

Waitaha Catchment
Monitoring Programme
Annual Report
2020-2021

Technical Report 2021-73



Working with people | caring for Taranaki



Taranaki Regional Council
Private Bag 713
Stratford

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Executive summary

This 2020-2021 annual compliance monitoring report is the 27th report by the Taranaki Regional Council (the Council) to be prepared for the monitoring programme in the Waitaha Stream catchment. Twelve industrial premises were monitored under this programme during the year under review. The monitoring reflects an on-going process of identifying and improving discharges into the catchment in a similar manner to the management of those in the neighbouring Mangati Stream catchment.

Overall, a good level of environmental performance was achieved by the consent holders in the industrial area of the Waitaha Stream catchment.

A total of 17 consents were included in the monitoring programme during the 2020-2021 monitoring period. Of these, ten licence discharges to water, one licence a discharge to land, and six licence discharges to air. These consents include a total of 204 special conditions.

The Council's monitoring included 55 inspections, 22 discharge samples and five receiving water samples collected for physicochemical analysis, a review of consent holder monitoring data, odour surveys, ambient air quality analyses, ambient PM₁₀ monitoring, and deposition gauging.

During the year under review, inspections found that the sites were generally well managed, with only transient non-compliances found at some sites, the majority of which were addressed in a timely manner. The persistent issue of non-compliant levels of suspended solids was again noted in the catchment with three instances recorded during the monitoring period. There was one unauthorised discharge into the Waitaha Stream with enforcement action taken as a result of this.

Chemical monitoring of the stream found that although there were measurable changes in some parameters, most of these would have resulted in only minor transient effects at most. In terms of guidelines, no exceedances of guidelines for pH, suspended solids, ammoniacal nitrogen, or biochemical oxygen demand were noted.

Two of the four wet weather samples taken in the Waitaha Stream system was found to be below the USEPA acute guideline for zinc, while three of the four dissolved copper results were below the USEPA acute guidelines.

Overall the consented discharges in the Waitaha catchment achieved a good level of environmental compliance and Council is continuously working with consent holders to apply best practice. The Council, in co-operation with New Plymouth District Council (NPDC) as the consented reticulation owners, is also educating and engaging with non-consent holders in the catchment who may be unaware of their environmental and regulatory obligations.

During the year, AICA (NZ) Ltd demonstrated a **high** level of environmental and administrative performance and compliance with their resource consents as defined in Section 1.1.4.

During the year, C&O Concrete Products Ltd demonstrated a **high** level of environmental performance and administrative performance.

During the year, Energyworks Ltd demonstrated a **high** level of environmental performance and administrative performance.

During the year, Greymouth Facilities Ltd demonstrated an overall **good** level of environmental performance and a **high** level of administrative performance with their resource consent as defined in Section 1.1.4.

During the year, Intergroup Ltd demonstrated an overall **good** level of environmental performance and a **high** level of administrative performance with their resource consent as defined in Section 1.1.4.

During the year, Meredith Metals Ltd demonstrated a **high** level of environmental and administrative performance.

During the year, NPDC demonstrated a **high** level of environmental performance and administrative performance.

During the year, Pounamu Oil Services Ltd demonstrated a **high** level of environmental and administrative performance with their resource consent as defined in Section 1.1.4.

During the year Symons Property Development demonstrated a **high** level of environmental and administrative performance with their resource consent as defined in Section 1.1.4.

During the period under review, **an improvement was required** in Taranaki Sawmill's environmental performance as set out in Section 1.1.4. Ongoing issues with sediment controls and unauthorised discharges from the site were noted. Taranaki Sawmills demonstrated a **high** level of administrative performance.

During the year, SRG Global Asset Services (Taranaki) Ltd demonstrated a **high** level of environmental performance and administrative performance with their resource consent as defined in Section 1.1.4.

During the year, Woodward's 2008 Ltd demonstrated a **high** level of environmental performance and administrative performance.

During the year, Zelum Ltd demonstrated a **high** level of environmental performance and administrative performance.

For reference, in the 2020-2021 year, consent holders were found to achieve a high level of environmental performance and compliance for 86% of the consents monitored through the Taranaki tailored monitoring programmes, while for another 11% of the consents, a good level of environmental performance and compliance was achieved.

In terms of overall environmental and compliance performance by the consent holders over the last several years, this report shows that the consent holders' performance remains at a good level for the year under review.

This report includes recommendations for the 2021-2022 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 for the period July 2020 to June 2021 by the Taranaki Regional Council (the Council) on the monitoring programme associated with 17 resource consents held by 13 consent holders in the Waitaha Catchment.

This report includes the results and findings of the monitoring programme implemented by the Council in respect of these consents, which relate to discharges to water and emissions to air within the Waitaha catchment.

One of the intents of the *Resource Management Act 1991* (RMA) is that environmental management should be integrated across all media, so that a consent holder's use of water, air, and land should be considered from a single comprehensive environmental perspective. Accordingly, the Council generally implements integrated environmental monitoring programmes and reports the results of the programmes jointly. This report discusses the environmental effects of the use of water, land and air by these consent holders, and is the 27th combined annual report by the Council for this catchment.

1.1.2 Structure of this report

Section 1 of this report is a background section. It sets out general information about:

- consent compliance monitoring under the RMA and the Council's obligations;
- the Council's approach to monitoring sites through annual programmes;
- the resource consents held by the companies in the Waitaha catchment;
- the nature of the monitoring programme in place for the period under review; and
- a description of the activities and operations conducted in the Company's site/catchment.

Sections 2-14 separately detail each company's onsite activities and performance.

In each **subsection 1** (e.g. section 2.1) there is a general description of the industrial activity and associated discharges, a photograph or map showing the location of the activity, and an outline of the matters covered by the company's permit/s.

Subsections 2 and 3 present the monitoring results of the company's activities during the period under review, including scientific and technical data, and any information on the Council's Register of Incidents.

Section 15 discusses the results of the monitoring of the Waitaha Stream, their interpretation and their significance.

Section 16 discusses the general site performance of the consent holders within the catchment, their interpretation, and their significance for the environment in the immediate vicinity of the sites under discussion.

Section 17 presents recommendations to be implemented in the 2021-2022 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 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); and
- 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' in as much 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 holders, this report also assigns a rating as to each Company's environmental and administrative performance during the period under review.

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 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 during investigations of incidents reported to the Council by a third party 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 during investigations of incidents reported to the Council by a third party. 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 during investigations of incidents reported to the Council by a third party. Cumulative adverse effects of a persistent moderate non-compliant activity could elevate an 'improvement required' issue to this level. Typically there were grounds for either a prosecution or an infringement notice in respect of effects.

Administrative performance

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

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

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

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

For reference, in the 2020-2021 year, consent holders were found to achieve a high level of environmental performance and compliance for 86% of the consents monitored through the Taranaki tailored monitoring programmes, while for another 11% of the consents, a good level of environmental performance and compliance was achieved.¹

1.2 Resource consents

The resource consents covered by the Waitaha Catchment Monitoring Programme are shown in Table 1 and their locations are shown in Figure 1. A total of 17 consents were included in the monitoring programme during the 2020-2021 monitoring period. Of these, 10 licence discharges to water, one licence a discharge to land, and six licence discharges to air. These consents include a total of 205 special conditions. There are

¹ The Council has used these compliance grading criteria for more than 17 years. They align closely with the 4 compliance grades in the MfE Best Practice Guidelines for Compliance, Monitoring and Enforcement, 2018

a small number of other consented discharges in the catchment, such as agricultural discharges, which are not covered directly by this monitoring programme.

Outlines of the companies' activities and the special conditions on their consents are presented in Sections 2- 14 of this report, and copies of the full consents are given in numerical order in Appendix I.

Most stormwater discharge consents have the most recent standardised special conditions that;

- require the consent holder to adopt best practice;
- limit the area from which stormwater can be discharged;
- require the use of a stormwater treatment system;
- limit constituents of the discharge, with specific regard to pH, suspended solids and oil and grease;
- require that the discharge does not cause certain effects in the receiving waters;
- require that the consent holder maintain a spill contingency plan;
- require that the consent holder maintain and adhere to a management plan;
- require the consent holder to notify Council prior to making any changes to the site or site processes;
- set a lapse date (where applicable); and
- set dates for optional review.

Table 1 Resource consents held in the Waitaha Catchment

Consent Holder	Consent No	Type	Description	Conditions	Granted	Expiry Date	Next Review Date
AICA (NZ) Ltd	2367-3.2	discharge stormwater to land/water	To discharge stormwater from a chemical manufacturing complex to land via irrigation and into a wetland at the headwaters of the Waitaha Stream	14	20 Sep 2017	01 Jun 2032	June 2026
	4021-3	discharge to air	To discharge emissions into the air from the manufacture of formaldehyde solution and urea formaldehyde resin, together with emissions from associated activities at the plant premises	12	26 May 2015	01 Jun 2032	June 2026
C&O Concrete Products Ltd	4777-2	discharge to land/water	To discharge stormwater from a concrete products manufacturing premises into the Waitaha Stream	9	09 Dec 2014	01 Jun 2032	June 2026
Energyworks Ltd	9606-2	discharge to air	To discharge emissions into the air associated with abrasive blasting operations, spray painting and associated activities at a permanent site at Connett Road East, Bell Block and from mobile operations throughout the Taranaki region, including parts of the coastal marine area	20	03 Sep 2020	01 Jun 2038	June 2023
	9962-1	discharge stormwater to land/water	To discharge stormwater via the New Plymouth District Council reticulated stormwater system into an unnamed tributary of the Waitaha Stream	8	11 Nov 2014	01 Jun 2032	June 2026

