Waverley Bulk Transport Limited
Quarry Monitoring Programme
Biennial Report
2013-2015

Technical Report 2015-27
Executive summary

Waverley Bulk Transport Limited (The Company) operates a dry crushing shell rock quarry located on Rangitatau West Road at Maxwell, in the Waitotara catchment two kilometres from the Makokako Stream. It operates on a commercial basis. This report for the period July 2013–June 2015 describes the monitoring programme implemented by the Taranaki Regional Council (The Council) to assess the Company’s environmental performance during the period under review, and the results and environmental effects of the Company’s activities.

This report addresses two resource consents held by the Company, which includes a total of 16 conditions setting out the requirements that the Company must satisfy. Resource consent 9570-1 permits the discharge of stormwater into and onto land. Resource consent 9972-1.2 permits the discharge of cleanfill onto and into land.

During the monitoring period, the Company demonstrated an overall high level of environmental performance.

The Council’s monitoring programme for the period under review included four inspections. The monitoring showed that the site was being well managed with respect to stormwater treatment controls. No water samples were taken during the monitoring period as it was not warranted upon inspection of the site.

The monitoring showed that there had been no significant adverse effects in the receiving environment as a result of the Company’s quarrying activities. During the period under review, the Company demonstrated a high level of environmental and administrative performance and compliance with the resource consents.

For reference, in the 2013-2014 year, 60% of consent holders in Taranaki monitored through tailored compliance monitoring programmes achieved a high level of environmental performance and compliance with their consents, while another 29% demonstrated a good level of environmental performance and compliance with their consents. In the 2014-2015 year, 75% of consent holders in Taranaki monitored through tailored compliance monitoring programmes achieved a high level of environmental performance and compliance with their consents, while another 22% demonstrated a good level of environmental performance and compliance with their consents.

This report includes a recommendation for the 2015-2017 monitoring period.
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1. Introduction

1.1 Compliance monitoring programme reports and the Resource Management Act 1991

1.1.1 Introduction

This report is for the period July 2013-June 2015 by the Taranaki Regional Council (the Council) describing the monitoring programme associated with resource consents held by Waverley Bulk Transport Limited (the Company). The Company operates a quarry situated on Rangitatau West Road near Maxwell in the Waitotara catchment.

This report covers the results and findings of the monitoring programme implemented by the Council in respect of the consents held by the Company that relate to discharges of stormwater and cleanfill at a quarry in the Waitotara catchment. This is the third report to be prepared for the Company by the Council to cover the water discharges and their effects from this quarry. This is the first report to also include the monitoring and assessment of a cleanfill at the quarry site.

1.1.2 Structure of this report

Section 1 of this report is a background section. It sets out general information about compliance monitoring under the Resource Management Act 1991 (RMA) and the Council’s obligations and general approach to monitoring sites through annual programmes, the resource consents held by the Company in the Waitotara catchment, the nature of the monitoring programme in place for the period under review, and a description of the activities and operations conducted in the Company’s site.

Section 2 presents the results of monitoring during the period under review, including scientific and technical data.

Section 3 discusses the results, their interpretation, and their significance for the environment.

Section 4 presents recommendations to be implemented in the 2015-2017 monitoring years.

A glossary of common abbreviations and scientific terms, and a bibliography, are presented at the end of the report.

1.1.3 The Resource Management Act 1991 and monitoring

The RMA primarily addresses environmental ‘effects’ which are defined as positive or adverse, temporary or permanent, past, present or future, or cumulative. Effects may arise in relation to:

(a) the neighbourhood or the wider community around an activity, and may include cultural and social-economic effects;
(b) physical effects on the locality, including landscape, amenity and visual effects;
(c) ecosystems, including effects on plants, animals, or habitats, whether aquatic or terrestrial;
(d) natural and physical resources having special significance (for example recreational, cultural, or aesthetic);
(e) risks to the neighbourhood or environment.
In drafting and reviewing conditions on discharge permits, and in implementing monitoring programmes, the Council is recognising the comprehensive meaning of ‘effects’ inasmuch as is appropriate for each activity. Monitoring programmes are not only based on existing permit conditions, but also on the obligations of the RMA to assess the effects of the exercise of consents. In accordance with section 35 of the RMA, the Council undertakes compliance monitoring for consents and rules in regional plans, and maintains an overview of the performance of resource users and consent holders. Compliance monitoring, including both activity and impact monitoring, enables the Council to continually re-evaluate its approach and that of consent holders to resource management and, ultimately, through the refinement of methods and considered responsible resource utilisation, to move closer to achieving sustainable development of the region’s resources.

