

28 May 2008

The Consents Manager  
Northland Regional Council  
Private Bag 9021  
WHANGAREI



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Attention: Mr D L Roke

Dear Sir

**RESOURCE CONSENT RENEWAL APPLICATION 4007 FOR EAST COAST BAYS  
WASTEWATER TREATMENT PLANT**

On behalf of the applicant, Far North District Council, we are sending you the following information:

- One copy of the report titled "East Coast Bays Wastewater Treatment System – Resource Consent 4007 Renewal – Supporting Information" dated May 2008, which contains the detailed supporting information for the above application.
- A completed application for resource consent renewal for the East Coast Bays Wastewater Treatment Plant including discharge of treated wastewater to surface water, and to ground (seepage), and discharges to air (primarily odour).
- A cheque for the application fee of \$843.75 (incl GST) for a notified discharge consent to surface water, land and air.

If you have any questions or would like to discuss this application, please feel welcome to contact me on the above number.

Yours sincerely

*VK Consulting Environmental Engineers Ltd*

*V. Klooster*

*PP* Stefan Kreegher

Principal Environmental Engineer

Encl. Report titled "East Coast Bays Wastewater Treatment System - Resource Consent 4007 Renewal - Supporting Information"  
Application fee of \$843.75

cc: Steve Cooper, Far North District Council - Copy for your information.

Received by: *Smelphick* (NRC)

Date: *29/05/08*

paid \$843.75 cheque 29/05/08

## Part A:

# Application for a Resource Consent



Caring for Northland and its Environment

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This application is made under Section 88 of the  
Resource Management Act 1991

To: The Secretary  
Northland Regional Council  
Private Bag 9021  
WHANGAREI

CONSENT NO.

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Official Use Only

### 1. APPLICANT

Applicant's Name: Far North District Council  
Address: Private Bag 752  
Kaikohe

### 2. OWNER/OCCUPIER OF LAND

Far North District Council

### 3. LOCATION OF PROPERTY TO WHICH APPLICATION RELATES

*Describe the location in a manner which will allow it to be readily identified, eg. Street address, legal description, map reference. Attach appropriate plans and/or diagrams.*

Consent No: 4007  
Property Address &  
Locality: Taipa  
Legal Description: Pt Allot 24, SO 59862, and Part A, SO69379 Parish of Taipa, Blk IV  
Mangonui SD (treatment Plant)  
and Pt Allot 57, Parish of Taipa and Pt Sec 33, SO 65075 (Part D), Blk IV,  
(wetland)

### 4. DESCRIPTION OF ACTIVITY PROPOSED

Description of Activity: Continued operation via resource consent renewal for the East Coast Bays Wastewater Treatment Plant including discharge of treated wastewater to a Tributary of the Parapara Stream, discharge to ground (seepage), and discharges to air (primarily odour),

5. TYPE(S) OF RESOURCE CONSENT SOUGHT FROM THE REGIONAL COUNCIL

☐ coastal permit ☐ land use consent ☐ water permit ☒ discharge permit

6. OTHER RESOURCE CONSENTS REQUIRED FROM THE DISTRICT COUNCIL

*Where other resource consents are required for the same activity, they must be applied for at the same time. Not doing so will delay the processing of this application.*

What other resource consents are required from the District Council?

☒ none ☐ land use consent ☐ subdivision consent ☐ discharge permit

Have the applications been made? N/A

7. RENEWAL OF EXISTING RESOURCE CONSENT

☒ Yes ☐ No

If yes, have there been any changes since the consent was granted (eg. Legal description as a result of subdivision or sale, area of development of horticulture, quantity of water taken or discharged, change in disposal system or discharge point)? Detail changes on supporting information form.

8. SUPPORTING INFORMATION ATTACHED:

- ☒ assessment of environmental effects
- ☒ information required under district and/or regional plans and/or regulations
- ☐ reclamation and esplanade reserve information (Section 88(7))
- ☒ names and addresses of adjoining landowners and occupiers

9. FEE/DEPOSIT ENCLOSED WITH APPLICATIONS

☐ coastal permit ☐ land use consent ☐ water permit ☒ discharge permit (\$843.75 incl GST)

*Signature of applicant or person authorised to sign on behalf of the applicant.*

Signature:



Name: (in block letters): **STEPHEN COOPER**  
on behalf of **Far North District Council**

Date *28 May 2008*

*Address for service of documents (if different from applicant's address)*

Name: **Stephen Cooper**  
Address: **Far North District Council**  
**Private Bag 752**  
**Kaikohe**

Phone: 0800 920 029





FAR NORTH  
DISTRICT COUNCIL



FAR NORTH DISTRICT COUNCIL

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## East Coast Bays Wastewater Treatment System - Resource Consent 4007 Renewal