Consent Holder	Consent No	Type	Description	Conditions	Granted	Expiry Date	Next Review Date
Greymouth Facilities Ltd	9868-1.1	discharge stormwater to land/water	To discharge untreated stormwater from a yard used for storage and maintenance of hydrocarbon exploration drilling equipment directly onto and into land, and to discharge treated stormwater into the Waitaha Stream via the New Plymouth District Council reticulated stormwater system, from an interceptor	15	04 Jun 2014	01 Jun 2032	June 2023
Intergroup Ltd	4776-2	discharge stormwater to land/water	To discharge treated stormwater from a liquid wastes processing and chemical consolidation facility onto and into land and into the Waitaha Stream via the New Plymouth District Council reticulated stormwater system	9	31 Mar 2016	01 Jun 2032	June 2026
Meredith Scrap Metals Ltd	9911-1	discharge contaminants to land	To discharge contaminants onto and into land associated with scrap metal storage and processing	9	04 Jun 2014	01 Jun 2032	June 2026
	9912-1	discharge stormwater to land/water	To discharge stormwater from scrap metal storage and processing into the Waitaha Stream and into an unnamed tributary of the Mangaoraka Stream	10	19 May 2021	01 Jun 2032	June 2026
New Plymouth District Council	0609-3	discharge stormwater to land/water	To discharge stormwater from industrial land in the Waitaha catchment via multiple outfalls between De Havilland Drive and State Highway 3 into the Waitaha Stream and various unnamed tributaries of the Waitaha Stream	7	22 Mar 2017	01 Jun 2032	June 2023
Pouamu Oilfield Services Ltd	4775-2	discharge stormwater to land/water	To discharge treated and untreated stormwater from an oilfield engineering services premises onto land and into an unnamed tributary of the Waitaha Stream and into the Waitaha Stream	9	11 Jul 2016	01 Jun 2032	June 2026

Consent Holder	Consent No	Type	Description	Conditions	Granted	Expiry Date	Next Review Date
SRG Global Asset Services (Taranaki) Ltd (formerly TBS Coatings Ltd)	4056-3.0	discharge to air	To discharge emissions into the air from abrasive blasting operations at a permanent site at Corbett Road, Bell Block, and from mobile operations at various locations throughout the Taranaki region, excluding the Coastal Marine Area	18	11 Dec 2020	01 Jun 2038	June 2023
Symons Property Developments Ltd	7805-1	discharge stormwater to land/water	To discharge stormwater from a truck depot and pipe cleaning facility into the Waitaha Stream	13	11 Jul 2016	01 Jun 2026	-
Taranaki Sawmills Ltd	2333-4.3	discharge stormwater to land/water	To discharge stormwater from a sawmill site into the Waitaha Stream	9	06 Aug 2020	01 Jun 2032	June 2026
	4096-2	discharge to air	To discharge emissions into the air from sawmilling and untreated timber processing and associated activities including the combustion of wood and/or coal within boilers and wastes in an open firepit	21	27 Jan 2004	01 Jun 2032	June 2026
Woodwards 2008 Ltd	7881-1	discharge to air	To discharge emissions into air from the combustion of untreated timber wastes	9	17 Aug 2011	01 Jun 2026	-
Zelam Ltd	4059-5	discharge to air	To discharge emissions into the air from industrial agri-chemical formulation processes and associated processes	12	13 Feb 2008	01 Jun 2026	-

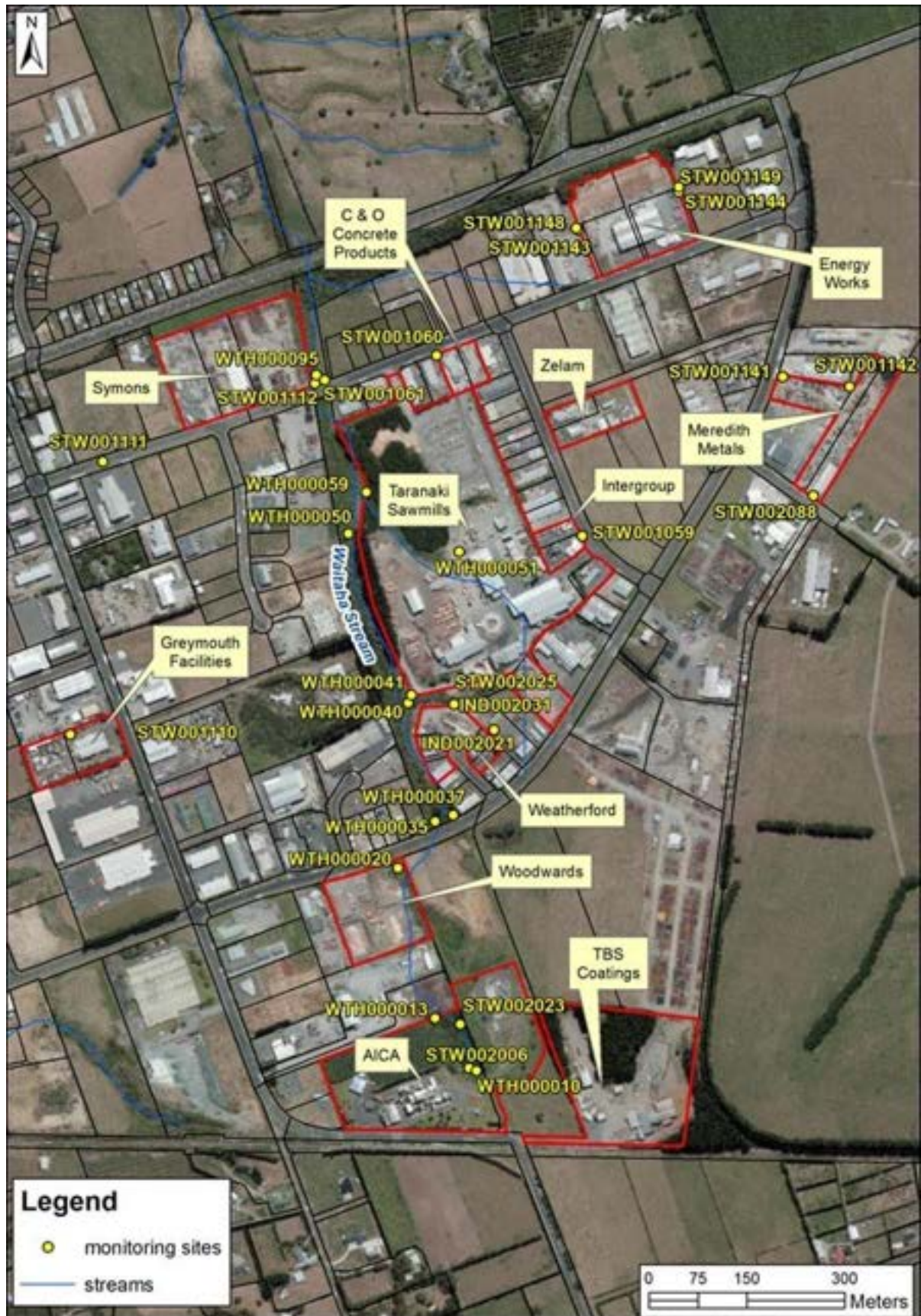


Figure 1 Consent holder site locations and associated sampling sites

1.3 Monitoring programme

1.3.1 Introduction

Section 35 of the RMA sets obligations upon the Council to gather information, monitor and conduct research on the exercise of resource consents within the Taranaki region. The Council is also required to assess the effects arising from the exercising of these consents and report upon them.

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 industries in the Waitaha catchment consisted of six primary components.

1.3.2 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;
- discussion over monitoring requirements;
- preparation for any consent reviews, renewals or new consent applications;
- advice on the Council's environmental management strategies and content of regional plans; and
- consultation on associated matters.

1.3.3 Site inspections

Council officers undertook 55 routine site inspections of the consent holders' sites. With regard to consents for discharges to water, the main points of interest were plant processes with potential or actual discharges to receiving watercourses, including contaminated stormwater and process wastewaters. During inspections at sites with air discharge consents, ambient monitoring of suspended particulate and other emissions were undertaken as appropriate.

1.3.4 Discharge sampling

The Council took 27 stormwater samples either via integrated wet weather runs or individually during wet weather inspections. Each sample was analysed for the expected contaminants and other physical characteristics of the discharges from each site.

1.3.5 Receiving water sampling

The Council took eight receiving water samples during one integrated wet weather survey. Each sampling site is located to serve as either an upstream control or downstream impact assessment site for any given discharge.

1.3.6 Air monitoring

Council undertook one 48-hour suspended particulate survey at Taranaki Sawmills Ltd, and one dust deposition survey at SRG Global during the monitoring period under review. Handheld DustTrak and Gastec devices were also used at various sites during inspections, to monitoring dust and gas emissions respectively.

1.3.7 Provision of company data

The consents held by AICA (NZ) Ltd require the collection of data in regards to stormwater quality and volumes and also require the provision of stack testing reports. A report on new air emissions treatment technology is required annually.

The air discharge consent held by Zelum Ltd requires the consent holder to measure the pH and amine content of the air scrubber liquor and provide the results to Council on an annual basis.

2 AICA (NZ) Ltd

2.1 Site description

AICA (NZ) Ltd (AICA) manufactures synthetic resins for the production of wood products at their plant situated above a wetland area at the headwaters of the Waitaha Stream (Photo 1).



Photo 1 View of AICA (NZ) site

There have been a number of changes at the site over the years in order to meet market demands. There are two processing areas on site, Plant 1 predominantly for formaldehyde based products, and Plant 2 which was primarily for phenol based products. In early 2009, due to the economic downturn it was decided that Plant 2 would be decommissioned and phenol production was moved to Nelson.

In 1999 a two tonne mixing vessel was installed at Plant 1 to take advantage of an increase in wood glue sales. This was piped up to the existing utilities and scrubbers.

AICA holds two consents in relation to the site; **2367-3** allows the discharge of stormwater from a chemical manufacturing complex to land via irrigation and into a wetland at the headwaters of the Waitaha Stream, while **4021-3** allows the discharge of emissions into the air from the manufacture of formaldehyde solution and urea formaldehyde resin, together with emissions from associated activities at the plant premises.

2.2 Water

The site has an enclosed stormwater system which directs all road drain runoff to two holding ponds that are lined with butyl rubber. These ponds (pond 1 and pond 2) are 300 m³ and 100 m³ respectively. Analysis of the stormwater is carried out by AICA prior to discharge. Should the stormwater be outside the limits given in the

consent, it is discharged via irrigation to the paddock to north of the plant. Should the discharge exceed the consent limits for irrigation, it is either diverted to trade waste or held for dilution.

The car park drains directly to the receiving waters of the Waitaha Stream. Roof water from the decommissioned phenolic resins plant (Plant 2) drains to the stormpond.

Areas likely to be contaminated, such as bunds around storage tanks and loading facilities, are directed to the NPDC sewer system.

2.2.1 Results

2.2.1.1 Inspections

Four routine inspections were conducted at the site during the monitoring period, on 23 September 2020, 17 December 2020, 12 March 2021, and 24 May 2021.

