

Grant Cudby Contracting Limited
Whenuku Road
Quarry Monitoring Programme
Biennial Report
2013-2015

Technical Report 2015-39

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Executive summary

Grant Cudby Contracting Limited (the Company) operates a quarry located on Whenuku Road near Normanby, in the Waingongoro catchment. This report for the period July 2013 to 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.

The Company held one resource consent during the period under review, which included a total of 10 conditions setting out the requirements that the Company would have to satisfy. The resource consent allowed the Company to discharge stormwater into land.

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

The Council's monitoring programme included four inspections. No water samples were collected for physicochemical analysis.

Routine monitoring found that the site had an adequate stormwater system in place and was generally well maintained. Further investigation in relation to the Company's quarry expansion proposal revealed issues with the site's stormwater discharge system and unauthorised streambed works. The potential environmental effects were considered to be negligible. Subsequently, the existing resource consent has been amended, and additional consents have been granted. There were no Unauthorised Incidents (UIs) recording non-compliance in respect of this consent holder during the period under review.

During the year, the Company demonstrated both a good level of environmental and administrative performance with the resource consent.

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 recommendations for the 2015-2017 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 to June 2015 by the Taranaki Regional Council (the Council) describing the monitoring programme associated with resource consents held by Grant Cudby Contracting Limited (the Company). The Company operates a quarry situated on Whenuku Road.

This report covers the results and findings of the monitoring programme implemented by the Council in respect of consent 7845-1 held by Cudby Contracting Limited that relates to discharges of stormwater in the Waingongoro catchment. This is the second biennial report to be prepared by the Council to cover the Company's water discharges and their effects.

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 Waingongoro catchment, the nature of the monitoring programme in place for the period under review, and a description of the activities and operations conducted at the Company's Whenuku Road quarry site.

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

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

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

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 consent holder 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 consent 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 consent 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 consent 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 consent. 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

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 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 laharcic deposits has occurred due to the controlled 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 extraction of gravel in NZ is regulated by two statutory processes. Allocation and protection of priority rights to extract gravel is obtained under the Crown Minerals Act from the NZ Petroleum and Minerals, a division of the Ministry of Economic Development.

Regulatory responsibility for control of environmental effects of quarrying and extraction is under the RMA as applied by respective regional councils. In some cases 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/into land, may not take place unless expressly allowed by a rule in a regional plan, a resource consent, or regulations. Aggregate extraction usually 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.

1.2.1 Grant Cudby Contracting Limited, Whenuku Road

The Company operates a quarry operation at the end of Whenuku Road, near Normanby in South Taranaki, to supply aggregate to a mostly local market. The quarry is looking to expand during the upcoming few years.



Figure 1 Location of Whenuku Road quarry

The quarry site is essentially flat terrace with the Waingongoro River along the western boundary. The quarry contains predominantly fine-grained river sorted aggregate. The material is stockpiled onsite as required. No washing is carried out at this site.



Figure 2 Grant Cudby Contracting Limited's Whenuku Road quarry

1.3 Resource consents

1.3.1 Water discharge permit

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

Water quality is a primary concern to the Council with regard to aggregate extraction. A quarry can operate as either a 'dry' quarry discharging only stormwater or a 'washing' quarry where aggregate washing facilities are in place. Many of the quarries in Taranaki have some form of washing facility and also operate in the vicinity of a water body or have some form of discharge into a water body.

Waste water from aggregate washing has a high silt concentration. Discharge of this water into a waterbody, particularly to a river during low flow, results in the smothering of instream life and deterioration in aesthetic conditions and can affect downstream abstractions of water, local fisheries and recreational activity.

Stormwater is generally less contaminated (in terms of silt concentration) and run-off tends to occur when rivers are in higher flow. This means that the effect of silt contamination is reduced due to lower quantities, dilution and carrying capacity. The installation of appropriate stormwater diversion structures, together with construction and maintenance of contaminated stormwater and aggregate washing discharge treatment facilities are most important in maintaining water quality.

Cudby Contracting Limited holds discharge permit **7845-1** to cover discharge of stormwater into land from quarry activities. This permit was issued by the Council on 7 July 2011 under Section 87(e) of the RMA. It is due to expire on 1 June 2029.

