

Vickers Quarries Limited
Toko and Midhirst
Monitoring Programme
Annual Report
2013-2014
Technical Report 2014-46

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Executive summary

Vickers Quarries Limited operates two quarries in Taranaki. One is located off York Road in the Waitara catchment; and the other is located off Toko Road in the Patea catchment. Both operate on a commercial basis.

This report for the period July 2013-June 2014 describes the monitoring programme implemented by the Taranaki Regional Council to assess the Company's environmental performance and environmental effects of the Company's activities.

Vickers Quarries Ltd holds a total of four resource consents to cover activities at its two quarries over the monitoring period. These four consents collectively included a total of thirty-nine special conditions setting out discharge, water quality and environmental protection requirements that the Company must satisfy.

During the monitoring period, the Company demonstrated an overall high level environmental performance and compliance with the resource consents.

Two of the consents related to the York Road quarry and covered the discharge of treated stormwater and washwater into an unnamed tributary of the Waipuku Stream. Aggregate washing at the York Road site commenced May 2007. The Company also holds a consent to allow the Toko Road quarry to discharge treated wastewater into the Patea River.

Compliance monitoring of the Company's two quarries in 2013-2014 included seven inspections. No water samples were collected from either site during the 2013-2014 monitoring year. Site inspections found no adverse environmental effects to the waters of the Waitara or Patea catchments as a result of quarry operations.

Both quarry sites appeared to be well maintained and managed with regard to environmental matters.

As in previous years, the Company has demonstrated a high level of both environmental and administrative performance and compliance with its consents and appropriate control over the discharge of contaminants into waterways.

There were no incidents recorded in relation to operations at the Vickers quarry sites in the monitoring period under review.

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.

This report includes recommendations for the 2014-2015 monitoring year.

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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 the annual report for the period July 2013-June 2014 by the Taranaki Regional Council (the Council) describing the monitoring programme associated with resource consents held by Vickers Quarries Limited (the Company). The Company operates two quarry sites in Taranaki. One site is located off York Road in the Waitara catchment, and the other is off Toko Road, in the Patea catchment.

This report covers the results and findings of the monitoring programme implemented by the Council in respect of the consents held by Vickers Quarries Limited that relate to abstractions and discharges of water in the Waitara and Patea catchments.

This is the 20th annual report to be prepared by the Taranaki Regional Council to cover the Company's stormwater and washwater 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 Vickers Quarries Limited in the Waitara and Patea catchments, the nature of the monitoring programme in place for the period under review, and a description of the activities and operations conducted in the catchments.

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 2014-2015 monitoring year.

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 *Resource Management Act 1991* (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 a discharger, and may include cultural and socio-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 (eg, 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 consent performance

Besides discussing the various details of the performance and extent of compliance by the consent holder/s during the period under review, this report also assigns a rating as to each 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 (i.e. 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 compliance

- **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.

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).

Twenty-five operating quarries presently supply aggregate in Taranaki. 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 laharic 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 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 1991 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 and 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.

1.2.2 Vickers Quarry- Toko Road

The Company's Toko Road quarry is on the true left bank of the Patea River, approximately 0.5 km below its confluence with the Toko Stream (Figure 1). The site is now well established and covers an area of about 5.7 ha. Quarrying began in 1975 and the aggregate was processed by dry crushing. The Company first obtained resource consent to discharge treated stormwater in March 1990. A washing plant with recirculation system was installed at the start of 1993.



Figure 1 Aerial photo showing the Location of Vickers Quarry – Toko Road site

All overburden material is stockpiled to use as backfill/remediate the site which will be returned to pasture on completion.

An earth bund runs along the north-western boundary, separating the quarry site from the Patea River. The existing extraction area and the aggregate stockpile area are essentially within a basin where stormwater discharges cannot leave this area of the site, and naturally soak away. If the existing extraction area needs to be dewatered, water is pumped through pipes, which are located underground, to the sediment pond system for treatment. Access roads from the northern area slope down to the southern area of the site. The quarry floor [where the aggregate stockpiles are] slopes away from the Patea River.

The following erosion and sediment control measures are in place for containing and treating stormwater generated on the access roads and quarry floor:

- An earthbund runs along the north western boundary of the site;
- A wide perimeter drain, with a large stilling basin, runs along the north-eastern boundary of the site and drains to Sediment Pond 1;
- Additionally, three silt traps also intercept and pre-treat stormwater on the quarry floor;

- Sediment Pond 1 and Sediment Pond 2 both have an approximate capacity of 1,500 m³ each. Stormwater is directed through the perimeter drain into Sediment Pond 1. From here it is directed into Sediment Pond 2 prior to discharging to a gravel beach within the Patea River during low flows or directly to water during high flows. There is a valve on the outlet of Sediment Pond 2 which can be manually closed off in the event of a spill.

Water is recycled from the sediment ponds for washing the aggregate. Discharges from this process are directed into silt traps on the quarry floor for pre-treatment prior to going back into the sediment pond system for continued treatment.

1.2.3 Vickers Quarry- York Road

The Company's York Road quarry is situated between the Manganui River and an unnamed tributary of the Waipuku Stream (Figure 2). This site is well established and was first excavated by Ed Mahon around 1945. At this time and for some years after, excavation at the site was entirely river-based. Following Ed Mahon, several other parties operated the site, including Len Angus, Wilkins and Davies, Tonks Metal Company, Industrial Lime, Alan Goble, and CML. Vickers Quarries Ltd first obtained resource consents for the York Road site in March 1995 and began operating early in the following year.