23 September 2020

An inspection to assess compliance with resource consent conditions was carried out in fine weather with light wind conditions. The site was tidy with no tracking noted around the vicinity of the urea shed. The stormwater ponds had not been discharged to land or water for some time, following a non-compliance in the previous monitoring year, and were being directed to the NPDC trade waste system. Samples of the stormwater from the pond were collected. No odours with dust or odour were noted, and onsite Gastec formaldehyde and phenol readings were low with no colour change in the detection tube. At the time of inspection, all resource consent conditions were being complied with.

17 December 2020

An inspection was undertaken in dry weather with light wind conditions. Operations staff were undergoing offsite training at the time, and the site was inactive as a result. The site was generally tidy, with a small amount of urea observed at the entrance to the storage shed. Staff on site noted that a door to the shed was being considered to minimise any tracking of product. The stormwater system was well managed, with no sign of recent flows from either of the two storm ponds. Stormpond 1 was on reticulation at the time, and any discharges were directed to either the Waitaha Stream or NPDC trade waste as required. Formaldehyde and phenol Gastec testing around the perimeter of the site found no levels of concern, and no offensive odours or dust were discharging beyond the boundary. The site was compliant with consent conditions at the time.

12 March 2021

The site was inspected in fine weather with light wind conditions. The stormwater system was fully contained with all discharges directed to the storm ponds. The flow meter on Stormpond 1 was awaiting repairs and all discharges from the pond were being directed to the trade waste system as a precaution. The urea storage shed was tidy with no sign of tracking at the entrance. The IBCs stored on the eastern site were slowly being cleared and disposed of at an appropriate facility. Phenol and formaldehyde Gastec testing at the perimeter of the site found minimal levels of both chemicals. There were no odour or dust issues beyond the boundary and all conditions were compliant at the time.

24 May 2021

A site inspection was carried out in fine weather with light wind conditions. The site was tidy and the stormwater drains were fully contained with no visual contaminants noted. The urea load out area was relatively clear with minimal tracking from the shed. Pond 1 was operating at a high level and had been discharging to the Waitaha for a short period five days prior. A visual inspection of the downstream receiving environment found that there were no adverse effects as a result of the discharge. Pond 2 was dry and not discharging at the time. Phenol and formaldehyde Gastec tests around the outer perimeter showed minimal

levels of the chemicals, and no offensive odours or dust were noted offsite. Overall, the site was compliant with resource consent conditions.

2.2.1.2 Results of discharge monitoring

Samples were collected from the storm ponds on two occasions during the period under review, on 23 September 2020 and 29 March 2021. The results are displayed in Table 2 and Table 3 below, and were within allowable limits. Pond 1 was not discharging during the March survey, and all results are indicative only.

Table 2 23 September 2020 stormwater sampling results, Pond 1 (STW002006) and Pond 2 (STW002023)

Parameter	Units	STW002006	STW002023	Consent limits (Tributary/Land)
pH	pH	8.5	8.8	6-9
Temperature	°C	15.8	16.1	-
Conductivity	mS/cm	20.1	11.6	-
Suspended Solids	g/m ³	28	22	100
Formaldehyde	g/m ³	0.07	< 0.02	2/10
Total Phenols	g/m ³	< 0.02	< 0.02	1
Total N	g/m ³	24	8.2	-
NH ₃	g/m ³	1.22	0.72	-
NH ₄	g/m ³	15.8	4.3	10/50
NNN	g/m ³	0.11	0.23	-
TKN	g/m ³	24	7.9	-
Urea	g/m ³	2.2	2.7	-

Table 3 29 March 2021 stormwater sampling results, Pond 1 (STW002006)

Parameter	Units	STW002006	Consent limits
pH	pH	7.9	6-9
Temperature	°C	18.8	-
Conductivity	µS/cm	325	-
Total Phenols	g/m ³	< 0.02	1
Total N	g/m ³	25	-
NH ₄	g/m ³	14.7	10/50*
NNN	g/m ³	0.34	-
TKN	g/m ³	24	-
Urea	g/m ³	3.1	-

*limit for discharge to land (10 g/m³); discharge to water (50 g/m³)

Results of receiving environment monitoring

Receiving water samples were collected from one site in the Waitaha Stream on 29 March 2021, and the results are shown in Table 4. The irrigation system was not observed in operation during the monitoring period.

Table 4 29 March 2021 receiving water sampling results, site WTH000013

Parameter	Units	WTH000013	Consent limits
pH	pH	6.7	6-9
Temperature	°C	17.5	-
Conductivity	µS/cm	81	-
Total Phenols	g/m ³	< 0.02	0.6
Total N	g/m ³	0.54	-
NH ₃	g/m ³	0.00004	0.025
NH ₄	g/m ³	0.024	-
NNN	g/m ³	0.25	-
TKN	g/m ³	0.28	-
Urea	g/m ³	< 0.05	-

The results were within consent limits and indicate that there were no measurable effects on receiving waters as a result of discharges from the AICA site.

2.2.2 Provision of company data

2.2.2.1 Results of self-monitoring

Consent conditions require that AICA notify Council prior to discharge and provide sampling results as part of that notification. During the period under review the Council received and reviewed these results and found that they complied with the consented contaminant limits and notification requirements.

The self-monitoring stormwater data for AICA Pond 1 (Table 5) and Pond 2 (Table 6) are summarised below.

Table 5 AICA Pond 1 self-monitoring sampling results from July 2020 to June 2021

Discharge Type		To Land			To Water		
Number of samples		1			11		
Parameter	Units	Min	Max	Consent Limit	Min	Max	Consent Limit
Temp	°C	15	15	-	12.0	20.7	-
pH (6-9)	pH	7.9	7.9	6-9	7.6	9.0	6-9
Conductivity	mS/cm @ 25°C	210	210	-	41.8	350	-
Ammonia	g/m ³	8	8	50	0.0	8.0	10
Unionised Ammonia	g/m ³	0.2	0.2	-	0.0	0.4	-
Formaldehyde	g/m ³	0.1	0.1	2	0.0	1.0	2
Phenol	g/m ³	0	0	1	0.0	0.0	1

Table 6 AICA Pond 2 self-monitoring sampling results from July 2020 to June 2021

Discharge Type		To Water		
Number of samples		2		
Parameter	Units	Min	Max	Consent Limit
Temp	°C	13.0	16.2	-

Discharge Type		To Water		
Number of samples		2		
Parameter	Units	Min	Max	Consent Limit
pH (6-9)	pH	7.1	8.9	6-9
Conductivity	mS/cm @ 25°C	65.1	152	-
Ammonia	g/m ³	0.0	0.0	10
Unionised Ammonia	g/m ³	0.0	0.0	-
Formaldehyde	g/m ³	0.0	0.0	2
Phenol	g/m ³	0.0	0.0	1

2.2.2.2 Discharge flow recording

AICA provided telemetered flow data for discharges from the storage ponds. This is used in conjunction with pre-release chemical analysis and downstream flow monitoring to provide further data on expected mixing and assimilation rates in the Waitaha Stream. A hydrograph of data collected for both discharges via irrigation and to the Waitaha Stream is shown in Figure 2. As shown in the hydrograph, AICA use discharge to water (marked in blue) as the preferred option for stormwater disposal, in order to avoid over-irrigation of the paddock during wetter months.

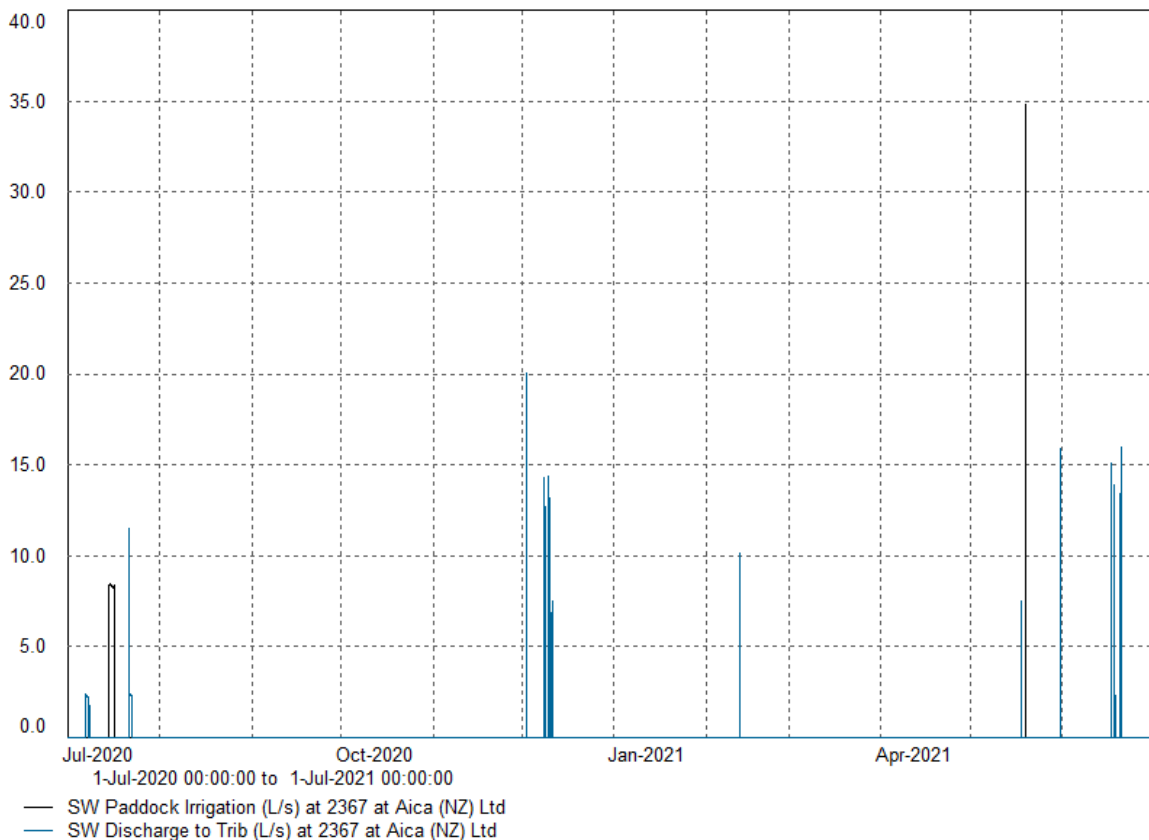


Figure 2 Hydrograph of AICA discharges for 2019-2020 year

2.3 Air

The primary source of emissions to the atmosphere is from the 22 m high formaldehyde absorption tower. The emissions contain formaldehyde, resorcinol, and other gases (including water vapour) from a gas-fired

boiler flue, and some steam from the plant's cooling tower, together with minor emissions from storage tanks and the laboratory fume cupboard.