1.1.4 Evaluation of environmental and administrative performance

Besides discussing the various details of the performance and extent of compliance by the Company during the period under review, this report also assigns a rating as to the Company’s environmental and administrative performance.

**Environmental performance** is concerned with actual or likely effects on the receiving environment from the activities during the monitoring year. **Administrative performance** is concerned with the Company’s approach to demonstrating consent compliance in site operations and management including the timely provision of information to Council (such as contingency plans and water take data) in accordance with consent conditions.

Events that were beyond the control of the consent holder and unforeseeable (that is a defence under the provisions of the RMA can be established) may be excluded with regard to the performance rating applied. For example loss of data due to a flood destroying deployed field equipment.

The categories used by the Council for this monitoring period, and their interpretation, are as follows:

**Environmental Performance**

- **High** No or inconsequential (short-term duration, less than minor in severity) breaches of consent or regional plan parameters resulting from the activity; no adverse effects of significance noted or likely in the receiving environment. The Council did not record any verified unauthorised incidents involving significant environmental impacts and was not obliged to issue any abatement notices or infringement notices in relation to such impacts.

- **Good** Likely or actual adverse effects of activities on the receiving environment were negligible or minor at most. There were some such issues noted during monitoring, from self reports, or in response to unauthorised incident reports, but these items were not critical, and follow-up inspections showed they have been dealt with. These minor issues were resolved positively, co-operatively, and quickly. The Council was not obliged to issue any abatement notices or infringement notices in relation to the minor non-compliant effects; however, abatement notices may have been issued to mitigate an identified potential for an environmental effect to occur.
For example:

- High suspended solid values recorded in discharge samples, however the
discharge was to land or to receiving waters that were in high flow at the
time;
- Strong odour beyond boundary but no residential properties or other
recipient nearby.

- **Improvement required** Likely or actual adverse effects of activities on the
receiving environment were more than minor, but not substantial. There were
some issues noted during monitoring, from self reports, or in response to
unauthorised incident reports. Cumulative adverse effects of a persistent minor
non-compliant activity could elevate a minor issue to this level. Abatement
notices and infringement notices may have been issued in respect of effects.

- **Poor** Likely or actual adverse effects of activities on the receiving environment
were significant. There were some items noted during monitoring, from self
reports, or in response to unauthorised incident reports. Cumulative adverse
effects of a persistent moderate non-compliant activity could elevate an
‘improvement required’ issue to this level. Typically there were grounds for
either a prosecution or an infringement notice in respect of effects.

**Administrative performance**

- **High** The administrative requirements of the resource consents were met, or any
failure to do this had trivial consequences and were addressed promptly and co-
operatively.

- **Good** Perhaps some administrative requirements of the resource consents were
not met at a particular time, however this was addressed without repeated
interventions from the Council staff. Alternatively adequate reason was provided
for matters such as the no or late provision of information, interpretation of ‘best
practical option’ for avoiding potential effects, etc.

- **Improvement required** Repeated interventions to meet the administrative
requirements of the resource consents were made by Council staff. These matters
took some time to resolve, or remained unresolved at the end of the period under
review. The Council may have issued an abatement notice to attain compliance.

- **Poor** Material failings to meet the administrative requirements of the resource
consents. Significant intervention by the Council was required. Typically there
were grounds for an infringement notice.

For reference, in the 2013-2014 year, 60% of consent holders in Taranaki monitored
through tailored compliance monitoring programmes achieved a high level of
environmental performance and compliance with their consents, while another 29%
demonstrated a good level of environmental performance and compliance with their
consents. In the 2014-2015 year, 75% of consent holders in Taranaki monitored through
tailored compliance monitoring programmes achieved a high level of environmental
performance and compliance with their consents, while another 22% demonstrated a
good level of environmental performance and compliance with their consents.
1.2 Process description

1.2.1 Background

In the past, a large percentage of aggregate production came from river-based sites within Taranaki. The Waiwhakaiho River supplied much of New Plymouth's requirements as far back as the 1950s with the Waitara River, Waiongana River, Kapuni Stream and Waingongoro River also providing a valuable source of aggregate. The aggregate source within these rivers was often over-exploited. The protective armouring of the boulders and gravel was removed in places, exposing the underlying erodible ash beds and creating deep narrow channels, which moved progressively upstream with no noticeable recovery. This brought about the need for the Shingle Extraction Bylaw introduced in 1974. Aggregate extraction from rivers was then controlled through the issue of permits accompanied by a set of conditions, with the removal of river-based aggregate being restricted to that for river control purposes only.