A lease agreement with the Department of Conservation allows the Company to occupy a strip of Crown land between the quarry and the Manganui River. The riparian margin of the unnamed tributary has been planted (Council Land Management Plan LM10/74) to help mitigate the effects of the quarry operations on this waterway. The quarry is separated into two main areas: the lower site, and the upper site.

The lower site is located on the true left bank of the Manganui River and contains the offices, stock piles, processing, loading out areas, and lower treatment ponds. The stormwater and washwater discharge from this part of the site is covered by consent 4905-3. Washing commenced in May 2007. Stormwater generated at the upper site is directed to treatment ponds before being discharged into the unnamed tributary of the Manganui River. Recycled service water for aggregate washing purposes also occurs at the lower site.

The upper site is also located on the true left bank of the Manganui River, about 500 m above the lower site. This part of the quarry was opened up for excavation in 2001-2002 and is presently used only for extraction. A series of stormwater treatment ponds have been constructed there, but otherwise there are no facilities. Stormwater and groundwater generated at the upper site is directed to treatment ponds before being discharged into the unnamed tributary of the Manganui River. The stormwater discharge from this site is covered by consent **5218-25**.

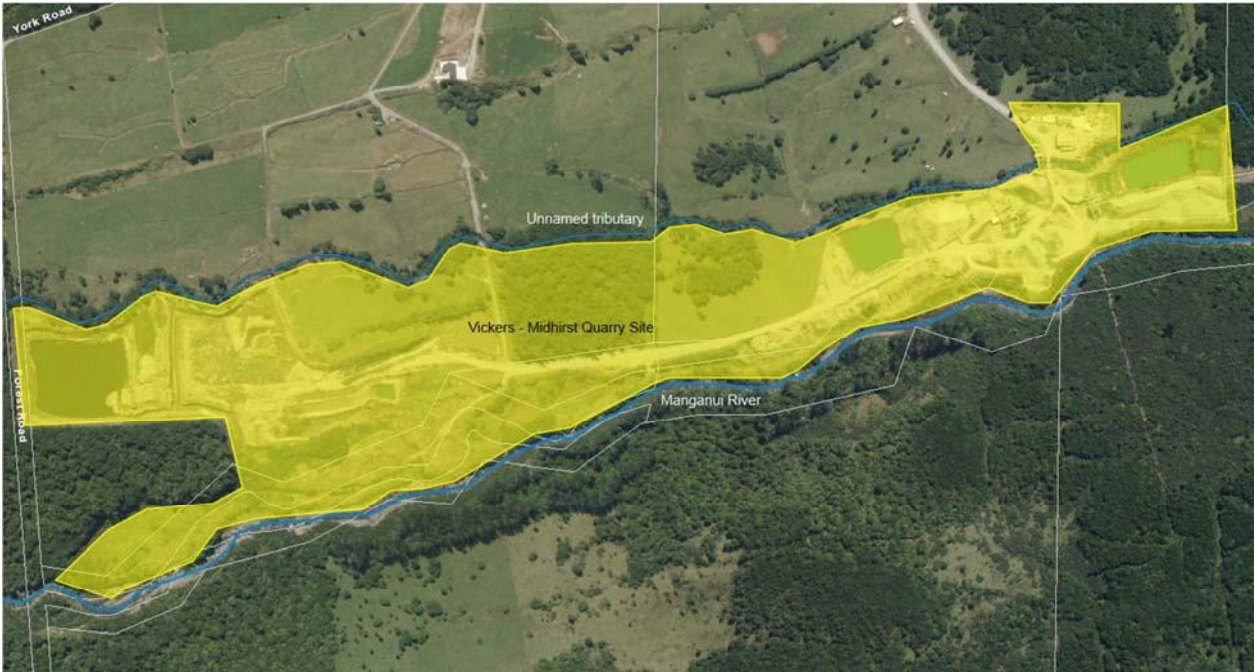


Figure 2 Aerial photo showing the Location of Vickers Quarry – York Road site

1.3 Resource consents

Vickers Quarries Limited held four resource consents to cover its activities at the two quarry sites over the monitoring period, the consents included a total of thirty nine special conditions.

The Company holds one consent to discharge treated stormwater and groundwater into surface water, two consents to discharge treated stormwater and washwater into surface water, and one consent to discharge cleanfill into and onto land.

All four consents were issued by the Council under Section 87(e) of the RMA. These consents are discussed in more detail below. Copies of the consent certificates are attached to this report in Appendix I.

1.3.1 Water abstraction permits

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 in this regard the Council encourages the recycling of both washwater and stormwater to minimise the requirement to abstract surface water.

Often when combined with efficient recycling, the small volumes of surface water required to be abstracted for washing at quarries fit within the permitted activity rule [Rule 15] of the Regional Fresh Water Plan for Taranaki. That is, the abstraction volume shall not exceed 50 cubic metres per day, and the abstraction rate shall not exceed 1.5 litres per second.

Vickers Quarries Limited holds no permits in this regard. The water volume and abstraction rate required to service the Company's operations are less than 50 cubic metres per day and 1.5 litres per second respectively.

1.3.2 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 silt-contaminated water into a waterbody, particularly to a river during low flow, results in a smothering of in stream life and deterioration in aesthetic conditions and can affect downstream users 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.

Vickers Quarries Limited holds consent **3564-3** to cover the discharge of treated quarry stormwater and washwater from the Toko Road site into the Patea River. This permit was issued by the Council on 18 June 2010 under Section 87(e) of the RMA. It is due to be reviewed on 1 June 2015 and to expire on 1 June 2020.

There are nine special conditions attached to consent 3564-3.

Condition 1 relates to capacity of sediment traps and settling ponds.

Condition 2 requires the active quarry areas to be contoured and bunded.