Consent 7845-1 has 10 special conditions as summarised below;

Special condition 1 states only stormwater may be discharged, no washwater or ground water.

Special condition 2 states the active quarry area shall not exceed 0.5 hectares

Special condition 3 states the discharge shall be to land via underground infiltration system and special condition 4 states all run off must pass through settlement ponds or sediment traps.

Special condition 5 states condition 3 above shall cease to apply, only when the site is stabilised.

Special condition 6 requires notification seven working days prior to the commencement of works.

Special condition 7 states all earthwork areas shall be stabilised with vegetation.

Special condition 8 states the consent holder shall at all times adopt best practicable option.

Special condition 9 the consent shall lapse on 30 September 2016.

Special condition 10 states that review may occur June 2017 and/or June 2023.

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 Company's Whenuku Road quarry 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 quarry site was visited four times during the monitoring period. With regard to consents 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. The neighbourhood was surveyed for environmental effects.

1.4.4 Chemical sampling

The collection of one discharge sample was programmed for the period under review, only if warranted.

2. Results

2.1 Water

2.1.1 Inspections

Four inspections were undertaken during the 2013-2015 monitoring period. The inspection notices are summarised below.

17 September 2013

There was a small amount of product stockpiled onsite. Aggregate was being processed at the time of the inspection. A new extraction area and a proposed stream alteration were discussed with quarry staff. Satisfactory progress was noted with regards to the installation of a silt trap and silt fence. The site was complying with consent conditions at the time of inspection.

5 May 2014

There was a large amount of product stockpiled onsite. Aggregate was being processed at the time of the inspection. The silt traps were installed and working well. The site appeared clean, tidy and well managed. The quarry was complying with consent conditions at the time of inspection.

11 August 2014

There was a small amount of product stockpiled on site; although a number of large boulders were piled within the quarry pit. Aggregate was being processed at the time of the inspection. Culvert pipe had been installed, in addition to new silt and sediment ponds. It was subsequently requested by the inspecting officer that these ponds be enlarged. The site was complying with consent conditions at the time of inspection.

18 November 2014

There was a small amount of product stockpiled onsite. No aggregate was being processed at the time of the inspection. The silt trap had been enlarged as requested and bunding had been installed alongside the drain. The site was clean and tidy and was complying with consent conditions at the time of the inspection.

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 routine monitoring inspections were undertaken during the period under review. The site was generally tidy and well maintained during each inspection. Stormwater bunding and treatment systems were continually improved over the course of the monitoring period. Overall, the operation and maintenance of these structures and systems was found to be satisfactory.

The Company proposed to expand the quarry during the 2013-2015 monitoring period. It was identified that the proposed works would require the conditions of the existing discharge consent to be altered, particularly as the consented stormwater catchment area had already been exceeded. In addition, a consent would be required authorising incidental groundwater take, and another would need to be granted in retrospect in order to authorise stream piping and realignment works that had already commenced. The corresponding consents were granted, commencing on the 19 August 2015.

3.2 Environmental effects of exercise of consents

The main potential environmental effect on waterways that quarries have is the discharges of wash water containing high suspended solids concentrations into nearby waterways. Such discharges may result in discolouration of the waterway near the discharge point and may result in smothering of benthic lifeforms, form a barrier to fish movement and may affect fish spawning habitats.

The site was visited in relation to the quarry expansion proposal. It was discovered that a stormwater infiltration system, such as that outlined by the original discharge consent, had not been installed. As this feature of the discharge system would be typically hidden under the ground, it had been overlooked during the routine monitoring inspections. Instead, the stormwater had been seeping through the base and walls of the settlement pond and into the Waingongoro River. Although this was in contravention to the consent, the potential environmental impact would be negligible, as the seepage through the pond walls would naturally treat the stormwater. The amended discharge consent 7845-1.1 authorises discharges of treated stormwater into the Waingongoro River as to prevent adverse environmental effects in the future.