Historically, land-based sites required steady markets to compete with the easily won river-based extraction operations. However, in the early 1980s, due to the restriction placed on river-based aggregate extraction (and the completion of various major river control programmes and ‘Think Big’ projects) land-based sites became more widespread (Taranaki Regional Council, 1992).

Currently, there are twenty six quarries in the region that are monitored by the Council. These quarries are generally (but not in this case) located in a reasonable proximity to urban areas, from which the greatest demand for aggregate stems.

Provision of aggregate to meet longer term demand will continue to be dominated by several large quarry operations. Extra demand on alluvial terraces and laharic deposits has occurred due to the control of river bed extraction. These resources are of good quality and are relatively plentiful. Importation of various aggregates may need to continue to meet the requirement for aggregate types not available in Taranaki.

Quarrying and shingle extraction in Taranaki is covered by the RMA and, if the minerals in question are Crown owned, by the Crown Minerals Act 1991.

Regional Councils have no control over the provision of exclusive rights to minerals. However, Regional Councils do have control over the environmental effects of aggregate extraction from river and lake beds, and land in certain circumstances, and these controls may act as a constraint or limitation on allocation decisions.

Sections 15 and 30 of the RMA give Regional Councils responsibility for the discharge of contaminants into the environment. Discharges of water into water, contaminants onto or into land that may result in water contamination, and contaminants from industrial premises into air or onto and into land, may not take place unless expressly allowed by a rule in a regional plan, a resource consent, or regulations. Aggregate extraction often involves washing aggregates, and therefore requires the discharge of wastes. Other discharges, such as emissions to air from crushing and processing plants, disposal of spoil and solid wastes, and discharges of stormwater are also the responsibility of regional councils.
1.2.2 Waverley Bulk Transport Quarry

The Company’s Rangitatau West Road quarry is situated on a rocky bluff approximately two kilometres above the Makokako Stream. The site was established in 2005-2006 and has a current exposed quarried area of approximately two hectares. The aggregate is processed by dry crushing and no aggregate washing is carried out on site. The site is well screened from the road and neighbouring properties by a surrounding pine plantation.

The quarrying process at this site involves progressively lowering an approximately 15 hectare bench-like shelf of exposed shellrock by approximately 20 metres. The shellrock bench has been first stripped of a thin layer of top soil and overburden in stages. This material has been stockpiled on site for future reinstatement and rehabilitation purposes. Before the site was established as a quarry it was in pasture, and used for grazing, and it is intended that following the quarrying operations it will be rehabilitated and reinstated as such. In addition to the quarrying activities, a resource consent commenced on the 20 November 2014 permitting the Company to operate a cleanfill onsite.

The contour and aspect of the strata being quarried allows all of the stormwater from quarried areas to be contained within the quarry pit and discharge is currently entirely via seepage to ground.

When the site was first established a silt pond was maintained outside and above the main pit. Stormwater was pumped out of the pit to be treated through it before discharge. It is intended that the site is operated in a manner that ensures that the bottom of the cut always slopes back to the hillside or the quarry pit. This ensures that
no untreated stormwater can escape from the site. The site also contains some minor springs whose waters need to be controlled appropriately on an ongoing basis.

1.3 Resource consents

1.3.1 Water abstraction

Section 14 of the RMA stipulates that no person may take, use, dam or divert any water, unless the activity is expressly allowed for by a resource consent or a rule in a regional plan, or it falls within some particular categories set out in Section 14.

Ensuring sufficient volumes of water within streams and rivers to protect aquatic habitat is a primary concern of the Council with respect to water abstraction permits. Water abstraction for quarries is primarily only required for the washing of aggregate and as the Company do not wash aggregate their water needs are minimal and they do not hold nor need any permit to abstract water. As there is no water abstraction permit, any water use must comply with the 50 cubic metres per day and 1.5 litres per second allowed under the permitted activity rule [Rule 15] of the Regional Freshwater Plan.