# Supporting Information

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## Supporting Information

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PREPARED FOR

**Far North District Council**

**May 2008**

PREPARED BY

Stefan Kreegher (Principal Environmental Engineer (B.E. (Env Eng) MIPENZ (Environmental) CPEng)

REVIEWED AND AUTHORISED FOR RELEASE BY

Vivian Kloosterman (Project Director (B.E. Hons, FIPENZ (Business & Environmental) CPEng, IntPE))

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### Revisions

No.	Date	Details
0	April 2008	Draft for client comment
1	May 2008	Final

VKCEE Client Report:  
s:\data\fn\dc\ec bays sew\1289 rcr 2008\report rev 1 final.doc

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## Executive Summary

Resource consent 4007 was first issued in December 1985 and renewed in August 2001. The current consent expires on 30 November 2008 and thus an application for renewal of this consent is necessary.

The current resource consent allows for the following activities (subject to conditions):

*"01 To discharge treated municipal wastewater to an unnamed tributary of the Parapara Stream, at Taipa, at or about Map Reference O04:514-882*

*02 To discharge contaminants from the wastewater treatment system to ground at two points, in the catchments of an unnamed tributary of the Parapara Stream and an unnamed tributary of Ryders Creek, at or about Map References O04:514-882 & O04:524-889 respectively;*

*03 To discharge contaminants to air from activities associated with the treatment and disposal of wastewater at two points, at or about Map References O04:514-882 & O04:524-889;"*

The volume of wastewater discharged is currently set at 1005 cubic metres per day (based on dry weather flow).

The East Coast Bays Wastewater Treatment Plant currently consists of two aerated ponds, operated in series, followed by a maturation pond and a four cell constructed wetland. Discharge is to a tributary of the Parapara Stream. A third aerated pond was constructed when the plant was built and this can be used as well when the demand increases.

### Consents Applied for

The following consents have been applied for:

- Discretionary activity for discharge of treated wastewater to the unnamed tributary of the Parapara Stream under the Regional Water and Soil Plan for Northland.
- Discretionary activity to discharge contaminants to air (odour) from a wastewater treatment plant under the Regional Air Quality Plan for Northland.
- Discretionary activity to discharge wastewater to ground by way of seepage under the Regional Water and Soil Plan for Northland.

### Volume of Wastewater and Consent Time Frame

The FNDC has produced growth strategy figures which show that the number of connections within the township is expected to grow at a rate of 2% per annum.

Therefore this application will be based on a 30 day rolling average daily dry weather flow of 1570 m<sup>3</sup>/day occurring in 2033.



A term of 25 years has been requested.

### **Assessment of Environmental Effects**

The analysis of the monitoring undertaken by NRC indicates that the East Coast Bays Wastewater Treatment Plant produces an effluent of good quality in terms of bacterial indicators such as faecal coliforms and pollutant indicators such as Biological Oxygen Demand.

With regards to faecal coliform monitoring the results show a median value in the discharge of 200 cfu/100ml for the total number of samples since 1990. The eighty percentile value was 580 cfu/100ml and the ninety percentile value recorded was 1,065 cfu/100ml. The above results apply to the treated wastewater discharge. However, the resource consent applies limits in the receiving environment as condition 2d (below). Even so, the discharge values are all within the levels set by the condition 2d of resource consent for the receiving environment.

*"2d. The median concentration of the faecal coliform bacteria in the water shall not exceed 600 per 100 millilitres, and the 80 percentile concentration shall not exceed 2400 per 100 millilitres, based on not fewer than 5 samples taken over any 30 day period."*

However further upgrading work will be required to achieve an acceptable standard of ammonia reduction. It is proposed that the renewed consent apply the ANZECC 2000 guidelines for ammonia with an acceptable lead in time to enable the Far North District Council to implement upgrading of the system to achieve these standards.

### **Assessment of Alternatives**

An assessment of alternatives for the East Coast Bays Wastewater Scheme was completed as required by Schedule 4 of the RMA.

As part of this initial desk top approach potential sites were identified and investigated

The two most favourable pieces of land, based on topography and soil type, for land disposal of treated effluent are the Taipa and Cable Bay Townships. As these are residential zones it is not possible to utilise these areas for land disposal and they have been excluded from the investigation.

Two other sites that could have potentially been utilised were towards the southeast of Cable Bay. Further evaluation demonstrated that these sites were also not suitable due to topography, the need to establish buffer zones from natural streams and insufficient land area.

Therefore the best practicable option is to continue to discharge treated effluent to the tributary of the Parapara Stream.

### Summary

Based on the analysis performed and the monitoring data that has been received, the East Coast Bays Wastewater Treatment Plant does not pose a significant effect on the receiving environment provided adequate resource consent conditions are complied with. Therefore this consent should be renewed to allow for the continued operation of this valuable community resource to safely treat the wastewater from the community.