The extent of stream piping and realignment also became clear during the site visit for the expansion proposal. However, a Council assessment of the works stated that it would be unlikely that the affected streams would have any significant fish values. Additionally, it was thought that the downstream effect of the works would be minimal, provided the activities were conducted during the summer low flow period, and that adequate silt controls were employed. These works have since been authorised with the commencement of consent 10017-1.0, which will also act to prevent any adverse environmental effects in the future.

As a result of the quarrying operation, groundwater seepage occurs on site. The incidental groundwater take is addressed in consent 10018-1.0, which makes it the consent holder's obligation to choose the best practicable option to prevent or minimise

any adverse environmental effects due to the abstraction. The discharge of the groundwater seepage is addressed in consent 7845-1.1.

3.3 Evaluation of performance

A tabular summary of the consent holder's compliance record for the period under review is set out in Table 1.

Table 1 Summary of performance for Consent 7845-1

<i>Purpose: To discharge stormwater into land from quarry activities</i>		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Only stormwater may be discharged	Inspections of treatment system	Yes
2. Quarry area shall not exceed 0.5 hectares	Site inspections	No
3. Discharge to land via underground infiltration system	Inspections of treatment system	No
4. Run off must pass through settlement ponds or sediment traps	Inspections of treatment system	Yes
5. Site shall be stabilised	Site inspections/Notification	N/A
6. Notification required	Notification received	Yes
7. Earthwork to be stabilised vegetatively	Site inspections/Notification	Yes
8. Adopt best practicable option	Site inspections	Yes
9. Consent shall lapse	Site inspections/Notification	N/A
10. Optional review provision	Not scheduled for consideration during year under review. Next consideration June 2017	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		Good
Overall assessment of administrative performance in respect of this consent		Good

N/A = not applicable

During the monitoring period, the Company demonstrated a good level of environmental and administrative performance with the resource consent as defined in Section 1.1.4. Although the installation of the stormwater discharge system had not been completed, and unauthorised works had begun on two small unnamed tributaries, the potential environmental effects were deemed to be negligible. Since the expansion proposal, the Company has acquired the appropriate resource consents.

3.4 Recommendations from the 2011-2013 Biennial Report

In the 2011-2013 Biennial Report, it was recommended:

1. THAT monitoring of discharges from Cudby Contracting Limited for 2013-2015 is extended to include a biomonitoring survey.

The 2013-2015 monitoring programme did not include a biomonitoring survey. A provisional biomonitoring survey has been included in the 2015-2017 monitoring programme.

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, its obligations to monitor emissions/ discharges and effects under the RMA, and report 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.

In order to address the quarry expansion, various alterations are proposed for the 2015-2017 monitoring programme. Inspections are to increase to four annually, two of which are to coincide with wet weather. Samples of the discharge and receiving waters are to be collected during each inspection, provided that there is a discharge. If sample results warrant it, a biomonitoring survey is to be conducted.

3.6 Exercise of optional review of consent

Resource consent 7845-1.1 commenced on 19 August 2015, the conditions of which were amended from those of 7845-1. The next optional review date for this consent is June 2016.

Due to this consent being recently amended to address the expanding quarry operation, it is considered that there are no grounds that require the review option to be exercised.

Resource consents 10017-1 and 10018-1 both provide for an optional review in June 2017.

The Council reserves the right to optionally review these consents should monitoring results over the next two years suggest that the conditions are inadequate to deal with adverse effects on the environment arising from the consents being exercised.

4. Recommendations

1. THAT monitoring of consented activities at the Company's Whenuku Road quarry in the 2015-2017 period is amended from that undertaken in 2013-2015, with inspection and sampling frequency increasing from two to four annual inspections (two of which will be conducted under wet weather conditions).
2. THAT the effects of turbidity and sedimentation on receiving waters be minimised by operating and maintaining the silt and sediment controls in accordance with consent conditions and best quarry management practices.
3. THAT the option for review of resource consent 7845-1.1 is not exercised in June 2016.
4. THAT either resource consent 10017-1.0 or 10018-1.0 or both may be subjected to review in June 2017, if the Council decides it is warranted, based on the results of monitoring over 2015-2017 monitoring period.