Formaldehyde solution is produced at the plant by the catalytic oxidation and dehydrogenation of methanol in a continuous process. This is then used in the production of urea-formaldehyde and melamine-urea-formaldehyde resins.

There are also traces of formaldehyde, methanol and various reaction by-products.

The World Health Organisation notes that there is variability in human formaldehyde responses, with significant increases in signs of irritation occurring at levels above 0.1 mg/m³ and a progression of symptoms occurring above 1.2 mg/m³. No lung function alterations were noted in healthy non-smokers and asthmatics exposed to formaldehyde levels up to 3.7 mg/m³.

In the national Ambient Air Quality Guidelines (Ministry for the Environment, 2002) a formaldehyde limit of 100 µg/m³ (0.1 mg/m³) was given. It should be noted that the primary consideration by the Ministry for the Environment in setting this guideline, has been to ensure that ambient (outdoor) air can be used to dilute indoor concentrations of formaldehyde. This limit protects against tissue irritation of the eyes, nose and throat.

2.3.1 Results

2.3.1.1 Inspections

The site was visited on four occasions during the period under review. Inspections assessed the compliance of both air and water discharges, and are reported in Section 2.2.1.1.

2.3.1.2 Results of receiving environment monitoring

Dust and gas emissions monitoring was carried out during each inspection visit. All readings were within allowable limits as per Section 2.2.1.1.

2.3.2 Provision of company data

2.3.2.1 Emissions testing

Special conditions 3, 4, and 5 of consent 4021-3 relate to the standard to which formaldehyde emissions from the plant site must be treated, and outline the frequency and conditions under which formaldehyde emissions testing must be performed to confirm compliance. The timing of the testing, and reporting of the results to Council are also specified.

Testing must be undertaken by a party independent from AICA and as specified in USEPA Method 0011, which is an isokinetic method ensuring a fully representative sample is collected. Acidified dinitrophenyl hydrazine (DNPH) is used to trap the formaldehyde present in the sample. This testing must be undertaken before 1 June each year, comprise not less than three samples taken under production conditions that give rise to maximum emissions, and the results (including all raw data) are to be reported to Council within 20 working days of the testing.

AICA undertook stack testing on 4 August 2021, following unexpected delays from the contractor who was scheduled to undertake the testing. The stack testing report found the emissions to be compliant with consent conditions.

2.3.2.2 Emission technology report

Condition 11 of consent 4021-3 requires that the consent holder provide an annual report in the month of June reviewing the technology available for reduction of emissions. A report covering the 2020-2021 period was received.

2.4 Evaluation of performance

A tabular summary of AICA's compliance record for the year under review is set out in Table 7 and Table 8.

Table 7 Summary of performance for AICA consent 2367-3

Purpose: To discharge stormwater from a chemical manufacturing complex to land via irrigation and into a wetland at the headwaters of the Waitaha Stream		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Adopt best practice	Inspection/liason with consent holder	Yes
2. Limit on catchment size	Inspection	Yes
3. Installation of discharge flow meters and data logger	Inspection	Yes
4. Analysis of stormwater prior to discharge	Review of data provided	Yes
5. Limits of stormwater discharge constituents	Sampling/review of data	Yes
6. Notification prior to discharge	Notification received	Yes
7. Limits of other stormwater discharge constituents	Inspection	Yes
8. Limits on effects in receiving water	Inspection/sampling	Yes
9. Limits on effects from land irrigation	Inspection/sampling	N/A – irrigation not in use during period under review
10. Provision of data	Review of data	Yes
11. Provision of a contingency plan	Review of plan	Yes
12. Provision of management plan	Review of plan	Yes
13. Notifications of changes in site activity	No changes this period	N/A
14. Review of consent	Next optional review in June 2026	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		High
Overall assessment of administrative performance in respect of this consent		High

N/A = not applicable or not assessed

Table 8 Summary of performance for AICA consent 4021-3

Purpose: To discharge emissions into the air from the manufacture of formaldehyde solution and urea formaldehyde resin, together with emissions from associated activities at the plant premises		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Adopt best practice	Site inspection	Yes
2. No objectionable effects beyond boundary	Inspection	Yes
3. 1.0 kg/hr formaldehyde limit on point source emissions	Stack testing	Yes
4. Conduct emission stack testing	Stack testing report received	Yes
5. Use approved method for stack testing	Stack testing report received	Yes
6. 0.1 mg/m ³ ambient formaldehyde limit at boundary	Gastec sampling during inspection	Yes
7. 0.63 mg/m ³ ambient phenol limit at boundary	Gastec sampling during inspection	Yes
8. 1.5 mg/m ³ ambient resorcinol limit at boundary	Gastec sampling during inspection	Yes
9. Minimisation of emissions through control of processes	Discussion and liaison with consent holder	Yes
10. Consultation before alterations to plant or processes	Discussion and liaison with consent holder	Yes
11. Formulation of a written report	Report received	Yes
12. Optional review provision re environmental effects	Next optional review in June 2026	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		High
Overall assessment of administrative performance in respect of this consent		High

N/A = not applicable or not assessed

During the year, AICA demonstrated a high level of environmental and administrative performance with the resource consents as defined in Section 1.1.4.

3 C&O Concrete Products Ltd

3.1 Site description

C&O Concrete Products Ltd (C&O Concrete) manufactures concrete products from their site located on Connett Road East, Bell Block. The site is comprised of 1,926 m² of industrial land dominated by a central building and includes outdoor construction and storage areas (Photo 2).



Photo 2 C & O Concrete site

The discharge from C&O Concrete is expected to potentially contain elevated suspended solids, high pH and alkalinity. The site discharges to the New Plymouth District Council (NPDC) stormwater system where it mixes with stormwater from roads and other developed sites before discharging to the Waitaha Stream.

C&O Concrete holds consent **4777-2**, to discharge stormwater from a concrete products manufacturing premises into the Waitaha Stream.

3.2 Results

3.2.1 Inspections

Two routine inspections were conducted at the site during the monitoring period, on 11 August 2020 and 11 February 2021.

11 August 2020

An inspection was conducted in overcast weather with light rain and wind conditions. The site was generally tidy with no spills or sheens noted. All stormwater drains were fully contained and operating with sufficient treatment capacity. The in-situ stone gabion baskets appeared to be working well, and the discharge from the stormwater system was visually clearer after treatment. It was noted that a trough on the upper site showed

use as a burn pit, although no fires were evident at the time. Staff onsite were reminded that burning materials in industrial areas was a prohibited activity, and that all further burning onsite must cease. There were no odour or dust issues, and the site was overall compliant with resource consent conditions.

11 February 2021

The site was inspected in fine weather with light wind conditions. The site was tidy and well maintained, with no further evidence of material being burnt onsite. The stormwater system was in good condition and the drains were free of visual contaminants, with only clear stormwater present. The system was not discharging at the time. Despite the light wind conditions, no dust or odours were discharging beyond the boundary. All resource consent conditions were being complied with at the time of inspection.

3.2.2 Results of discharge monitoring

The requirements for the discharge are that the suspended solids concentration must not exceed 100 g/m³ and the oil and grease concentration must not exceed 15 g/m³. The pH must be between 6 and 9.

The discharge from the C&O Concrete site was sampled on two occasions during the period under review. The results of the monitoring are shown in Table 9. All results were within consented limits.

Table 9 C & O Concrete stormwater sampling results, site STW001060

Parameter	pH	Temperature	Conductivity	Suspended Solids	Cu (AS)	Oil & Grease	Hydrocarbons			
							C7 - C9	C10 - C14	C15 - C36	Total HC
Units	pH	°C	mS/cm	g/m ³	g/m ³	g/m ³	g/m ³	g/m ³	g/m ³	g/m ³
24 Aug 2020	6.9	-	6.7	11	-	-	< 0.06	< 0.2	< 0.4	< 0.7
14 Apr 2021	6.8	15.2	1.6	33	0.0193	5	< 0.10	< 0.2	< 0.4	< 0.7
<i>Consent limits</i>	6-9	-	-	100	-	15	-	-	-	-

3.3 Evaluation of performance

A tabular summary of the C&O Concrete's compliance record for the year under review is set out in Table 10.

Table 10 Summary of performance for C&O Concrete Ltd consent 4777-2

Purpose: <i>To discharge stormwater from a concrete products manufacturing premises into the Waitaha Stream</i>		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Adopt best practice	Observation at inspection	Yes
2. Limits stormwater catchment to 0.415 Ha	Observation at inspection	Yes
3. Stormwater to be directed to treatment system	Observation at inspection	Yes
4. Contaminants in discharge not to exceed certain limits	Sampling	Yes
5. Discharge cannot cause specified adverse effects beyond mixing zone	Observation at inspection and sampling	Yes
6. Maintenance of a contingency plan	Contingency plan received	Yes
7. Maintenance of a management plan	Management plan received	Yes

Purpose: To discharge stormwater from a concrete products manufacturing premises into the Waitaha Stream		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
8. Notification of changes at site	No notification received or changes noted	Yes
9. Optional review provision re environmental effects	Next optional review in June 2026	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		High
Overall assessment of administrative performance in respect of this consent		High

N/A = not applicable or not assessed

During the year, C&O Concrete Products Ltd demonstrated a high level of environmental and administrative performance with the resource consent as defined in Section 1.1.4.

4 Energyworks Ltd

4.1 Site description

Energyworks Ltd (Energyworks) operates a blasting and painting facility on Connett Road Bell Block. Blasting occurs within a fully enclosed dedicated blast chamber within the main building. The blasting medium is mainly steel grit, with the use of blasting garnet as a secondary option. Emissions from the blast shed are managed internally via a media reclaimer and recycling system and emissions from the spray painting will be from vents on the downstream side of the purpose built filters. Two outdoor wash pads are used to wash blasted parts and these are directed to the NPDC sewer (Photo 3).



Photo 3 Stockpiled material to be blasted on Energyworks site, March 2020

Stormwater from the site discharges at points which flow into the Waitaha catchment via the NPDC reticulation system.

