remove or reduce any adverse effect on the environment.

9.0 REASONS FOR CONSENT

- 9.1 It is accepted that the activity of application of biosolids to forestry is a method of sustainable management of the sewage waste stream and that the imposition of appropriate consent conditions will ensure that there will be minimal effect on the air environment.
- 9.2 The duration of the consent and the provision for a review of conditions reflects Council's stated policy that it will seek to avoid, remedy or mitigate adverse effects of the discharges of contaminants to air.
- 9.3 The application of biosolids to forestry and bark areas as controlled by the proposed consent conditions, although imposing restriction on the already limited access to Bells Island, will generally maintain the quality of the environment and should have little or no impact on the air quality of the residents or recreational users of the adjoining Bests Island.



D C Bush-King
Environment and Planning Manager



Lo\H:\CONSENTS\NN\NN980123.dh1.doc