Glossary of common terms and abbreviations

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

Biomonitoring	Assessing the health of the environment using aquatic organisms.
Bund	A wall around a tank to contain its contents in the case of a leak.
Conductivity	An indication of the level of dissolved salts in a sample, usually measured at 20°C and expressed in mS/m.
Fresh g/m ³	Elevated flow in a stream, such as after heavy rainfall. Grammes per cubic metre, and equivalent to milligrammes per litre (mg/L). In water, this is also equivalent to parts per million (ppm), but the same does not apply to gaseous mixtures.
IR	Incident Register.
l/s	Litres per second.
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 7 times the width of the stream at the discharge point.
NTU	Nephelometric Turbidity Unit, a measure of the turbidity of water.
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	Resource Management Act 1991 and subsequent amendments.
SS	Suspended solids.
Temp	Temperature, measured in °C.
Turb	Turbidity, expressed in NTU.
UI	Unauthorised Incident - an event recorded by the Council on the basis that it had potential or actual environmental consequences that may represent a breach of a consent or provision in a Regional Plan.

For further information on analytical methods, contact the Council's laboratory.

Bibliography and references

Taranaki Regional Council 1992: Regional Policy Statement Working Paper, Aggregate extraction in Taranaki TRC Report.

Taranaki Regional Council, 2013: Quarry Monitoring Programme Biennial Report 2011-2013: Cudby Contracting Limited, Technical Report 13-107.

Appendix I

Resource consents held for Whenuku Road Quarry

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

Name of
Consent Holder: Grant Cudby Contracting Limited
12 Beech Place
Hawera 4610

Decision Date
(Change): 29 July 2015

Commencement Date
(Change): 19 August 2015 (Granted Date: 7 July 2011)

Conditions of Consent

Consent Granted: To discharge treated stormwater and incidental groundwater from a quarry site through land seepage and into Waingongoro River and its tributary

Expiry Date: 1 June 2029

Review Date(s): June 2016, June 2018, June 2020, June 2022,
June 2024, June 2026, June 2028

Site Location: 277 Whenuku Road, Hawera

Legal Description: Sec 38 Patea District (Discharge source & site)

Grid Reference (NZTM) 1705816E-5623161N

Catchment: Waingongoro

*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 quarry activity shall be carried out in accordance with the details provided in the application and in particular, the following documents:
 - a) Proposed stream realignment and piping plan - Appendix 3 attached to this consent; and
 - b) Indicative stream reinstatement plan – Appendix 4 attached to this consent.

In the case of any contradiction between the application details and the conditions of this consent, the conditions of this consent shall prevail.

2. The stormwater discharged shall be from a catchment area not exceeding 7.73 hectares.
3. At least 30 days prior to commencing quarrying in each stage, the consent holder shall prepare, and subsequently maintain, a detailed stormwater management plan that documents how the site will be managed to ensure that stormwater and groundwater is adequately managed and treated prior to the discharge into the stream. Details of the management of each site shall include, but not necessarily limited to, the:
 - a) area and location of the stage to be quarried;
 - b) protection/diversion/modification of streams;
 - c) treatment of stormwater and incidental groundwater, prior to the discharge into surface water; and
 - d) measures and procedures to be undertaken to prevent the spillage of accidental discharge of contaminants in the stormwater catchment, and measures to avoid, remedy or mitigate the environmental effects of such spillage.

The consent holder shall forward the stormwater management plan to the Chief Executive, Taranaki Regional Council and Te Runanga o Ngaati Ruanui Trust. Te Runanga o Ngaati Ruanui Trust may provide comments to the Taranaki Regional Council within 20 working days of receipt. The final stormwater plan shall be certified by the Chief Executive, Taranaki Regional Council and followed at all times.

4. The consent holder shall install, properly maintain and operate the system of settling ponds as proposed and required in condition 1 of this consent, including the use of shut off valves, in such a manner that any discharge which may occur does not breach the conditions of this consent. The settling ponds system shall be operated, as far as practicable, so as to minimise the duration and frequency of discharges.

Consent 7845-1.1

5. 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;
- 100 cubic metres for every hectare of exposed soil between 1 November to 30 April; and
 - 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.

6. The obligation described in condition 5 above shall cease to apply, and accordingly the erosion and sediment control measures can be removed, in respect of any particular site or area of any site, only when the site is stabilised.