Energyworks hold two consents in relation to activities at the site. Consent **9606-1** allows the discharge emissions into the air associated with abrasive blasting operations, spray painting and associated activities at a permanent site at Connett Road East, Bell Block and from mobile operations throughout the Taranaki region, while **9962-1** covers the discharge of stormwater via the NPDC reticulated stormwater system into an unnamed tributary of the Waitaha Stream.

4.2 Results

4.2.1 Inspections

Two routine inspections were conducted at the site during the monitoring period, on 11 August 2020 and 10 February 2021.

11 August 2020

An inspection was carried out in overcast weather with light wind and rain conditions. The condition of the site required improvement, with multiple locations showing evidence of rust or garnet blasting debris located above or near stormwater drains. It was highlighted to staff onsite that this material has potential to discharge to the Waitaha Stream via the stormwater drains, and cause adverse effects. The stormwater drains themselves were visually clear and in good condition, with no evidence of rust or garnet materials, however it was noted that garnet had potentially entered the stormwater system adjacent to the trade waste truck wash. Large quantities of rusted material were also observed adjacent to doors on the blasting shed and around the large waste bins on the northern perimeter. No discharges of smoke, odour, or dust, were occurring at the time, and the site was overall compliant with consent conditions.

10 February 2021

The site was inspected in wet weather with calm wind conditions. The visit had been timed to coincide with forecast rain, to assess any impacts of the rust and garnet debris noted in the previous inspection. It was found that housekeeping on the site had improved significantly, with no evidence of any debris noted near stormwater drains, blasting sheds, and waste bins; all of which had previously been identified as areas of concern. The stormwater drains were running clean and uncoloured, with no sign of contaminants being discharged off the site. The doors on the active blasting sheds were closed, which was effectively reducing the likelihood of discharges to air. There was also evidence that regular cleaning was being undertaken in shed doorways to prevent debris tracking across the site. No offensive or objectionable dust or odours were noted, and the site was compliant with all resource consent conditions.

4.2.1.1 Mobile blasting inspections

No notifications of off-site blasting were received during the monitoring period.

4.2.2 Results of discharge monitoring

The discharge from the Energyworks' site was visited on two occasions during the period under review, however no discharges were occurring during the summer low flow visit. The results of the monitoring are shown in Table 11. All results were within consented limits and historical ranges.

Table 11 Energyworks stormwater sampling results, site STW001144

Parameter	pH	Temperature	Conductivity	Suspended Solids	Hydrocarbons			
					C7 - C9	C10 - C14	C15 - C36	Total HC
Units	pH	°C	mS/cm	g/m ³	g/m ³	g/m ³	g/m ³	g/m ³
24 Aug 2020	6.9	-	0.6	28	< 0.10	< 0.2	< 0.4	< 0.7
29 Mar 2021	nd	nd	nd	nd	nd	nd	nd	nd
<i>Consent limits</i>	6-9	-	-	100	-	-	-	15*

*HC used in place of oil & grease; nd: not discharging

4.3 Evaluation of performance

A tabular summary of Energyworks' compliance record for the year under review is set out in Table 12 and Table 13.

Table 12 Summary of performance for Energyworks consent 9606-1

Purpose: To discharge emissions into the air associated with abrasive blasting operations, spray painting and associated activities at a permanent site at Connett Road East, Bell Block and from mobile operations throughout the Taranaki region		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Specifies that conditions 2-7 and 18 apply to all operations, 8-12 to the permanent facility and 13-17 to mobile operations	N/A	N/A
2. Adopt the best practicable option	Inspection	No – potential discharges of garnet to stormwater system
3. No effects beyond boundary	Inspection	Yes
4. All abrasive blasting is to be conducted in conjunction with wind assessment	Inspection	N/A
5. Clean up of blasting media	Inspection	N/A
6. Blasting media used for dry abrasive blasting to meet certain specifications	Visual inspection of dust emissions	N/A
7. The consent holder shall ensure that all operators of abrasive blasting equipment understand and comply with the all the conditions of this consent	Inspection	N/A
8. All abrasive blasting on the consent holder's permanent site at Connett Road, East, Bell Block shall be carried out in an enclosed booth or shed	Inspection	N/A
9. All emissions from abrasive blasting be treated to a certain standard.	Inspection of emissions	N/A
10. The dust deposition rate beyond the property boundary of the permanent site at Connett Road East, Bell Block arising from the discharge, shall be less than 0.13 g/m ² /day	Visual inspection of dust emissions	N/A
11. Adhere to and maintain an operations and management plan	Plan received	Yes
12. Keep records of complaints	Consent holder liaison	Yes
13. All items blasted in a mobile facility shall be those that cannot be moved to a permanent facility (e.g. bridges)	Inspection	Yes

Purpose: To discharge emissions into the air associated with abrasive blasting operations, spray painting and associated activities at a permanent site at Connett Road East, Bell Block and from mobile operations throughout the Taranaki region		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
14. Mobile blasting mitigation requirements	Inspection	Yes
15. Public notification if dwellings within 200 m of mobile blasting	No mobile blasting this period within 200 m of dwelling	Yes
16. Limitation on effects of mobile blasting	Inspection	Yes
17. No blasting in coastal marine area.	Inspection	Yes
18. Lapse Condition	Consent exercised	N/A
19. Review condition	No further option for review prior to expiry	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		High
Overall assessment of administrative performance in respect of this consent		High

N/A = not applicable or not assessed

Table 13 Summary of performance for Energyworks consent 9962-1

Purpose: To discharge stormwater via the New Plymouth District Council reticulated stormwater system into an unnamed tributary of the Waitaha Stream		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Adopt best practice	Inspection	Yes
2. Stormwater catchment not to exceed 2.5 ha	Inspection	Yes
3. Discharge quality standards	Visual inspection	Yes
4. Receiving quality standards	Sampling	Yes
5. Contingency planning	Plan received	Yes
6. Stormwater management planning	Plan received	Yes
7. Notification of changes on site	No changes made	N/A
8. Review condition	Next optional review in June 2026	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		High
Overall assessment of administrative performance in respect of this consent		High

N/A = not applicable or not assessed

During the year, Energyworks Ltd demonstrated a high level of environmental and administrative performance with their resource consents as defined in Section 1.1.4.

5 Greymouth Facilities Ltd

5.1 Site description

Greymouth Facilities Ltd (GFL), operate a storage and maintenance yard on Corbett Road, Bell Block (Figure 3). Stormwater generated at the 0.47 ha site is discharged into the NPDC stormwater system, which flows north along Corbett Road then east along Connett Road before discharging to the Waitaha Stream. The stormwater from Greymouth Facilities' site is treated in an oil separator, prior to discharging to NPDC's reticulation. Bunding around the site provides for onsite storage of excess stormwater during heavy rainfall events.



Figure 3 Aerial view of GFL site

GFL hold permit **9868-1** to discharge untreated stormwater from a yard used for storage and maintenance of hydrocarbon exploration drilling equipment directly onto and into land, and to discharge treated stormwater into the Waitaha Stream via the NPDC reticulated stormwater system, from an interceptor.

5.2 Results

5.2.1 Inspections

Four routine inspections were conducted at the site during the monitoring period, on 24 August 2020, 14 December 2020, 11 February 2021, and 24 May 2021.

24 August 2020

An inspection was carried out in cold weather with moderate rain and wind conditions. The site was tidy with no sign of hydrocarbon spills or sheens. All storage IBC's had been removed from site, and the stormwater ring drain was clear with a filter sock in place and operating effectively. A sample was collected from the final discharge point, and was visually turbid and discoloured. It was noted that there was a significant volume of water tracking from a neighbouring site, which was entering the stormwater system and impacting the quality of the discharge. There were no odour or dust issues. Further investigation found the concentration of suspended solids in the discharge was in breach of consent limits, and further enforcement action was undertaken as a result.

14 December 2020

The site was inspected in warm, sunny weather with light wind conditions. The site was clean and tidy with no spills or sheens noted. The neighbouring site that was being developed by GFL had been bunded to prevent stormwater tracking into the existing system and causing any further non-compliances. The stormwater system on the main site was fully contained and the drains were in good condition with drain socks in place and showing regular maintenance. There were no issues with odour or dust from the site, and all consent conditions were being complied with at the time.

11 February 2021

An inspection was carried out to assess compliance with resource consent conditions in fine weather with light wind conditions. The main site had new gravel recently applied, and no dust was noted discharging beyond the boundary. Stormwater bunding between the two sites was in good condition, with all runoff from the primary site directed to the stormwater system for treatment. Stormwater drains were well-managed, with a controlled amount of vegetative growth in place to assist with sediment retention and silt control. The existing silt sock was in place and working well. The interceptor was found to be operating effectively with no sign of visual hydrocarbons or contaminants. The site was overall tidy, there were no empty oil containers or IBC's noted. At the time of inspection, all conditions were compliant.

24 May 2021

An inspection was conducted in weather with light wind conditions. The site was clean and tidy, with no spills or sheens observed. Bunding was still in place between both operational sites, to control runoff and direct stormwater to the treatment system. All empty IBC's and drums on the site were clean and stored appropriately, with minimal risk of any discharges to land. No odour or dust issues were noted, and overall the site was compliant with consent conditions.

5.2.2 Results of discharge monitoring

The requirements for the discharge are that the suspended solids concentration must not exceed 100 g/m³, oil and grease concentration must not exceed 15 g/m³, and pH must lie in the range 6-9.

The discharge from Greymouth Facilities' site was sampled on two occasions during the period under review, and the results are provided in Table 14.

Table 14 GFL stormwater sampling results, site STW001110

Parameter	pH	Temperature	Conductivity	Suspended Solids	Oil & Grease	Hydrocarbons			
						C7 - C9	C10 - C14	C15 - C36	Total HC
Units	pH	°C	mS/cm	g/m ³	g/m ³	g/m ³	g/m ³	g/m ³	g/m ³
24 Aug 2020	7.0	-	5.9	370	-	< 0.10	< 0.2	< 0.4	< 0.7
29 Mar 2021	6.8	18.8	5.6	19	5	< 0.10	< 0.2	< 0.4	< 0.7
<i>Consent limits</i>	6-9	-	-	100	15	-	-	-	-

The suspended solids concentration measured in the discharge in August 2020 exceeded the allowable limit. Further enforcement was undertaken in response (section 5.3).

All other sampling results were within consented limits for the period under review.