Condition 3 states the level of suspended solids in discharge not to exceed 100gm⁻³.

Condition 4 refers to adverse effects in the receiving waters from the discharge that must be avoided.

Condition 5 relates to contingency planning.

Condition 6 relates to progressive site reinstatement.

Condition 7 requires a site rehabilitation plan to be submitted at least 3 months prior to completion of extraction activities.

Condition 8 requires the site is rehabilitated in accordance with rehabilitation plan.

Condition 9 was a review provision.

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

Vickers Quarries Limited holds consent **5218-2** to cover the discharge of treated stormwater and groundwater seepage from quarry operations into an unnamed tributary of the Manganui River at the York Road site. This consent was granted on 12 September 2012 and expires on the 1 July 2027.

There are 11 special conditions attached to consent 5218-2.

Condition 1 requires the consent holder to adopt the best practicable option.

Condition 2 requires the consent holder to progressively reinstate site.

Condition 3 states the maximum stormwater catchment area.

Condition 4 relates to capacity of settlement ponds.

Condition 5 prohibits the direct discharge of untreated stormwater of groundwater.

Condition 6 states the limits of constituents of discharge before entry of treated stormwater into receiving waters.

Condition 7 refers to adverse effects in the receiving waters.

Condition 8 states that the site must be contoured or bunded.

Condition 9 requires an approved contingency to be provided.

Condition 10 requires the consent holder to notify the Chief Executive, Taranaki Regional Council, prior to any changes to operations at the site.

Condition 11 was a review provision.

Vickers Quarries Limited holds consent **4905-3** to cover the discharge of treated stormwater and washwater into and onto land and an unnamed tributary of the Waipuku Stream, a tributary of the Manganui River at the York Road site. This consent was granted on 12 September 2012 and expires on the 1 July 2027.

There are 11 special conditions attached to consent **4905-3**.

Condition 1 requires the consent holder to adopt the best practicable option.

Condition 2 requires the consent holder to progressively reinstate site.

Condition 3 states the maximum stormwater catchment area.

Condition 4 relates to capacity of settlement ponds.

Condition 5 prohibits the direct discharge of untreated stormwater of groundwater.

Condition 6 states limits of constituents of discharge before entry of treated stormwater into receiving waters.

Condition 7 refers to adverse effects in the receiving waters.

Condition 8 states that the site must be contoured or bunded.

Condition 9 requires an approved contingency plan to be provided.

Condition 10 requires the consent holder to notify the Chief Executive, Taranaki Regional Council, prior to any changes to operations at the site.

Condition 11 was a review provision.

1.3.3 Air discharge permit

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 6 of the Council's Regional Air Quality Plan (RAQP) for Taranaki allows the discharge of emissions from quarrying operations as a permitted activity, subject to compliance with various environmental performance conditions.

Vickers Quarries Limited holds no air discharge permits for either the Toko Road or York Road site because airborne discharges from the operations meet the requirements of Rule 6 of the RAQP.

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.

Vickers Quarries Limited holds consent **7615-1** to cover the discharge of cleanfill onto and into land at the York Road site. This permit was issued by the Council on 17 February 2010 under Section 87(e) of the RMA. It is due to be reviewed on 1 June 2015 and to expire on 1 June 2027.

There are 8 special conditions attached to this consent.

Condition 1 states cleanfill shall only occur in the area indicated on the plan attached.

Condition 2 specifies and defines the discharge contaminants.

Condition 3 specifies unauthorised contaminants that shall not be discharged on site.

Condition 4 states that the consent holder must obtain written approval from the Consents Manger, Taranaki Regional Council in the event of uncertainty as to acceptability of discharge of a particular material.

Condition 5 requires the consent holder to adopt the best practicable option

Condition 6 requires stabilisation and revegetation upon completion of cleanfill discharge authorised by this consent.

Condition 7 refers to the lapse of the consent on the 31 March 2015, unless the consent is given effect to before the end of that period, or the Council fixes a longer period.

Condition 8 is a review provision.

A copy of 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 obligation/s upon the Taranaki Regional 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 Taranaki Regional 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 two sites consisted of two primary components.

1.4.2 Programme liaison and management

There is generally a significant investment of time and resources by the Taranaki Regional 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, or new consents, advice on the Council's environmental management strategies and the content of regional plans, and consultation on associated matters.

1.4.3 Site inspections

Both the York Road site and the Toko Road site were each visited three times during the monitoring period. Routine inspections were made of the quarry operational areas and adjacent waterways, with particular reference to consent conditions. The main points of interest were plant processes that potentially or actually discharge to watercourses, including contaminated stormwater and process wastewaters. The neighbourhood was also surveyed for environmental effects.

2. Results

2.1 Water

2.1.1 Inspections

During the 2013-2014 monitoring period the Council carried out a total of seven routine inspections; three inspections at the Toko Road Quarry and four at the York Road Quarry. Inspection notes are summarised below:

Toko Road Quarry

8 October 2013

There was a lot of product stockpiled onsite. The extraction area looked good and processing was occurring at the time of inspection. The ponds were not discharging. Advice was given that to operate a cleanfill a resource consent would be required.

14 March 2014

There was processing occurring at time of inspection. There was a lot of product stockpiled onsite. The extraction area looked good and a loading truck arrived while the inspection was under way. Overall the site looked to be well managed and was operating within consent conditions on that day.

19 June 2014

There was processing occurring at time of inspection. There was not a lot of product stockpiled onsite. The extraction area looked good and the crusher was set up over by a big pile of boulders. Stormwater was directed into silt and sediment ponds. Overall the site looked to be well managed and was operating within consent conditions at the time of inspection.