Note: For the purpose of this condition "stabilised" in relation to any site or area means inherently resistant to erosion or rendered resistant, such as by using rock or by the application of basecourse, colluvium, grassing, mulch, or another method to the reasonable satisfaction of the Chief Executive, Taranaki Regional Council and as specified in the Taranaki Regional Council's Guidelines for Earthworks in the Taranaki Region, 2006. Where seeding or grassing is used on a surface that is not otherwise resistant to erosion, the surface is considered stabilised once, on reasonable visual inspection by an officer of the Taranaki Regional Council, an 80% vegetative cover has been established.

7. There shall be no direct discharge of untreated stormwater or groundwater from the active quarry site into any surface water.
8. At least 7 working days prior to the commencement of each stage of the quarry activity, the consent holder shall notify the Taranaki Regional Council and Te Runanga o Ngaati Ruanui Trust of the proposed start date for the work. Notification shall include the consent number and a brief description of the activity consented and shall be emailed to worknotification@trc.govt.nz and gml@ruanui.co.nz.
9. The consent holder shall at all times adopt the best practicable option, as defined in the Resource Management Act 1991, to prevent or minimise any adverse effects of the discharge to the environment.
10. The consent holder shall operate and progressively reinstate each stage of the quarry, prior to commencement of the next stage, in a manner which ensures that the area of exposed, un-vegetated earth, within the quarry's stormwater catchment is kept to a minimum at all times.
11. Constituents of the discharge shall meet the standards shown in the following table.

Constituent	Standard
pH	Within the range 6.0 to 9.0
suspended solids	Concentration not greater than 100 gm ⁻³
total recoverable hydrocarbons	Concentration not greater than 15 gm ⁻³

This condition shall apply after leaving the treatment system and before entry of the treated stormwater into the receiving waters at a designated sampling point approved by the Chief Executive, Taranaki Regional Council.

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12. After allowing for reasonable mixing, within a mixing zone extending 25 metres downstream of any discharge point, the discharge shall not give rise to any of the following effects in the receiving waters:
 - a) an increase in the suspended solids concentration in the receiving water in excess of 10 grams per cubic metres when the turbidity as measured immediately upstream of the discharge point is equal to or less than 5 NTU (nephelometric turbidity units); or
 - b) an increase in the turbidity in the receiving water of more than 50%, where the stream turbidity measured upstream if the discharge is greater than 5 NTU, as determined using NTU (nephelometric turbidity units).
13. The consent holder shall notify the Chief Executive, Taranaki Regional Council and Te Runanga o Ngaati Ruanui Trust, prior to making any changes to the processes or operations undertaken at the site, or the chemicals used or stored on site that could alter the nature of the discharge. Any such change shall then only occur following receipt of any necessary approval under the Resource Management Act 1991. Notification shall include the consent number, a brief description of the activity consented and an assessment of the environmental effects of any changes, and be emailed to consents@trc.govt.nz and gml@ruanui.co.nz.
14. 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 2018, and/or June 2020, and/or June 2022, and/or June 2024, and/or June 2026, 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 29 July 2015

For and on behalf of
Taranaki Regional Council

A D McLay
Director - Resource Management

Appendix 3: The proposed stream realignment and piping plan



- Piped tributary of the Waingongoro River (for retrospective consent)**
- Existing stream to be realigned, prior to the commencement of stage C.**
- Existing stream, partly quarried into a waterfall, to be piped, prior to the commencement of Stage A, to be day-lighted following the completion of Stage D.**
- Stream section to be piped prior to the commencement of Stage C quarrying, to be day-lighted following the completion of Stage D.**
- Stream section to be realigned, and to remain, as an open channel, prior to the commencement of Stage C. The stream shall be fenced and its margins riparian planted immediately following completion of the realignment.**
- Proposed wetland**

Appendix 4: Indicative Stream Reinstatement Plan



Following the completion of the quarrying operation:

- - - - - Piped stream to remain piped
- = = = = = Piped stream sections to be 'day-lighted' to join the existing open channel upstream
- — — — — Open stream to remain open
- Proposed wetland

All open streams and wetland to be fenced and their margins riparian planted in accordance with the revised Riparian Management Plan prepared for the site.: