

## **Report 99.478**

16 August 1999

File: N/3/10/1

Report to the Landcare Committee  
from Geoff Dick, Manager, Flood Protection (Operations)

### **Hutt River Mouth Extraction Resource Consents for the Deposition of Surplus Dredged Material**

#### **1. Purpose**

To inform the Landcare Committee of the June 1999 outcome of resource consent applications to dispose of surplus material from the Hutt River mouth extraction operation, and to recommend some “good neighbour” initiatives for the Hutt River mouth extraction operation site.

#### **2. Background**

On 31 December 1995, a 15 year license to Winstone Aggregates Ltd to extract shingle and sand from the Hutt River mouth expired. This set into motion a major project to renew a number of regulatory and access requirements so that the extraction operation could continue, and a new license could be negotiated with Winstone Aggregates Ltd.

The ongoing extraction operation at the Hutt River mouth is an important component of the current Hutt River scheme. It stops the formation of a sand bar across the mouth and general aggradation in the estuary reach, which if allowed to happen would raise flood levels and impede drainage. Accordingly, it is appropriate that the Regional Council facilitates and controls this activity by obtaining the necessary resource consents and owning the processing site.

The following summarises the project achievements to date:

<b>Issue</b>	<b>Status</b>
1) Extraction consent renewal	A 15-year coastal permit to extract sand and shingle from the Hutt River mouth (expires May 2011) granted in May 1996.

2) Disposal of by-product material	A 2.5 year coastal permit granted to dispose of surplus (non-saleable) materials from the sand processing operation.
3) Access through Hikoikoi Reserve	Easement granted by Hutt City Council in July 1997 and new access road constructed in November 1997.
4) Liability for Crown Royalties	Waiver granted by the Minister for the Environment in June 1998.
5) Long term plan for disposal of extraction by-product.	Options study completed in July 1998. 15 year coastal permits granted for the disposal of by-product in June 1999 (subject of this report).
6) Renewal of Winstone's License	Basic document including conditions of operation complete and verbally agreed, negotiations on commercial conditions ready to commence.

Previous Committee reports on the Hutt River mouth project include Reports 96.281, 96.282, 97.15, 97.261 and 97.262.

### 3. **Options Report : Reuse and Disposal of By-products**

The sand and shingle extracted from the Hutt River mouth is transported by barge to be processed onshore. Here the fine sands, the main saleable product used in concrete mixes, is separated from the silt (organic mud), shells, stones and timber. This fraction, which may be up to 30 percent of the total volume extracted from the river mouth, has little or no commercial value and needs to be disposed of.

The May 1996 decision to allow the material to be disposed of by placing it on the existing foreshore bund, was a short term consent (2.5 years) which allowed the then existing practice to continue. When this material is placed on the foreshore bund it gets washed back into the marine environment during southerly storms. This method of disposal of the reject material has led to a build up of stone and shells on the eastern end of Petone Beach. The Hearing Commissioners made it quite clear in their decision that they could only grant a short term consent and that the Regional Council should look at alternative disposal methods.

In April 1997, consultants Corporate Environmental Research Ltd were engaged to investigate options for the reuse or disposal of the dredge by-product. The specific options considered were: marine disposal, beach disposal, land-filling, reprocessing and reuse. The "Options Report : Reuse and Disposal of By-products", July 1998, reviewed the environmental effects, statutory obligations and costs for each option.

The recommendations from the report were that:

- The coarse fraction consisting of stones, shells and timber fragments be disposed of at a deposition site approximately 750m offshore.
- The fine fraction consisting of silt, some fine sand and fine organic material continue to be disposed of using the beach deposition method.

More detailed investigations were conducted including a detailed ecological survey of the proposed disposal site. The outcome of these further investigations was that the effects of the proposed disposal methods would be minor. In particular, disposing of the stones and shells offshore stops the build-up of this material on the eastern end of Petone beach.

#### 4. Consent Applications

In July 1998 the Flood Protection Group made the following resource consent applications:

- WGN 990012(01) to deposit on the sea floor (an area of some 6ha), an average of 5,200 m<sup>3</sup>/year of natural course material by-product (stones, shells and timber) dredged from the Hutt River mouth, to a maximum of 6,700 m<sup>3</sup>/year.
- WGN 990012(02) to deposit the fine by-product material (natural sand and silts) from the Hutt River mouth dredging operation on the easternmost end of Petone foreshore. This deposition will produce an intermittent discharge of fine by-product material into Wellington Harbour. An average of 8,800 m<sup>3</sup>/year of sand and silt is expected to flow into the Coastal Marine Area, with a maximum of 11,500 m<sup>3</sup>/year.

These applications were supported by the “Environmental Effects Assessment”, July 1998, and the “Ecological Survey of a Proposed Gravel Disposal Site in Wellington Harbour”, June 1998.

The applications were notified both through the newspapers and direct mail to a large number of interested parties. The submission period ended on 1 September 1998 and 19 submissions were received. No submissions were received from Iwi though they did provide comment during the consultation process for the application.

The majority of the submissions opposed one or both applications. Major issues of concern included:

- effects on the amenity value of Petone Beach.
- potential contamination of the fine reject material with heavy metals from the Waiwhetu Stream.
- risks to the Hutt Aquifer.
- build-up of the fine sediment on Petone Beach – make it muddy.
- safety at the site.
- the sustainability of the activity.

As a result of the submissions, Flood Protection requested a hold on the application while further investigation work was completed. This included further research into the sediment transport processes to refine the likely movement of dumped material, and testing for toxic substances in the fine material. The investigations confirmed that the proposed disposal methods should have no significant impact on Petone Beach. In addition, samples collected from the existing stockpile and silt trap for toxicity testing were found to be “very clean”.

## 5. **Decision and Consent Conditions**

On 18 June 1999 the Wellington Regional Council Hearings Committee granted the two applications as applied for, subject to conditions. There were no appeals against the Commissioners’ decisions.

The consent conditions include a stringent monitoring regime. This is summarised as follows:

Marine Disposal of Course Material:

- (17) Petone Beach monitoring every six months for the first four years and thereafter as determined by the Manager, Consents Management. Note this monitoring is currently conducted annually as a condition of the extraction consent.
- (18) Survey seafloor levels in years 4 and 11 of the consent to determine the location and extent of build-up.
- (19) Course grain size evaluation on seabed sediment samples taken from within the disposal area, outside the disposal area and from along a line taken at 20 degrees east from the centre of the disposal area towards the shoreline.
- (20) Ecological monitoring of the marine disposal site with grab samples and SCUBA diving observations undertaken annually from sites within and outside the disposal area.

Foreshore Disposal of Fine Material:

- (19) Petone Beach monitoring every six months for the first four years and thereafter at intervals to be determined. Note this monitoring is currently conducted annually as a condition of the extraction consent.
- (20) Survey checks of the deposition line, undertaken upon request by the Manager, Consents Management.

These consents expire on 17 May 2011 to coincide with the expiry of the Hutt River Mouth extraction consent.

## 6. **Cost of Consents and Compliance**

The costs of obtaining the resource consents were substantial and are listed below. Note Winstone Aggregates Ltd will pay for 50 percent of the non-staff costs, a total of \$36,625.

**Obtaining Resource Consents**

• Staff costs	\$ 9,300
• Options Report including consultation	\$10,000
• Prepare application including consultation	\$14,500
• Further investigations, consultation and hearing	\$16,900
• Legal fees	\$ 7,250
• Consent Authority charges	\$25,000
<b>Total</b>	<b>\$82,950</b>

The estimated costs of the required monitoring programme resulting from the deposition consents is provided as follows:

**Ongoing Monitoring Programme**

• Initial implementation	\$7,000
• Estimated average annual costs (1 <sup>st</sup> four years)	\$9,250
• Compliance charges	to be determined

**7. Project Summary**

Obtaining the disposal consents is a significant milestone in the Hutt River mouth management renewal project. All the necessary resource consents have now been obtained, and do not expire until May 2011. The Hutt River mouth extraction operation can therefore continue until that date.

The costs of obtaining the coastal disposal consents were high, but when spread over 12 years are very cost effective when compared to the alternative options of landfill or deep water disposal. The costs of barging the coarse fraction out to the dump site 750 metres offshore will not significantly add to Winstone Aggregates Ltd operational costs.

The next, and final, significant task in the project is to conclude a license agreement with Winstone Aggregates Ltd. The proposed license will end in 2011, when all the resource consents expire. The main outstanding items to be negotiated are the commercial aspects of the license including a site rental and extraction fee. It is hoped to have an agreement in principle, for Council approval, by the end of October.

At this stage it is also worth taking a moment to consider the need to renew the consents in 2011. My view is that the level of evidence needed to support continuance of the extraction operation, and its flood mitigation benefits, at that time will be even greater than through the current project. Environmental requirements are likely to be even more stringent. One advantage we will have, at that time, is 15 years of monitoring data. A study reviewing the fundamentals of the flood mitigation benefits, and hence this Council's involvement in the extraction operation is proposed.

## 8. Community Relations

Throughout the Hutt River mouth project there has been considerable objection voiced by various individuals and community groups. The greatest concerns have been the impacts of the Hutt River mouth extraction operation on the amenity value of Petone beach and the impact of a substantial commercial operation to the adjacent Hikoikoi Reserve, in particular trucks passing through the reserve.

Overall there is a good understanding, and an acceptance of, the need to dredge the Hutt River mouth for flood mitigation. However during the various hearings and consultation meetings the Regional Council has often been accused of not doing all it could to ensure that the impacts of the extraction operation are avoided or mitigated. This invariably comes down to a judgement of cost and effort relative to the net ratepayer benefit.

**Attachment 1** is a copy of the evidence presented by Roy Hewson on behalf of Keep Petone Beautiful. It summarises well many of the concerns expressed by submitters.

My personal view from having managed the project from the beginning is that there is no doubt that Petone Beach has changed since the 1930s when many of the records start. It is not as sandy as it used to be and for many people this has considerably reduced its attraction. However it is not just Petone Beach that has changed but the whole Hutt River mouth area. Since the early 1920s when dredging of the river mouth commenced in earnest, changes have included; the east bank reclamation, construction of the Seaview marina, the former Petone landfill and reclamation of the current extraction operation site. In addition for many years industrial discharges including from the Gear Meat company, had outfalls directly onto Petone Beach.

While the expert evidence gathered for the extraction and deposition consents shows that the mouth operation will have no significant effects on Petone Beach, **as it is today**, it will however not return the beach to the former early 1900s condition. For this to happen, dredging would need to stop to allow the natural sand spit and bar to reform, which is at odds to the flood mitigation requirements.

My view is that there are further positive initiatives the Regional Council and Winstone Aggregates Ltd can do to show we are a good and responsible neighbour, and to further reduce any impacts on Petone Beach and the Hikoikoi Reserve from the sand plant operation.

Recommended initiatives include:

- Landscaping and tree planting of the Petone foreshore and Hutt River boundaries of the site.
- Work with Hutt City Council to landscape and plant an unused north-west corner of the site (Regional Council land), effectively incorporating this area into the Hikoikoi Reserve.
- Over time, replace the current demolition concrete foreshore protection bund with rock rip-rap, and clean up the scattered demolition material on the beach.

Other initiatives suggested have been to remove many of the stones and shells washed up over the years on the eastern end of the beach, and to financially contribute to Hutt City Council's beach grooming work so that it can be done more frequently (following Hutt River floods a lot of drift wood is washed up on the beach). Both these initiatives have significant costs and would require additional funds. They are not recommended at this stage given likely Council commitments to the Hutt River Floodplain Management Plan. However, Committee members may wish to express a view on this.

## 9. **Communication**

The outcome of the consent applications for the disposal of the dredging by-product has already been well covered in the community newspapers.

However, it is important that any "good neighbour" initiatives taken, as suggested in Section 8 above, be conveyed to the Petone Community, and the various interest groups. It is proposed to do this through letters and a press release to the local community newspaper.

## 10. **Recommendations**

- (1) *That the report be received and its contents noted.*
- (2) *That the Committee endorses the "good neighbour" initiatives recommended in Section 8 of this report, and notes that no special additional funding for this work is sought at this stage.*
- (3) *That the "good neighbour" initiatives endorsed by the Committee, in (2) above, be communicated to the relevant Petone Beach and Hikoikoi Reserve interest groups, and the Petone Community in general.*

Report prepared by:

Approved for submission:

GEOFF DICK  
Manager, Flood Protection (Operations)

ANDREW ANNAKIN  
Divisional Manager, Landcare

Attachment 1 : Hearing Submission from Keep Petone Beautiful