York Road Quarry

8 October 2013

A lot of product was stockpiled onsite. The cleanfill and processing area looked good. The washings from crusher were directed back up into pit behind a large pile of fines. All stormwater onsite was being directed through silt and sediment ponds or traps. Overall the site looked to be well managed and was operating within consent conditions at the time of inspection.

13 January 2014

There was processing occurring. There was a lot of product stockpiled on site. The bottom plant was washing. Wash water was getting pumped back up to the middle pond. The fines were settling out and the extraction area looked good. All ponds were clear and the receiving rivers were running clear.

14 March 2014

The cleanfill area was discussed with the site manager onsite. Information was given as to what material can be accepted in the cleanfill. There was processing at two crushers occurring at the time of inspection and washing was occurring at the bottom crusher. There was a lot of material stockpiled onsite and a lot of stone that had been broken with a rock breaker. The extraction area up behind the cleanfill site looked good. Overall the site was well maintained and looked good.

19 June 2014

Processing was occurring. There was a lot of product stockpiled onsite. The site was busy with loading out truck and trailers. There was washing occurring on the bottom crusher. The site looked clean and tidy considering the high recent rainfall. The extraction area and the cleanfill area looked good as not a lot of material had been dumped since the last inspection. Overall the site looked to be well managed and was operating within consent conditions at the time of inspection.

2.1.2 Results of discharge monitoring

Wastewater sampling was not performed at the Toko Road or the York Road quarry sites during 2013-2014 monitoring year. Compliance monitoring inspections of the sites and the discharge from the silt/sediment ponds found treated stormwater and/or washwater discharges occurring on several occasions; however the inspecting officer, considered that the discharges were unlikely to have an impact on the receiving waters and sampling was not warranted.

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 causes of non-compliance or failure to maintain good practices. A pro-active approach that in the first instance avoids issues occurring is favoured.

The Taranaki Regional 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 Unauthorised Incident Register (UIR) 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/individual is indeed the source of the incident (or that the allegation cannot be proven).

In the 2013-2014 period, it was not necessary for the Council to undertake additional investigations and interventions, or record incidents, in association with Vickers Quarries Limited's conditions in resource consents or provisions in Regional Plans in relation to the Company's activities during the monitoring period.

3. Discussion

3.1 Discussion of site performance

During the period under review seven compliance monitoring inspections of the Company's two quarry sites were carried out.

Management of the two quarries sites was good for the reporting period with no complaints received by the Council and no abatement notices issued during the reporting period.

Overall, the consent holder demonstrated a high level of both environmental and administrative performance and compliance at both quarry sites.

3.2 Environmental effects of exercise of consents

The main potential environment effects on waterways that quarries can have are the discharges of washwater 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 life forms, the formation of a barrier to fish movement and may affect fish spawning habitats.

The Taranaki Regional Council monitors for possible effects on stream life by conducting a visual inspection of the streambed both up and downstream of the quarry, and measuring physicochemical properties of the stormwater and receiving environment if warranted.

Inspections of the Company's York Road and Toko Road quarries during 2013-2014 showed that no adverse effects caused by discharges from these sites were evident downstream of the quarries.

3.3 Evaluation of performance

A summary of the consent holder's compliance record for the year under review is set out in Tables 1-4.

Table 1 Summary of performance for Consent **5218-2** (York Road) to discharge treated stormwater and groundwater seepage into an unnamed tributary of the Manganui River

Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Adopt best practicable option	Inspections of discharge point inspections	Yes
2. Operate and progressively reinstate the quarry site to minimise stormwater catchment area	Inspections of site	Yes
3. Discharge from catchment area not exceeding 6 ha	Inspections of site	Yes
4. Maintain and operate settling ponds	Inspections of site	Yes
5. Prevent direct discharge of stormwater and washwater into receiving waters	Inspections of site	Yes

Condition requirement	Means of monitoring during period under review	Compliance achieved?
6. Concentration limits	Inspections of site (no sampling required)	Yes
7. Limits within mixing zone	Inspections of site (no sampling required)	Yes
8. Properly and efficiently maintain and operate the silt control structures to minimise discharge	Inspections of site	Yes
9. Provide contingency plan to TRC	Received	Yes
10. Notification to Chief Executive, TRC prior to any changes in operations	Received	Yes
11. Review condition	Optional review June 2015	N/A
Overall assessment of environmental performance and compliance in respect of this consent		High
Overall assessment of administrative performance in respect of this consent		High

Table 2 Summary of performance for Consent **3564-3** (Toko Road) to discharge treated stormwater and washwater from a quarry into the Patea River

Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Requires sediment traps or settling ponds to be used	Inspections of site	Yes
2. Requires active quarry area to be bunded	Inspections of site	Yes
3. Suspended solids not to exceed 100g/m ³	Sampling (not required)	Yes
4. Discharge not to cause effect beyond mixing zone	Inspections of receiving water	Yes
5. Supply TRC with contingency plan	Received	Yes
6. Progressive reinstatement of site	Inspections of site	Yes
7. Rehabilitation plan to be submitted prior to completion of extraction activities	N/A	N/A
8. Rehabilitate site prior to rehabilitation or expiry of consent	N/A	N/A
9. Review condition	Optional review date June 2015	N/A
Overall assessment of environmental performance and compliance in respect of this consent		High
Overall assessment of administrative performance in respect of this consent		High

Table 3 Summary of performance for Consent **4905-3** (York Road) to discharge stormwater and washwater from a quarry site onto land and into an unnamed tributary of the Waipuku Stream

Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Adopt best practicable option	Inspections of discharge point inspections	Yes
2. Operate and progressively reinstate the quarry site to minimise stormwater catchment area	Inspections of site	Yes
3. Discharge from catchment area not exceeding 6 ha	Inspections of site	Yes
4. Maintain and operate settling ponds	Inspections of site	Yes
5. Prevent direct discharge of stormwater and washwater into receiving waters	Inspections of site	Yes
6. Concentration limits	Inspections of site (no sampling required)	Yes
7. Limits within mixing zone	Inspections of site (no sampling required)	Yes
8. Properly and efficiently maintain and operate the silt control structures to minimise discharge	Inspections of site	Yes
9. Provide contingency plan to TRC	Received	Yes
10. Notification to Chief Executive, TRC prior to any changes in operations	Received	Yes
11. Review condition	Optional review June 2015	N/A
Overall assessment of environmental performance and compliance in respect of this consent		High
Overall assessment of administrative performance in respect of this consent		High

Table 4 Summary of performance for Consent **7615-1** (York Road) to discharge cleanfill into or onto land

Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Discharge shall only occur in area indicated by plan	Inspections of site	Yes
2. Discharge contaminants shall be limited to cleanfill and inert materials	Inspections of site	Yes
3. Discharge of specified contaminants shall not occur	Inspections of site	Yes
4. Written approval obtained from Consents manager by consent holder regarding uncertainty of acceptability of material to be discharged.	N/A	N/A
5. Adopt best practicable option	Inspection of site and records	Yes

Condition requirement	Means of monitoring during period under review	Compliance achieved?
6. Stabilisation and revegetation on completion of authorised discharge	N/A	Yes
7. Consent Lapse	N/A	N/A
8. TRC may serve notice of its intention to review, amend, delete, or add to the conditions of this consent	Optional review date June 2015	N/A
Overall assessment of environmental performance and compliance in respect of this consent		High
Overall assessment of administrative performance in respect of this consent		High

During the year the Company demonstrated a high level of both environmental and administrative performance and compliance with its resource consents. There were no incidents recorded in relation to operations at either of the Vickers Quarries Limited sites. The sites were both well managed and tidy. The bunding and ponds appeared to be well maintained.

3.4 Recommendations from the 2011-2012 Annual Report

In the 2011-2012 Annual Report, it was recommended:

1. THAT monitoring of the Vickers Quarries Limited York Road quarry in 2013-2014 remains unchanged from the previous year.
2. THAT monitoring of the Vickers Quarries Limited Toko Road quarry in 2013-2014 remains unchanged from the previous year.

These recommendations were carried out in the 2013-2014 monitoring period.

3.5 Alterations to monitoring programmes for 2014-2015

In designing and implementing the monitoring programmes for air/water discharges in the region, the Taranaki Regional 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 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 2014-2015 the monitoring programme for Vickers Quarries Limited at the Toko Road site remain unchanged from the 2013-2014 monitoring period.

4. Recommendations

1. THAT monitoring of the Vickers Quarries Limited Toko Road quarry in 2014-2015 remains unchanged from 2013-2014.

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.
Condy	Conductivity, an indication of the level of dissolved salts in a sample, usually measured at 20°C and expressed in mS/m.
Cumec	A volumetric measure of flow- 1 cubic metre per second (1 m ³ s ⁻¹).
Fresh	Elevated flow in a stream, such as after heavy rainfall.
g/m ³	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.
l/s	Litres per second.
mS/m	Millisiemens per metre.
NTU	Nephelometric Turbidity Unit, a measure of the turbidity of water.
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.
PM ₁₀	Relatively fine airborne particles (less than 10 micrometre diameter).
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 including all subsequent amendments.
SS	Suspended solids.
Temp	Temperature, measured in °C (degrees Celsius).
Turb	Turbidity, expressed in NTU.
UI	Unauthorised Incident.
UIR	Unauthorised 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.

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

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Taranaki Regional Council, 2012: Vickers Quarries Limited Toko and Midhirst Quarries Compliance Monitoring Programme Annual Report 2011-2012. Technical Report 2012-69

Taranaki Regional Council, 2013: Vickers Quarries Limited Toko and Midhirst Quarries Compliance Monitoring Programme Annual Report 2012-2013. Technical Report 2013-08

Appendix I

Resource consents held by Vickers Quarry 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: Vickers Quarries Limited
683 York Road
RD 24
STRATFORD 4394

Decision Date
(Change): 22 May 2014

Commencement Date
(Change): 22 May 2014 (Granted Date: 12 September 2012)

Conditions of Consent

Consent Granted: To discharge treated stormwater, groundwater and washwater from a quarry site onto and into land and into an unnamed tributary of the Waipuku Stream

Expiry Date: 01 June 2027

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

Site Location: York Road, Midhirst

Legal Description: Secs 51 & 52 Blk XVI Egmont SD (Discharge source & site)

Grid Reference (NZTM) 1702842E-5650466N

Catchment: Waitara

Tributary: Manganui
Waipuku

*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. No less than 30 days, prior to beginning excavation in the proposed quarry extension shown in the indicative plan attached to this consent, the consent holder shall provide to the Chief Executive, Taranaki Regional Council a detailed stage plan for the proposed quarry operation.
2. The detailed stage plan required under condition 1 above shall show a minimum buffer of:
 - a) 10 metres between the new quarry area and the unnamed tributary of the Waipuku Stream; and
 - b) 20 metres between the existing quarry area and larger tributary of the Waipuku Stream.

No excavation shall occur within these buffers.

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, washwater 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) diversion of streams;
 - b) groundwater taken incidental to the quarry operation;
 - c) treatment of stormwater, groundwater, washwater and incidental groundwater, prior to the discharge into the streams; 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 stormwater management plan shall be certified by the Chief Executive, Taranaki Regional Council and shall be followed at all times.

4. 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.
5. The consent holder shall operate and progressively reinstate the quarry site 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.
6. The stormwater discharged shall be from a catchment area not exceeding 36 hectares.

Consent 4905-3.1

7. The consent holder shall properly maintain and operate the settling ponds system, 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.
8. There shall be no direct discharge of untreated stormwater or groundwater from the active quarry site into any surface water.
9. 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 hydrocarbons	Concentration not greater than 15 gm ⁻³

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

10. 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) the production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials;
 - b) any conspicuous change in the colour or visual clarity;
 - c) any emission of objectionable odour;
 - d) the rendering of fresh water unsuitable for consumption by farm animals;
 - e) any significant adverse effects on aquatic life.
11. 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 within the unnamed tributary of the Waipuku Stream 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 within the unnamed tributary of the Waipuku Stream 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).
12. The washing and washwater treatment system shall be bunded to prevent the inflow of stormwater and/or groundwater from any other areas of the quarry. In addition, the consent holder shall implement appropriate re-circulatory systems to minimise the volume of washwater being discharged off-site.

Consent 4905-3.1

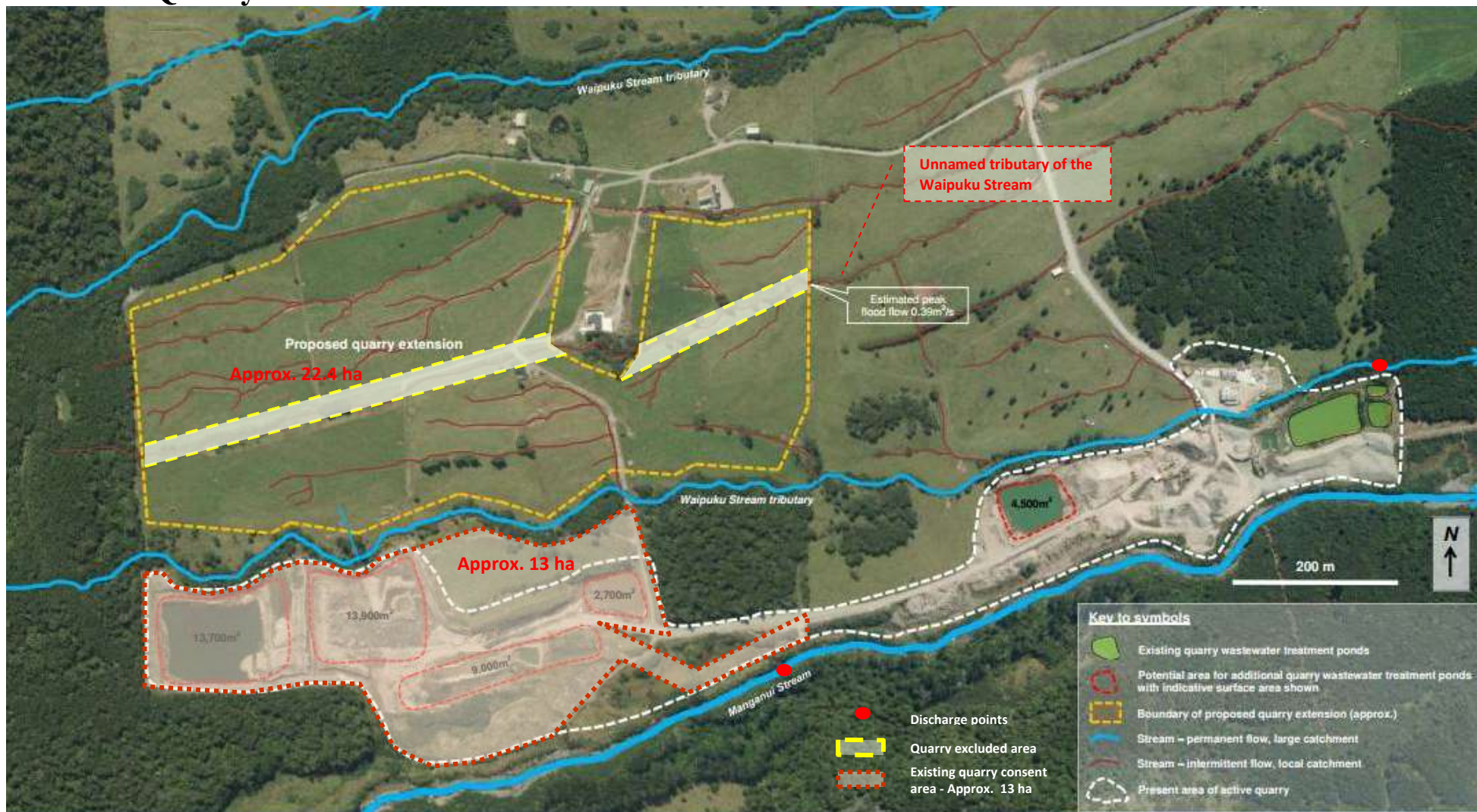
13. The consent holder shall notify the Chief Executive, Taranaki Regional Council, prior to making any changes to the processes or operations undertaken at the site, or the chemicals used or stored on site that could alter the nature of the discharge. Any such change shall then only occur following receipt of any necessary approval under the Resource Management Act. 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.
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, 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 22 May 2014

For and on behalf of
Taranaki Regional Council

A D McLay
Director - Resource Management

Indicative Quarry Plan – Attachment for Consent 4905



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

Name of
Consent Holder: Vickers Quarries Limited
683 York Road
RD 24
STRATFORD 4394

Decision Date
(Change): 22 May 2014

Commencement Date
(Change): 22 May 2014 (Granted Date: 12 September 2012)

Conditions of Consent

Consent Granted: To discharge treated stormwater and groundwater seepage from quarry operations into an unnamed tributary of the Manganui River

Expiry Date: 01 June 2027

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

Site Location: York Road, Midhirst

Legal Description: Pt Clsd Rd SO 10236 Adj Sec 24 Pt Secs 21 & 48
Blk XVI Egmont SD Sec 47 Blk XVI Egmont SD
(Discharge source & site)

Grid Reference (NZTM) 1702094E-5650120N

Catchment: Waitara

Tributary: Manganui

*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. No less than 30 days, prior to beginning excavation in the proposed quarry extension shown in the indicative plan attached to this consent, the consent holder shall provide to the Chief Executive, Taranaki Regional Council a detailed stage plan for the proposed quarry operation.
2. The detailed stage plan required under condition 1 above shall show a minimum buffer of:
 - a) 10 metres between the new quarry area and the unnamed tributary of the Waipuku Stream; and
 - b) 20 metres between the existing quarry area and larger tributary of the Waipuku Stream.

No excavation shall occur within these buffers.

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) diversion of streams;
 - b) groundwater taken incidental to the quarry operation;
 - c) treatment of stormwater, groundwater and incidental groundwater, prior to the discharge into the streams; 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 stormwater management plan shall be certified by the Chief Executive, Taranaki Regional Council and shall be followed at all times.

4. 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.
5. The consent holder shall operate and progressively reinstate the quarry site 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.
6. The stormwater discharged shall be from a catchment area not exceeding 36 hectares.

Consent 5218-2.1

7. The consent holder shall properly maintain and operate the settling ponds system, including the use of shut off valves, in such a manner that any discharge which may occur shall 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.
8. There shall be no direct discharge of untreated stormwater or groundwater from the active quarry site into any surface water.
9. 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 hydrocarbons	Concentration not greater than 15 gm ⁻³

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

10. 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) the production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials;
 - b) any conspicuous change in the colour or visual clarity;
 - c) any emission of objectionable odour;
 - d) the rendering of fresh water unsuitable for consumption by farm animals;
 - e) any significant adverse effects on aquatic life
11. 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 within the unnamed tributary of the Waipuku Stream 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 within the unnamed tributary of the Waipuku Stream 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).
12. The consent holder shall notify the Chief Executive, Taranaki Regional Council, 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. 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.

Consent 5218-2.1

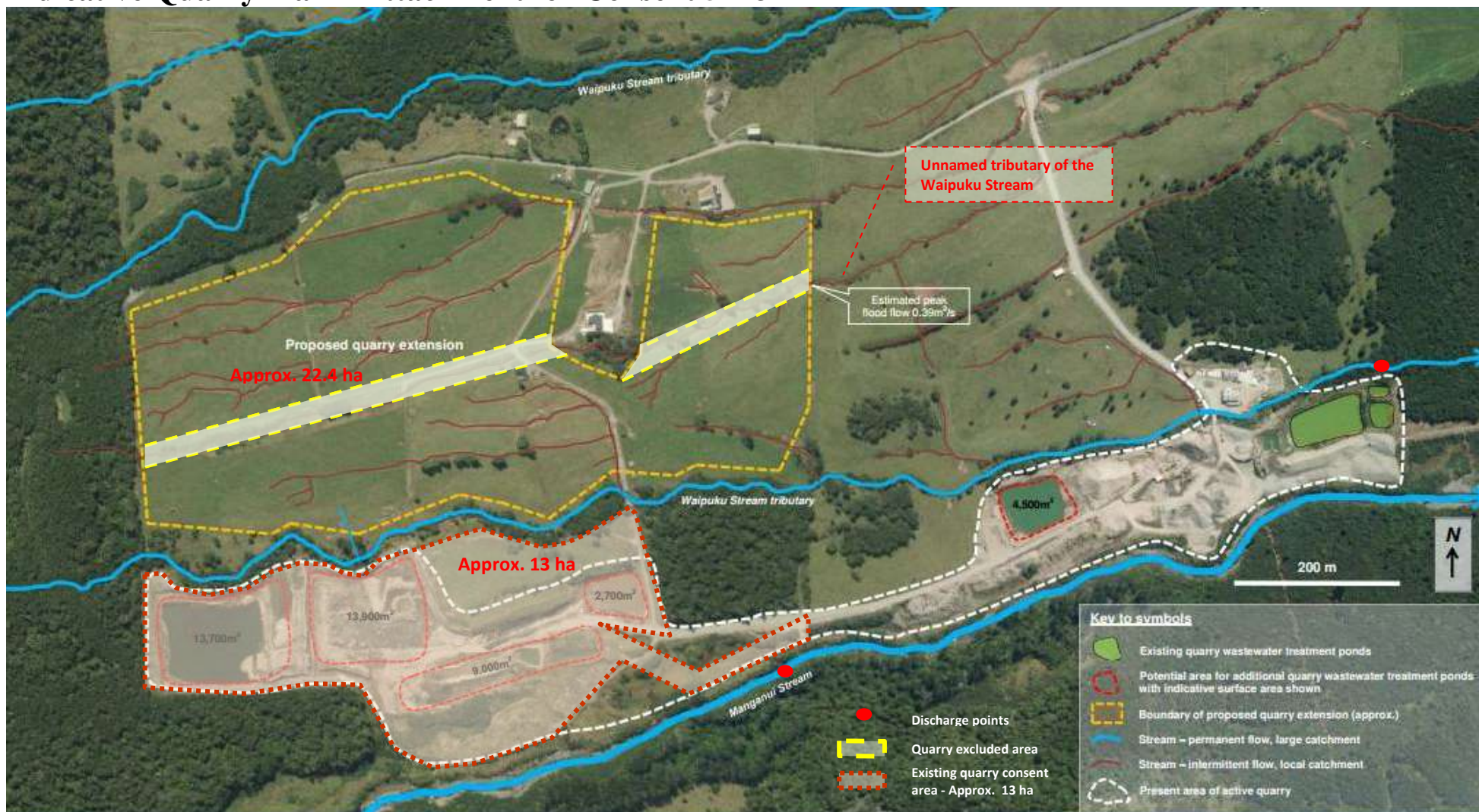
13. In accordance with section 128 and section 129 of the Resource Management Act 1991, the Taranaki Regional Council may serve notice of its intention to review, amend, delete or add to the conditions of this resource consent by giving notice of review during the month of June 2016 and/or June 2018, and/or June 2020, and/or June 2022, and/or June 2024, and/or June 2026, 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 22 May 2014

For and on behalf of
Taranaki Regional Council

A D McLay
Director - Resource Management

Indicative Quarry Plan – Attachment for Consent 5218





CHIEF EXECUTIVE
PRIVATE BAG 713
47 CLOTEN ROAD
STRATFORD
NEW ZEALAND
PHONE: 06-765 7127
FAX: 06-765 5097
www.trc.govt.nz

Please quote our file number
on all correspondence

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

Name of Consent Holder:	Vickers Quarries Limited 125 Radnor Road R D 24 STRATFORD 3494	New Address: 683 York Road RD 24 Stratford 4394
Consent Granted Date:	17 February 2010	

Conditions of Consent

Consent Granted:	To discharge cleanfill onto and into land at or about (NZTM) 1701549E-5650156N
Expiry Date:	1 June 2027
Review Date(s):	June 2015, June 2021
Site Location:	683 York Road, Midhirst
Legal Description:	Lot 2 DP 366171
Catchment:	Waitara
Tributary:	Manganui Waipuku

*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 Council all the administration, monitoring and supervision costs of this consent, fixed in accordance to section 36 of the Resource Management Act.

Special conditions

1. The discharge of cleanfill shall only occur in the area indicated on the plan attached [Plan 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], 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 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.
6. Upon completion of the cleanfill discharge authorised by this consent, the discharge site shall be stabilised and revegetated.
7. This consent shall lapse on 31 March 2015, 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.

Consent 7615-1

8. 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 2015 and/or June 2021, 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 17 February 2010

For and on behalf of
Taranaki Regional Council



Director-Resource Management



Plan 1: Showing the location of the authorised clean-fill site.



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

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www.trc.govt.nz

Please quote our file number
on all correspondence

Name of
Consent Holder: Vickers Quarries Limited
125 Radnor Road
R D 24
STRATFORD 4394

Consent Granted
Date: 18 June 2010

Conditions of Consent

Consent Granted: To discharge treated stormwater and treated aggregate washwater from a quarry site into the Patea River at or about (NZTM) 1721850E-5643115N

Expiry Date: 1 June 2020

Review Date(s): June 2015

Site Location: 278 Toko Road, Stratford

Legal Description: Pt lot 2 DP 739

Catchment: Patea

*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 [the Council] all the administration, monitoring and supervision costs of this consent, fixed in accordance to section 36 of the Resource Management Act.

Special conditions

1. 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.
2. The active quarry site shall be contoured/bunded so that:
- all water generated in this area is directed to the silt control structures for treatment prior to discharge; and
 - the flow of uncontaminated stormwater into this area is prevented, as far as is practicable.
3. The suspended solids concentration within the discharge shall not exceed 100 gm⁻³.
- This condition shall apply prior to the entry of the treated stormwater and aggregate washwater into the receiving waters of the Patea River at a designated sampling point approved by the Chief Executive, Taranaki Regional Council.
4. After allowing for a mixing zone of 25 metres, the discharge shall not give rise to any of the following effects in the receiving waters of the Patea River:
- a) the production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials;
 - b) any conspicuous change in the colour or visual clarity;
 - c) any emission of objectionable odour;
 - d) the rendering of fresh water unsuitable for consumption by farm animals;
 - e) any significant adverse effects on aquatic life.
5. The consent holder shall maintain a contingency plan. The contingency plan shall be adhered to in the event of a spill or emergency and shall, to the satisfaction of the Chief Executive, Taranaki Regional Council, detail measures and procedures to be undertaken to prevent spillage or accidental discharge of contaminants not authorised by this consent and measures to avoid, remedy or mitigate the environmental effects of such a spillage or discharge.

The contingency plan shall be submitted to the Chief Executive, Taranaki Regional Council on request.

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6. The consent holder shall progressively reinstate the quarry site in a manner which ensures that the area of exposed, unvegetated earth, within the active quarry site is kept to a minimum at all times. This shall be undertaken to the satisfaction of the Chief Executive, Taranaki Regional Council.
7. A Site Rehabilitation Plan shall be submitted to the Chief Executive, Taranaki Regional Council no later than 3 months before the completion date of extraction activities. The Plan shall detail the proposed methods to rehabilitate and stabilise the site and an approximate timeframe by when the works will be commenced and completed.
8. Prior to this consent expiring or being surrendered, the consent holder shall rehabilitate the site in accordance with the Site Rehabilitation Plan, approved under condition 7 above.
9. 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 2015, 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 18 June 2010

For and on behalf of
Taranaki Regional Council



Director-Resource Management