1.3.2 Water discharge permit

The Company holds water discharge permit 9570-1 to discharge stormwater into and onto land. This permit was issued by the Council on 28 May 2013 under Section 87(e) of the RMA. The resource consent will expire on 1 June 2028.

There are five special conditions attached to this consent, summarised as follows:
Condition 1 states that quarry activities shall not exceed two hectares.

Condition 2 states that runoff shall pass through settlement ponds.

Condition 3 states that all earthworks shall be stabilised with vegetation.

Condition 4 requires the consent holder at all times adopt best practicable option.

Condition 5 allows the review of consent conditions.

A copy of the permit is attached to this report in Appendix I.

**1.3.3 Air discharges**

Section 15(1)(c) of the RMA stipulates that no person may discharge any contaminant from any industrial or trade premises into air, unless the activity is expressly allowed for by a resource consent, a rule in a regional plan, or by national regulations.

Rule 17 of the Council's Regional Air Quality Plan for Taranaki (RAQP) allows the discharge of emissions from quarrying operations as a permitted activity, subject to compliance with various environmental performance conditions. The Company does not hold any air discharge consent.

**1.3.4 Discharges of wastes to land**

Sections 15(1)(b) and (d) of the RMA stipulate that no person may discharge any contaminant onto land if it may then enter water, or from any industrial or trade premises onto land under any circumstances, unless the activity is expressly allowed for by a resource consent, a rule in a regional plan, or by national regulations.

The Company have recently obtained resource consent 9972-1.2 to discharge cleanfill onto and into land. This permit was issued by the Council on 20 November 2014 under Section 87(e) of the RMA. It is due to expire on 1 June 2034.

Condition 1 outlines the area that the cleanfill is permitted to operate within.

Condition 2 outlines the permitted contaminants that may be discharged into the cleanfill.

Condition 3 outlines prohibited contaminants that may not be discharged into the cleanfill.

Condition 4 directs the consent holder to contact the Council if they are unsure about the status of a contaminant.

Condition 5 prohibits any solid contaminants from entering surface and/or groundwater.

Condition 6 requires the installation and maintenance of silt retention structures.

Condition 7 requires the installation and maintenance of stormwater diversion drains.
Condition 8 requires the consent holder to adopt the best practicable option to prevent or minimise adverse environmental effects.

Condition 9 requires the reinstatement of the cleanfill site upon conclusion of the activity.

Condition 10 outlines the provision for consent lapse.

Condition 11 outlines the provision for consent review.

The permit is attached to this report in Appendix I.

1.4 Monitoring programme

1.4.1 Introduction

Section 35 of the RMA sets out obligations upon the Council to gather information, monitor, and conduct research on the exercise of resource consents, and the effects arising, within the Taranaki region and report upon these.

The Council may therefore make and record measurements of physical and chemical parameters, take samples for analysis, carry out surveys and inspections, conduct investigations, and seek information from consent holders.

The monitoring programme for the Rangitatau West Road quarry site consisted of three primary components.

1.4.2 Programme liaison and management

There is generally a significant investment of time and resources by the Council in:

- ongoing liaison with resource consent holders over consent conditions and their interpretation and application;
- in discussion over monitoring requirements;
- preparation for any reviews;
- renewals;
- new consents;
- advice on the Council’s environmental management strategies and content of regional plans and;
- consultation on associated matters.

1.4.3 Site inspections

The Company’s quarry site was visited four times during the monitoring period. With regard to the consent for the discharge to water, the main points of interest were plant processes with potential or actual discharges to receiving watercourses, including contaminated stormwater and process wastewaters. Air inspections focused on plant processes with associated actual and potential emission sources and characteristics, including potential odour, dust, noxious or offensive emissions. Sources of data being collected by the consent holder were identified and accessed, so that performance in respect of operation, internal monitoring, and supervision could be reviewed by the Council. The neighbourhood was surveyed for environmental effects.
1.4.4 Physicochemical sampling

The Council may collect one stormwater discharge sample per year, if warranted. The sample may be analysed for turbidity, suspended solids and hydrocarbons.
2. **Results**

2.1 **Inspections**

During the period under review the Council carried out four routine inspections at the Company’s quarry site.

**17 September 2013**
There was a small amount of product stockpiled on site. Extraction and processing of aggregate was occurring at the time of the inspection. Silt and sediment controls were yet to be installed. A small pile of waste had been deposited from offsite. Staff were instructed to stop accepting offsite material and to install sediment controls.

**20 May 2014**
There was a large amount of product stockpiled onsite. Aggregate was being processed at the time of the inspection and movement of the extraction area was evident. Puddles were present and soak holes were reasonably full. Staff were encouraged to construct a wall along the south east corner of the quarry to ensure stormwater runoff is directed through the settling ponds. It was also suggested that the settling ponds were deepened. A considerable amount of bitumen, clay, dirt, and concrete had been dumped at the end of the quarry. Staff were again instructed to stop accepting waste from offsite. This was further clarified by informing staff that a resource consent would be required for this activity.

**11 August 2014**
There was a small amount of product stockpiled onsite. Aggregate was being processed at the time of the inspection. Work was still required in the excavation area in order to ensure that stormwater runoff was diverted appropriately. Settling ponds still required further deepening to facilitate the settlement of fine sediment. It appeared that no further offsite material had been dumped in the quarry. A resource consent to operate a cleanfill onsite had been applied for. Overall the site was in a satisfactory state, however, as mentioned earlier there was a lot of work still required.

**26 November 2014**
This inspection was conducted following recent heavy rain. There was a small amount of product stockpiled onsite. Aggregate was being processed at the time of the inspection. A bund had been constructed along the southern edge of the quarry directing runoff into settling ponds. The ponds appeared to be working well, however it was asked that staff continue to deepen them. Resource consent 9972-1.2 commenced on 20 November 2014 allowing for the discharge of cleanfill to land. There was a small amount of material in the cleanfill consisting of cured bitumen, concrete, clay and dirt. There were no ponding or dust issues on site. Overall the site was in a satisfactory state.

2.2 **Investigations, interventions, and incidents**

The monitoring programme for the year was based on what was considered to be an appropriate level of monitoring, review of data, and liaison with the consent holder. During the year matters may arise which require additional activity by the Council, for example provision of advice and information, or investigation of potential or actual courses of non-compliance or failure to maintain good practices. A pro-active approach that in the first instance avoids issues occurring is favoured.

The Council operates and maintains a register of all complaints or reported and discovered excursions from acceptable limits and practices, including non-compliance
with consents, which may damage the environment. The Incident Register (IR) includes events where the Company concerned has itself notified the Council. The register contains details of any investigation and corrective action taken.

Complaints may be alleged to be associated with a particular site. If there is potentially an issue of legal liability, the Council must be able to prove by investigation that the identified company is indeed the source of the incident (or that the allegation cannot be proven).

In the 2013-2015 period, the Council was not required to undertake significant additional investigations and interventions, or record incidents, in association with the Company’s conditions in resource consents or provisions in Regional Plans.
3. Discussion

3.1 Discussion of site performance

Four site inspections were carried out during the period under review. Over the course of the inspections, the Company demonstrated a satisfactory standard of site maintenance and upkeep. The quarry pit floor and surroundings were progressively contoured and bunded to retain sediment and silt within control structures and soakage areas. No samples were taken as the inspections did not indicate that contaminated discharges were escaping from the immediate site surrounds.

No complaints have been received by the Council and there was no need to issue any abatement notices or environmental infringement fines. The site is well screened from the road and nearby residences by a surrounding pine plantation which would help with prevention of noise and dust nuisances.

A stormwater management plan and spill contingency plan have been previously supplied by the Company to the Council and are still considered adequate for the purpose. Staff have a spill kit on site and are trained in its use.

3.2 Environmental effects of exercise of consents

The main potential environmental effect of quarry operations on waterways is the discharge of stormwater or washwater containing high concentrations of suspended solids. Such discharges may result in a discolouration of the waterway near the discharge point and may result in the smothering of benthic life, form a barrier to fish movement and may affect fish spawning habitats. As no aggregate washing is carried out on the Waverley Bulk Transport site the risk is of sediment contaminating natural waters is minimised, however careful management is still needed to ensure that stormwater that has entrained sediment on exposed quarry faces is controlled, so it cannot affect the nearby Makokako Stream.

Monitoring of the site during the 2013-2015 monitoring period has indicated that stormwater discharges from the site have had no discernable effect on the nearby waters of the Makokako Stream.
### 3.3 Evaluation of performance

A tabular summary of the consent holder’s compliance record for the year under review is set out in Tables 1 and 2.

#### Table 1  Summary of performance in relation to consent 9570-1

<table>
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<tr>
<th>Condition requirement</th>
<th>Means of monitoring during period under review</th>
<th>Compliance achieved?</th>
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<tbody>
<tr>
<td>1. Quarry activities shall not exceed two hectares at any one time</td>
<td>Inspections of data and site inspections</td>
<td>Yes</td>
</tr>
<tr>
<td>2. Settlement ponds and sediments traps must be in place to capture any run-off</td>
<td>Site inspections</td>
<td>Yes</td>
</tr>
<tr>
<td>3. Earthworks shall be stabilised with vegetation</td>
<td>Site inspections</td>
<td>Yes</td>
</tr>
<tr>
<td>4. Adopt best practicable option</td>
<td>Site inspections</td>
<td>Yes</td>
</tr>
<tr>
<td>5. Option for review</td>
<td>Review not required until June 2016</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Overall assessment of consent compliance and environmental performance in respect of this consent: High

Overall assessment of administrative performance in respect of this consent: High

N/A = not applicable

#### Table 2  Summary of performance in relation to consent 9972-1.2

<table>
<thead>
<tr>
<th>Condition requirement</th>
<th>Means of monitoring during period under review</th>
<th>Compliance achieved?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cleanfill limited to prescribed area</td>
<td>Inspections</td>
<td>Yes</td>
</tr>
<tr>
<td>2. May only discharge cleanfill / inert materials</td>
<td>Inspections</td>
<td>Yes</td>
</tr>
<tr>
<td>3. No prohibited contaminants to be discharged</td>
<td>Inspections</td>
<td>Yes</td>
</tr>
<tr>
<td>4. Obtain approval from the Council if unsure of status of contaminant</td>
<td>TRC – consent holder liaison</td>
<td>N/A</td>
</tr>
<tr>
<td>5. No contaminant to enter surface water or groundwater</td>
<td>Inspection</td>
<td>Yes</td>
</tr>
<tr>
<td>6. Silt retention structures to be installed</td>
<td>Inspections</td>
<td>Yes</td>
</tr>
<tr>
<td>7. Maintain drains to divert stormwater from cleanfill discharge area</td>
<td>Inspections</td>
<td>Yes</td>
</tr>
<tr>
<td>8. Prevent or minimise environmental effect</td>
<td>Inspections</td>
<td>Yes</td>
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</table>
The Company has demonstrated a high level of environmental and administrative performance and compliance with its consents during the period under review. Inspections found the site was well maintained and compliant with consent conditions. Discharges from the site were confined to land and there were no adverse effects associated with quarry or cleanfill activity observed in any surface waterbody.

3.4 **Recommendations from the 2009-2013 Quadrennial Report**

In the 2009-2013 Quadrennial Report, it was recommended:

1. THAT monitoring of consented activities at Waverley Bulk Transport Limited’s Rangitatau Road Quarry in the 2013-2015 monitoring period continue at the same level as in 2009-2013

3.5 **Alterations to monitoring programmes for 2015-2017**

In designing and implementing the monitoring programmes for air/water discharges in the region, the Council has taken into account the extent of information made available by previous authorities, its relevance under the RMA the obligations of the Act in terms of monitoring emissions/discharges and effects, and subsequently reporting to the regional community. The Council also takes into account the scope of assessments required at the time of renewal of permits, and the need to maintain a sound understanding of industrial processes within Taranaki emitting to the atmosphere/discharging to the environment.

It is proposed that for the Company’s Rangitatau Road quarry that the monitoring programme for the 2015-2017 monitoring period continue at the same level as in 2013-2015 A recommendation to this effect is attached to this report.

3.6 **Exercise of optional review of consent**

Resource consent 9570-1 does not provide for an optional review of the consent in June 2015. The next date on which the consent may be subjected to a review is June 2016.

Resource consent 9972-1.2 does not provide for an optional review of the consent in June 2015. The next date on which the consent may be subjected to a review is June 2022.
4. Recommendations

1. THAT monitoring of consented activities at Waverley Bulk Transport Limited’s Rangitatau Road Quarry in the 2015-2017 monitoring programme continues at the same level as in 2013-2015.
Glossary of common terms and abbreviations

The following abbreviations and terms may be used within this report:

**Bund**  
A wall around a tank/object to contain its contents in the case of a leak.

**g/m³**  
Grams per cubic metre, and equivalent to milligrams per litre (mg/L). In water, this is also equivalent to parts per million (ppm), but the same does not apply to gaseous mixtures.

**Incident**  
An event that is alleged or is found to have occurred that may have actual or potential environmental consequences or may involve non-compliance with a consent or rule in a regional plan. Registration of an incident by the Council does not automatically mean such an outcome had actually occurred.

**Intervention**  
Action/s taken by Council to instruct or direct actions be taken to avoid or reduce the likelihood of an incident occurring.

**Investigation**  
Action taken by Council to establish what were the circumstances/events surrounding an incident including any allegations of an incident.

**IR**  
Incident Register – contains a list of events recorded by the Council on the basis that they may have the potential or actual environmental consequences that may represent a breach of a consent or provision in a regional plan.

**Mixing zone**  
The zone below a discharge point where the discharge is not fully mixed with the receiving environment. For a stream, conventionally taken as a length equivalent to seven times the width of the stream at the discharge point.

**O&G**  
Oil and grease, defined as anything that will dissolve into a particular organic solvent (e.g. hexane). May include both animal material (fats) and mineral matter (hydrocarbons).

**pH**  
A numerical system for measuring acidity in solutions, with 7 as neutral. Numbers lower than 7 are increasingly acidic and higher than 7 are increasingly alkaline. The scale is logarithmic i.e. a change of 1 represents a ten-fold change in strength. For example, a pH of 4 is ten times more acidic than a pH of 5.

**Physicochemical**  
Measurement of both physical properties (e.g. temperature, clarity, density) and chemical determinants (e.g. metals and nutrients) to characterise the state of an environment.

**Resource consent**  
Refer Section 87 of the RMA. Resource consents include land use consents (refer Sections 9 and 13 of the RMA), coastal permits (Sections 12, 14 and 15), water permits (Section 14) and discharge permits (Section 15).

**RMA**  

**SS**  
Suspended solids.

**Temp**  
Temperature, measured in °C.

**UI**  
Unauthorised Incident.

For further information on analytical methods, contact the Council’s laboratory.
Bibliography and references


Appendix I

Resource consents held by
Waverley Bulk Transport Limited
Discharge Permit
Pursuant to the Resource Management Act 1991
a resource consent is hereby granted by the
Taranaki Regional Council

Name of Consent Holder: Waverley Bulk Transport Limited
2 Bear Street
WAVERLEY 4510

Decision Date: 28 May 2013
Commencement Date: 28 May 2013

Conditions of Consent

Consent Granted: To discharge stormwater onto and into land from quarrying activities

Expiry Date: 1 June 2028
Review Date(s): June 2016, June 2022
Site Location: Rangitatau West Road, Waitotara
Legal Description: Lot 6 DP 77930 (Discharge source & site)
Grid Reference (NZTM) 1759360E-5595856N
Catchment: Waitotara
Tributary: Makokako

For General, Standard and Special conditions pertaining to this consent please see reverse side of this document
General condition

a. The consent holder shall pay to the Taranaki Regional Council all the administration, monitoring and supervision costs of this consent, fixed in accordance with section 36 of the Resource Management Act 1991.

Special conditions

1. The active area of the quarry shall not exceed 2 hectares at any one time.

2. If any area of soil is exposed, all run off from that area shall pass through settlement ponds or sediment traps with a minimum total capacity of;
   a) 100 cubic metres for every hectare of exposed soil between 1 November to 30 April; and
   b) 200 cubic metres for every hectare of exposed soil between 1 May to 31 October; unless other sediment control measures that achieve an equivalent standard are agreed to by the Chief Executive of the Taranaki Regional Council.

3. All earthworked areas shall be stabilised vegetatively or otherwise as soon as is practicable immediately following completion of soil disturbance activities.

4. The consent holder shall at all times adopt the best practicable option, as defined in section 2 of the Resource Management Act 1991, to prevent or minimise any actual or likely adverse effect on the environment associated with the discharge of contaminants from the site.

5. In accordance with section 128 and section 129 of the Resource Management Act 1991, the Taranaki Regional Council may serve notice of its intention to review, amend, delete or add to the conditions of this resource consent by giving notice of review during the month of June 2016 and/or June 2022, for the purpose of ensuring that the conditions are adequate to deal with any adverse effects on the environment arising from the exercise of this resource consent, which were either not foreseen at the time the application was considered or which it was not appropriate to deal with at the time.

Signed at Stratford on 28 May 2013

For and on behalf of
Taranaki Regional Council

______________________________
Director-Resource Management
Discharge Permit
Pursuant to the Resource Management Act 1991
a resource consent is hereby granted by the
Taranaki Regional Council

Name of Consent Holder: Waverley Bulk Transport Limited
2 Bear Street
Waverley 4510

Decision Date: 20 November 2014
Commencement Date: 20 November 2014

Conditions of Consent

Consent Granted: To discharge cleanfill onto and into land
Expiry Date: 01 June 2034
Review Date(s): June 2022, June 2028
Site Location: Rangitatau Road West, Maxwell
Legal Description: Lots 5 & 6 DP 77930 Blks V & VI Nukumaru SD (Discharge site)
Grid Reference (NZTM) 1759157E-5595928N
Catchment: Waitotara
Tributary: Makokako

For General, Standard and Special conditions pertaining to this consent please see reverse side of this document
General condition

a. The consent holder shall pay to the Taranaki Regional Council all the administration, monitoring and supervision costs of this consent, fixed in accordance with section 36 of the Resource Management Act 1991.

Special conditions

1. The discharge of cleanfill shall only occur in the area shaded yellow on the plan attached as Appendix 1.

2. The contaminants to be discharged shall be limited to cleanfill and/or inert materials. For the purposes of this condition, “clean fill and inert materials” are defined as materials consisting of any concrete, cement or cement wastes, bricks, mortar, tiles (clay, ceramic or concrete), cured asphalt, non-tanalised timber, porcelain, glass, gravels, boulders, shingles, fibreglass, plastics, sand, soils and clays, and/or tree stumps and roots, whether singly or in combination or mixture, or any other material (subject to condition 3) that when placed onto and into land will not render that land or any vegetation grown on that land toxic to vegetation or animals consuming vegetation.

3. The discharge of the following contaminants shall not occur: food wastes, paper and cardboard, grass clippings, garden wastes including but not limited to wastes containing foliage or other vegetation (other than tree stumps and roots as permitted under condition 2), textiles, steel, galvanised metals, construction materials containing paint or fillers or sealers or their containers, oils or greases or any liquids or sludges or their containers, any industrial process by-products other than as permitted under condition 2, any poisons or solvents or their containers, batteries, general domestic refuse not otherwise described, or any wastes with the potential to render land or any vegetation grown on the land toxic to vegetation or to animals consuming such vegetation.

4. If the consent holder is uncertain as to the acceptability or not of a certain material the consent holder shall obtain written approval from the Consents Manager, Taranaki Regional Council, prior to its discharge.

5. The discharge to land shall not result in any solid contaminant entering surface water or groundwater.

6. Silt retention structures shall be installed and maintained at the toe of the cleanfill discharge area to minimise silt and sediment discharge. Installing silt retention structures in accordance with Guidelines for Earthworks in the Taranaki region, by the Taranaki Regional Council, will achieve compliance with this condition.

7. The consent holder shall install and maintain stormwater diversion drains to minimise stormwater entering the cleanfill discharge area to the satisfaction of the Chief Executive, Taranaki Regional Council.

8. The consent holder shall at all times adopt the best practicable option or options (as defined in section 2 of the Resource Management Act 1991) to prevent or minimise any actual or potential effect on the environment arising from any discharge at the site.
9. Upon completion of the cleanfill discharge authorised by this consent, the discharge site shall be stabilised and re-vegetated to the satisfaction of the Chief Executive, Taranaki Regional Council.

10. This consent shall lapse on 31 December 2019, unless the consent is given effect to before the end of that period or the Taranaki Regional Council fixes a longer period pursuant to section 125(1)(b) of the Resource Management Act 1991.

11. In accordance with section 128 and section 129 of the Resource Management Act 1991, the Taranaki Regional Council may serve notice of its intention to review, amend, delete or add to the conditions of this resource consent by giving notice of review during the month of June 2022 and/or June 2028, for the purpose of ensuring that the conditions are adequate to deal with any adverse effects on the environment arising from the exercise of this resource consent, which were either not foreseen at the time the application was considered or which it was not appropriate to deal with at the time.

Signed at Stratford on 20 November 2014

For and on behalf of
Taranaki Regional Council

__________________________________________
A D McLay
Director - Resource Management
Figure 4  Area where the discharge of cleanfill is permitted.