5.3 Investigations, interventions, and incidents

Table 15 below sets out details of any incidents recorded, additional investigations, or interventions required by the Council in relation to GFL's activities during the 2020-2021 period. This table presents details of all events that required further investigation or intervention regardless of whether these were found to be compliant or not.

Table 15 Incidents, investigations, and interventions summary

Date	Details	Compliant (Y/N)	Enforcement Action Taken?	Outcome
24 Aug 2020	Breach of suspended solids consent limit	N	Abatement notice issued	Abatement notice EAC-23509 was issued and further investigation by GFL resolved the source of the contaminants

5.4 Evaluation of performance

A tabular summary of GFL's compliance record for the year under review is set out in Table 16.

Table 16 Summary of performance for GFL consent 9868-1

Purpose: To discharge untreated stormwater from a yard used for storage and maintenance of hydrocarbon exploration drilling equipment directly onto and into land, and to discharge treated stormwater into the Waitaha Stream via the NPDC reticulated stormwater system, from an interceptor		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Clarification of circumstances under which discharges to land can occur	Inspection	Yes
2. Records to be kept of discharges to land	No such discharges have occurred	N/A
3. Adoption of best practicable option to minimise adverse effects on the environment	Inspection and liaison with consent holder. Best practicable option re-evaluated during the year under review, with revised treatment system proposed	Yes

Purpose: To discharge untreated stormwater from a yard used for storage and maintenance of hydrocarbon exploration drilling equipment directly onto and into land, and to discharge treated stormwater into the Waitaha Stream via the NPDC reticulated stormwater system, from an interceptor		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
4. Catchment area limited to 1.065 ha	Inspection	Yes
5. Treatment of all stormwater by 31 October 2015	Inspection and liaison with consent holder	Yes
6. Limits on component concentrations in the discharge	Sampling	No – one exceedance of suspended solids limit
7. Installation and maintenance of discharge sampling point	Inspection and liaison with consent holder	Yes
8. Discharge cannot cause specified adverse effects beyond mixing zone	Visual assessment at inspection and chemical sampling of the stream	Yes
9. Maintenance of contingency plan	Review of Council records and documents submitted	Yes
10. Provision and maintenance of stormwater management plan	Review of Council records and documents submitted	Yes
11. No contaminants beyond the boundary from skimmer pit spillway discharges	Inspection	Yes
12. Soil component concentrations	Visual assessment at inspection	Yes
13. Notification of changes	Review of Council records and liaison with consent holder. Notification of proposed changes to treatment system	Yes
14. Provision for lapse of consent	Consent has been exercised	N/A
15. Optional review provision re environmental effects and/or notification of changes	Next optional review in June 2023	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		High

N/A = not applicable or not assessed

During the year, GFL demonstrated a good level of environmental performance and a high level of administrative performance as defined in Section 1.1.5. The Company has since undertaken to resolve influent stormwater flows that were impacting onsite treatment.

6 Intergroup Ltd

6.1 Site description

Intergroup Ltd (Intergroup) operates a waste disposal company from their site on Hudson Road, Bell Block. The site comprises of 3,903 m² of industrial land including buildings and mainly sealed areas. The site is used as a transit depot and temporary storage facility for waste materials collected from throughout the Taranaki region prior to transportation on to an appropriate disposal site.

The majority of the waste collected is waste oil, which is stored in tanks located in a bunded area. An open concrete pit contains a series of separators and is used for the separation of sludge and water from the waste oil (Photo 4). The wastewater from this process is directed to trade waste and the oily sludge is taken to an off-site location for weathering/bioremediation prior to final disposal. The waste oil is transported up to a sister company in Auckland, which undertakes the disposal.



Photo 4 Intergroup Ltd oil treatment facility

A second open pit is a drive-in facility for the transfer of domestic septic tank effluent from the trucks to the trade waste system.

Stormwater from the yard area enters the NPDC system and is then discharged to the Waitaha Stream.

Potential therefore exists for minor amounts of sewage effluent, petroleum products or other contaminants to enter the stormwater system via drains on site.

Intergroup holds water discharge permit **4776-2** to cover the discharge of treated stormwater from a liquid wastes processing and chemical consolidation facility onto and into land and into the Waitaha Stream via the NPDC reticulated stormwater system.

6.2 Results

6.2.1 Inspections

Four routine inspections were conducted at the site during the monitoring period, on 13 August 2020, 14 December 2020, 10 February 2021, and 24 May 2021.

13 August 2020

The site was inspected in fine weather with light wind conditions. The site was found to be generally clean and tidy. A large volume of IBC's were stored onsite, however staff informed that these contained solid tar and so were unlikely to leak, and had been scheduled for removal. The stormwater system was in good condition with all grates and drains clear of visual contaminants. Large potholes were still present on the site, which created a potential hazard for contaminants to discharge to land during a spill. There were no odour or dust issues, and the site was compliant with consent conditions.

14 December 2020

The site was inspected in warm, fine weather with light wind conditions. The site was generally tidy, however an improvement in best practice around storage of containers was required. It was found that waste batteries were being stored in an un-bunded area, with the potential to discharge contaminants to the stormwater system. It was also noted that a waste oil IBC was located in an un-bunded area, and advice was given to ensure that all unwashed IBC's are stored appropriately. It was recommended that stormwater drains be more clearly marked on the site to avoid confusion and potential non-compliant discharges. Some hydrocarbon odours were noted onsite, however they were not discharging beyond the boundary and all resource consent conditions were being complied with at the time.

10 February 2021

An inspection was carried out in overcast weather with light wind and rain conditions. The site was generally tidy, with all stormwater captured and directed to the treatment system. Hydrocarbon sheens were observed in the vicinity of the wash down bay and load out area, which were tracking towards a nearby stormwater drain and potentially discharging. Staff were notified at the time, and immediately undertook to clean up the area. Advice was given to ensure that all spills and contaminants were contained within bunded areas and did not discharge to the stormwater system. All other drains onsite were clear and flowing freely with no sign of visual hydrocarbons. At the time of inspection, the site was compliant with consent conditions.

24 May 2021

An inspection was conducted in fine weather with light wind conditions. An improvement in the site housekeeping was noted, with all liquids onsite contained in IBC's and drums in bunded areas. All spills and leaks were contained and directed towards the trade waste system. No hydrocarbon sheens were noted onsite. Some oil was noted on the ground in the trade waste wash area, and this was brought to the attention of staff on the site at the time. The stormwater drains were clear of contaminants and there were no odour or dust issues. All resource consent conditions were being complied with.

6.2.2 Results of discharge monitoring

The main stormwater discharge point at Intergroup was sampled twice during the period under review, with the results presented in Table 17.

Table 17 Intergroup stormwater sampling results, site STW001059

Parameter	pH	Temperature	Conductivity	Suspended Solids	Zinc (dissolved)	Oil & Grease	Hydrocarbons			
							C7 - C9	C10 - C14	C15 - C36	Total HC
Units	pH	°C	mS/cm	g/m ³	g/m ³	g/m ³	g/m ³	g/m ³	g/m ³	g/m ³
24 Aug 2020	6.9	-	2.1	61	0.15	-	< 0.10	< 0.2	1.1	1.2
14 Apr 2021	6.8	15.8	9	112	-	5	< 0.10	< 0.2	2.2	2.4
<i>Consent limits</i>	6-9	-	-	100	-	15	-	-	-	-

The suspended solids concentration measured in the discharge in April 2021 exceeded the consented limit, and further action was undertaken (section 6.3).

6.3 Investigations, interventions, and incidents

Table 18 below sets out details of any incidents recorded, additional investigations, or interventions required by the Council in relation to Intergroup's activities during the 2020-2021 period. This table presents details of all events that required further investigation or intervention regardless of whether these were found to be compliant or not.

Table 18 Incidents, investigations, and interventions summary

Date	Details	Compliant (Y/N)	Enforcement Action Taken?	Outcome
14 April 2021	Breach of suspended solids consent limit	N	14 day letter (explanation requested) and abatement notice issued	Further explanation was requested and received. Reinspection found that onsite practices were insufficient and abatement notice EAC-24188 was issued in August 2021

6.4 Evaluation of performance

A tabular summary of Intergroup's compliance record for the year under review is set out in Table 19.

Table 19 Summary of performance for Intergroup Ltd consent 4776-2

Purpose: To discharge treated stormwater from a liquid wastes processing and chemical consolidation facility onto and into land and into the Waitaha Stream via the NPDC reticulated stormwater system (in force from 31 March 2016)		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Adopt best practicable option	Inspection	Yes
2. Bund for unwashed vessels storage	Inspection	Yes
3. Limit stormwater catchment area	Inspection	Yes
4. Limits on chemical composition of discharge	Sampling and visual assessment at inspection	No – suspended solids exceeded on one occasion

Purpose: To discharge treated stormwater from a liquid wastes processing and chemical consolidation facility onto and into land and into the Waitaha Stream via the NPDC reticulated stormwater system (in force from 31 March 2016)

Condition requirement	Means of monitoring during period under review	Compliance achieved?
5. Discharge cannot cause specified adverse effects beyond mixing zone	Visual assessment at inspection and receiving water sampling	Yes
6. Maintain contingency plan	Consent holder liaison and inspection	Yes
7. Maintain and adhere to management plan	Consent holder liaison and inspection	Yes
8. Notification of changes in site processes	Consent holder liaison and inspection	N/A
9. Optional review provision re environmental effects	Next optional review in June 2026	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		High

N/A = not applicable or not assessed

During the year, Intergroup Ltd demonstrated a good level of environmental performance and a high level of administrative performance as defined in Section 1.1.5. The Company has since undertaken to update and improve onsite practices.

7 Meredith Metals

7.1 Site description

During the monitoring period under review, Global Metal Solutions Ltd (GMS) operated part of a site held by Meredith Metals Ltd (Meredith Metals); a scrap metal and car recycling yard on Catalina Place, Bell Block. Fluids were drained from the cars on a concrete pad prior to being crushed and sold for scrap. The scrap yard encompassed two legal titles, known informally as Catalina (Site A) and de Havilland (Site B) (Figure 4). Site B has been inactive since April 2021 and has since been sold.

Stormwater from the site discharges at three points, two of which flow into the Waitaha catchment via the NPDC reticulation and the third to the Waiongana catchment (Figure 4). GMS operated and occupied Site A until August 2021, while Site B was managed entirely by Meredith Metals.



Figure 4 Aerial view of Meredith Metals site and sampling locations

Meredith Metals hold two resource consents, **9911-1** allows for the discharge of contaminants onto and into land associated with scrap metal storage and processing, while **9912-1** covers the discharge of stormwater from scrap metal storage and processing into the Waitaha Stream and into an unnamed tributary of the Mangaoraka Stream. Both consents covered Sites A and B for the monitoring period, however in April 2021, a change of consent was processed to remove Site B. Both consent now apply to Site A only.

7.2 Results

7.2.1 Inspections

Four routine inspections were conducted at the site during the monitoring period, on 23 September 2020, 30 November 2020, 10 February 2021, and 17 May 2021.

23 September 2020

The site was inspected in overcast weather with light wind and rain conditions. The site was clean and tidy with mud levels much reduced compare to previous visits. No hydrocarbon spills and sheens were visible. The site was operating as normal, and the stormwater system was in good condition. Samples were collected from two manholes which were discharging at the time, and there were no odour or dust issues. The site was compliant with resource consent conditions.

30 November 2020

A site inspection was carried out in overcast weather with light wind and rain conditions. There had been several days of rain prior to the visit. A small localised hydrocarbon sheen was noted on one part of the site, however this was contained and not discharging beyond the boundary. Staff were advised to clean this up, and to monitor the level of mud being generated by heavy traffic operating onsite to prevent tracking. The stormwater system was operating well and in good condition. Discharges from the storm drains were clear and uncoloured with no adverse effects noted in receiving waters. No dust or odour issues were noted, and all consent conditions were being complied with at the time.

10 February 2021

An inspection to assess compliance with resource consent conditions was conducted in fine weather with light wind conditions. The main site on Catalina Drive was being cleared of scrap and waste material, with Global Metals Solutions Ltd in the process of relocating to a new site. Some equipment and material was still stockpiled on site, and no hydrocarbon sheens or spills were noted in these areas. The site and stormwater system were tidy, and all discharges were running clean and uncoloured with no effected noted in the Waitaha Stream. The De Havilland Drive site had already been cleared by the owner, and was quiet with no sign of recent activity. At the time of inspection, all consent conditions were compliant.

17 May 2021

An inspection was carried out in overcast weather with heavy rain showers. Both sites were tidy and relatively clear of scrap material, with localised ponding in some areas due to ongoing wet weather. No hydrocarbon spills or sheens were noted, and all runoff was being captured and directed to the stormwater system, which was flowing relatively clear and uncoloured. Silt cloth installed by GMS was effectively reducing sediment loading into the drains. There were no odour or dust issues, and all consent conditions were being complied with.

7.2.2 Results of discharge monitoring

Samples of stormwater were collected from two of the three discharge points on 23 September 2020. The results are displayed below in Table 20.

Table 20 Meredith Metals stormwater sampling results, 23 September 2020

Parameter	Unit	STW002088	STW001142	Consent limits
Temperature	°C	14.2	15	-
pH	pH	7.4	7.3	6-9
Conductivity	mS/m	16.5	15.5	-

Parameter	Unit	STW002088	STW001142	Consent limits
Oil and Grease	g/m ³	< 4	-	15
Suspended solids	g/m ³	26	5	100
TBOD	g O ₂ /m ³	1.7	1.2	-
Metals (acid soluble)				
Copper	g/m ³	0.03	0.029	-
Lead	g/m ³	0.048	0.014	-
Manganese	g/m ³	0.21	0.011	-
Zinc	g/m ³	1.56	0.22	-
Metals (dissolved)				
Copper	g/m ³	0.014	0.018	-
Manganese	g/m ³	0.156	< 0.010	-
Zinc	g/m ³	1.39	0.1	-
Hydrocarbons				
C7 - C9	g/m ³	< 0.10	< 0.10	-
C10 - C14	g/m ³	< 0.2	< 0.2	-
C15 - C36	g/m ³	0.6	< 0.4	-
Total HC	g/m ³	< 0.7	< 0.7	-

All results were within consent limits. The quality of the site stormwater has shown marked improvements in recent years, due to a decrease in site activity and improved onsite stormwater management.

7.3 Evaluation of performance

A tabular summary of Meredith Metals' compliance record for the year under review is set out in Table 21 and Table 22.

Table 21 Summary of performance for Meredith Metals consent 9912-1

Purpose: To discharge stormwater from scrap metal storage and processing into the Waitaha Stream and into an unnamed tributary of the Mangaoraka Stream via the NPDC reticulated stormwater system		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Adopt best practice	Inspection	Yes
2. Stormwater catchment not to exceed 1.7 ha	Inspection	Yes
3. Discharge quality standards	Sampling	Yes
4. Receiving quality standards	Sampling	Yes
5. Contingency planning	Plan received	Yes
6. Stormwater management planning	Plan received	Yes

Purpose: To discharge stormwater from scrap metal storage and processing into the Waitaha Stream and into an unnamed tributary of the Mangaoraka Stream via the NPDC reticulated stormwater system		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
7. Notification of changes on site	No changes made	N/A
8. Lapse condition	Consent exercised	N/A
9. Review condition	Next optional review in June 2026	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		High
Overall assessment of administrative performance in respect of this consent		High

N/A = not applicable or not assessed

Table 22 Summary of performance for Meredith Metals consent 9911-1

Purpose: To discharge contaminants onto and into land associated with scrap metal storage and processing		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Adopt best practice	Inspection	Yes
2. Discharge not to affect adjacent properties	Inspection	Yes
3. Groundwater not to be affected	Assessed via periodic soil sampling - not assessed this period	N/A
4. Metal limits in soils	Assessed via periodic soil sampling - not assessed this period	N/A
5. Hydrocarbon limits in soils	Assessed via periodic soil sampling - not assessed this period	N/A
6. Notification of changes on site	No changes made	N/A
7. Pre-surrender contaminant limits in soils	N/A	N/A
8. Surrender of consent not to occur without compliance with condition seven	N/A	N/A
9. Review condition	Next optional review in June 2026	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		High
Overall assessment of administrative performance in respect of this consent		High

N/A = not applicable or not assessed

During the year, Meredith Metals Ltd demonstrated a high level of environmental and administrative performance with their resource consents as defined in Section 1.1.4.

8 New Plymouth District Council

8.1 Site description

The New Plymouth District Council (NPDC) stormwater system carries discharges from the roads and industrial subdivisions in the Corbett Road, Connett Road and De Havilland Drive areas to the Waitaha Stream (Figure 5).



Figure 5 NPDC stormwater catchment, reticulation, and discharge points

Historically, the consented discharge points were located on the eastern side of the stream at the end of Connett Road (consent 0608) and into an unnamed tributary/open drain through farm land on the western side of the stream (consent 0609). However, Connett Road has since been extended to meet at the Waitaha

Stream, and the discharge point for the consent is now immediately below the culvert where Connett Road crosses the stream.

NPDC hold consent **0609-3** to discharge stormwater from industrial land in the Waitaha catchment via multiple outfalls between De Havilland Drive and State Highway 3 into the Waitaha Stream and various unnamed tributaries of the Waitaha Stream.

8.2 Results

8.2.1 Inspections

Four routine inspections were conducted during the monitoring period, on 20 October 2020, 14 December 2020, 11 February 2021, and 17 May 2021.

20 October 2020

An inspection of the final discharge point into the Waitaha Stream was carried out in fine weather with light wind conditions. Both culverts were discharging a low flow that was clear and uncoloured. Silt accumulations noted in earlier inspections were still present, but the receiving waters were clear of any noticeable sheens or foaming. At the time of inspection, all consent conditions were being complied with.

14 December 2020

The culvert outlets were inspected in fine weather with light wind conditions. Both stormwater drains were running clean and uncoloured. No adverse effects were noted in the downstream receiving environment, and all consent conditions were compliant at the time.

11 February 2021

An inspection was carried out in warm fine weather, with light wind conditions. The culverts were discharging a clear, uncoloured flow with no effects noted in the receiving waters. The stream was flowing at a moderate rate, with no sheens or foaming noted and no impacts on visual clarity as a result of the discharges. All resource consent conditions were being complied with at the time.

17 May 2021

An inspection to assess resource consent compliance was conducted in overcast weather with moderate wind conditions. Heavy showers had passed through earlier that day, and both culverts were discharging a moderate flow volume that was a turbid brown colour. No scouring or erosion was noted at the outlets. The receiving environment below the mixing zone was slightly turbid with no adverse effects noted as a result of the discharge. The discharges were compliant with all consent conditions at the time.

8.2.2 Results of discharge monitoring

Samples of the discharge from the NPDC stormwater reticulation are collected from three locations in the catchment:

NPDC Connett Road East (site code STW001111)

Collected directly from the NPDC reticulation on Connett Road East. This site is located upstream of all inflows from consented sites in the Waitaha Catchment and acts as control site for NPDC stormwater.

NPDC Connett Road to Waitaha Stream (western side) (site code STW001112)

Outlet from the NPDC reticulation on the left bank of the Waitaha Stream. This also discharges stormwater from the GFL and Symons sites.

NPDC Connett Road to Waitaha Stream (eastern side) (site code STW001061)

Outlet from the NPDC reticulation on the right bank of the Waitaha Stream. This also discharges stormwater from the C&O Concrete, Energyworks, Intergroup and Zelam sites.

A fourth site is also located at the outlet of a piped tributary of the Waitaha Stream on de Havilland Drive. The outlet of the tributary also acts as a stormwater discharge point for runoff from the road and neighbouring properties, and so is considered to fall within the NPDC stormwater consented area:

Waitaha Stream unnamed trib. downstream de Havilland Drive (site code WTH000037)

Located on the right bank of the Waitaha Stream immediately downstream of de Havilland Drive, the outlet of this piped tributary also receives stormwater from the nearby carriageway.

8.2.2.1 Mid catchment stormwater sampling results

The mid catchment stormwater sites (WTH000037 and STW001111) were visited on 29 March 2021. Access restrictions prevented sampling at the Connett Road East site, while the results of the samples from Waitaha Stream tributary are shown in Table 23.

Table 23 NPDC stormwater sampling results mid catchment, 29 March 2021

Parameter	Unit	STW001111	WTH000037	RFWP Guidelines
Temperature	°C	na	19.3	-
pH	pH	na	7.1	6-9
Conductivity	mS/m	na	13.4	-
DO	mg/L	na	9.46	-
	%	na	102.5	-
CBOD	g O ₂ /m ³	na	1.6	-
TBOD	g O ₂ /m ³	na	2.9	-
Turbidity	FNU	na	69	-
Metals (acid soluble)				
Copper	g/m ³	na	0.0161	-
Metals (dissolved)				
Copper	g/m ³	na	0.0057	-
Manganese	g/m ³	na	0.37	-
Nickel	g/m ³	na	0.0016	-
Zinc	g/m ³	na	0.034	-

*na: no access

Results showed all parameters were within recommended guidelines.

8.2.2.2 Lower catchment stormwater sampling results

The lower catchment stormwater sites (STW001112 and STW001061) were visited on 29 March 2021. The location of the sampling sites is shown in Figure 6. Samples were collected from both, and the results are shown in Table 24.



Figure 6 NPDC stormwater discharge sites to the Waitaha Stream

Table 24 NPDC stormwater sampling results lower catchment, 29 March 2021

Parameter	Unit	STW001112	STW001061	RFWP Guidelines
Temperature	°C	18.6	18.7	-
pH	pH	6.9	6.9	6-9
Conductivity	mS/m	10.6	19	-
Oil and Grease	g/m ³	< 4	< 4	15
Suspended solids	g/m ³	27	21	100
Turbidity	FNU	17.3	-	-
Metals (acid soluble)				
Copper	g/m ³	0.021	0.0129	-
Hydrocarbons				
C7 - C9	g/m ³	< 0.10	< 0.10	-
C10 - C14	g/m ³	< 0.2	< 0.2	-
C15 - C36	g/m ³	< 0.4	< 0.4	-
Total HC	g/m ³	< 0.7	< 0.7	-

Results showed that concentrations of oil & grease and suspended solids were within guidelines or below limits of detection. This indicates that in general, the stormwater discharged from the NPDC reticulation to the Waitaha Stream was of good quality.

8.3 Evaluation of performance

A tabular summary of NPDC's compliance record for the year under review is set out in Table 25.

Table 25 Summary of performance for NPDC consent 0609-3

<i>Purpose: To discharge stormwater from industrial land in the Waitaha catchment via multiple outfalls between De Havilland Drive and State Highway 3 into the Waitaha Stream and various unnamed tributaries of the Waitaha Stream.</i>		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Adopt best practice	Inspection/ liaison with consent holder	Yes
2. Size and location of catchment	Inspection/ liaison with consent holder	Yes
3. Limits effects in receiving water	Inspection/sampling	Yes
4. Mitigation of erosion	Inspection	Yes
5. Not to cause increase in depth or frequency of flooding	Inspection/ Review of hydrological data	Yes
6. Provision of a management plan by 2020	Management plan provided	N/A
7. Review	Next optional review in June 2023	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		High
Overall assessment of administrative performance in respect of this consent		High

N/A = not applicable or not assessed

During the year, New Plymouth District Council demonstrated a high level of environmental and administrative performance with the resource consent as defined in Section 1.1.4.

9 Pounamu Oilfield Services Ltd

9.1 Site description

Pounamu Oilfield Services (Pounamu) (previously Weatherford New Zealand Ltd) has a 1.7 ha yard on Dakota Place for storage and maintenance of drill pipe, down-hole tools and other miscellaneous equipment used in the oil industry (Figure 7). New casing and drill pipe is cleaned to remove protective grease, which until the 1980's contained some copper and zinc, and a high proportion of lead. Kerosene is brushed onto the threads and the oil/kerosene mix is washed off with a water blaster. Kerosene is only used when oil and grease cannot be removed by water alone. A phosphate bath is used for the etching of pipes in the lower yard. The chemicals in this bath also contain nickel and manganese. Minor amounts of waste from this process may be discharged to the stream via the lower wash pad interceptor.

There are two wash pads at the site. The wash pad in the upper catchment drains to a small three stage interceptor which discharges onto land just over 50 m from the tributary. There is no bunding around either of the wash pads, so a significant volume of stormwater from the upper and lower yards flows through the interceptors during rainfall events.

The property slopes towards the Waitaha Stream where it runs along the western boundary and towards the unnamed tributary that runs along the northern boundary. The site is mostly metalled, with only the wash pad areas sealed. Recent works have been undertaken on site to direct overland flow to sediment settling ponds for treatment.



Figure 7 Aerial view of Pounamu site and sampling locations

Pounamu hold water discharge permit **4775-2** to discharge treated and untreated stormwater from an oilfield engineering services premises onto land and into an unnamed tributary of the Waitaha Stream and into the Waitaha Stream

9.2 Results

9.2.1 Inspections

Four routine inspections were conducted during the monitoring period, on 23 September 2020, 14 December 2020, 11 February 2021, and 21 May 2021.

23 September 2020

An inspection of the site to assess compliance with resource consent conditions was carried out in overcast weather with light wind and rain conditions. The site was tidy with normal operations ongoing, and interceptor showed signs of recent maintenance with both the 2nd and 3rd chambers empty as per operating procedure. The stormwater system was in good condition, with all runoff captured and directed to the sediment pond for treatment. The pond was operating at a low level considering the ongoing wet weather, and showed no sign of recent discharges. A grab sample was collected from the pond adjacent to the outlet, to ensure compliance should a discharge occur. The downstream receiving environment was clear with no sign of hydrocarbon sheens or spills, and no sediment accumulations. It was noted that a significant crack had appeared at ground level adjacent to the sediment pond, and staff onsite were advised to investigate to ensure that no stormwater was bypassing the system and discharging to land or causing erosion to the pond bunding. All consent conditions were compliant at the time of inspection.

14 December 2020

The site was inspected in fine weather with a cool, light breeze. The site was tidy with good housekeeping apparent, and the crack beside the sediment pond that had been noted in the previous visit had been repaired and showed no signs of further movement. The wash water interceptor was approximately half full, but showed no sign of recent discharge and was being managed appropriately. The sediment pond was operating at a low level with no discharge occurring. No offensive odours or dust were being generated at the time, and the site was compliant with consent conditions.

11 February 2021

An inspection was conducted in warm, fine weather with light wind conditions. The site was tidy and well maintained, and the pipe wash bay was in use at the time with all runoff captured and directed to the interceptor. Bays 1 and 2 of the interceptor were full, but there was sufficient storage capacity and no sign of discharge from the system. There were no signs of hydrocarbon spills or sheens on the site, and all stormwater drains were in good operational condition. The sediment pond was operating at a low level, well below the discharge point, and the downstream receiving waters showed no impacts or signs of recent discharges. Despite the breezy conditions, there were no odour or dust issues and all consent conditions were being complied with at the time of the inspection.

21 May 2021

The site was visited to assess compliance with resource consent conditions in overcast weather with light winds present. The site was tidy and well maintained, with no hydrocarbon spills or sheens noted. The interceptor was well maintained, and staff advised that daily checks were carried out to ensure no discharges were occurring. It was scheduled for cleaning by Intergroup later that day. The stormwater system was operating well, with drains fully contained and the sediment pond operating at a moderately low level. There were no signs of discharges from the pond and the receiving environment showed no adverse effects. At the time of inspection, all consent conditions were compliant.

Recent inspections have shown a consistently high standard of compliance and performance for the site.

9.2.2 Results of discharge monitoring

The sediment settling pond consistently operates at a low level and discharges infrequently. In the absence of flow, representative samples are collected from within the pond adjacent to the outlet to ascertain compliance in the event of a discharge. The results of sampling for the monitoring period under review are presented in Table 26.

Table 26 Pounamu sediment pond sampling results, site STW002025

Parameter	Unit	23 Sep 2020	29 Mar 2021	Consent limits
Temperature	°C	15	20.3	-
pH	pH	7.1	7.2	6-9
Conductivity	mS/m	8.8	5.7	-
Oil and Grease	g/m ³	-	< 4	15
Suspended solids	g/m ³	88	81	100
Metals (acid soluble)				
Copper	g/m ³	0.019	0.024	-
Lead	g/m ³	0.014	0.028	0.1
Manganese	g/m ³	0.046	0.064	-
Nickel	g/m ³	0.013	0.0144	-
Zinc	g/m ³	0.09	0.133	-
Metals (dissolved)				
Copper	g/m ³	< 0.010	-	0.05
Manganese	g/m ³	< 0.010	-	-
Zinc	g/m ³	0.05	-	0.65
Hydrocarbons				
C7 - C9	g/m ³	< 0.10	< 0.10	-
C10 - C14	g/m ³	< 0.2	< 0.2	-
C15 - C36	g/m ³	< 0.4	< 0.4	-
Total HC	g/m ³	< 0.7	< 0.7	-
Nutrients				
NH ₄	g/m ³	< 0.010	-	-
DRP	g/m ³	-	0.007	-

The September 2020 sample was collected from the pond itself due to lack of discharge. All results for both sampling surveys were within consented limits. The discharge from the ponds has performed consistently well in recent years, and this is attributed to a combination of low contaminant loading and good site management practices.

9.3 Evaluation of performance

A tabular summary of Pounamu’s compliance record for the year under review is set out in Table 27.

Table 27 Summary of performance for Pounamu Oilfield Services Ltd consent 4775-2

Purpose: To discharge of treated and untreated stormwater onto land and into a stream		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Adopt best practice	Site inspection	Yes
2. Catchment area limit	Site inspection	Yes
3. Stormwater to be treated	Inspections and chemical sampling	Yes
4. Limits on contaminants in discharge	Inspections and chemical sampling	Yes
5. Limits on effects	Inspections and chemical sampling	Yes
6. Preparation and maintenance of contingency plan	Review of documentation submitted to Council	Yes
7. Preparation and maintenance of stormwater management plan	Review of documentation submitted to Council	Yes
8. Notification of changes	None received	N/A
9. Review condition	Next optional review in June 2026	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		High
Overall assessment of administrative performance in respect of this consent		High

N/A = not applicable or not assessed

During the year, Pounamu Oilfield Services Ltd demonstrated a high level of environmental and administrative performance with the resource consent as defined in Section 1.1.4.

10 SRG Global Asset Services (Taranaki) Ltd, formerly TBS Coatings Ltd

10.1 Site description

Abrasive blasting is used at SRG Global Asset Services (Taranaki) Ltd's (SRG), formerly TBS Coatings, site to clean and prepare surfaces for painting. The process involves blasting an abrasive substance onto the surface of the object in question.

Material from the blasting process becomes airborne due to the release of high pressure air used to accelerate the abrasive media to the required cleaning velocities. Spray painting is also carried out on the site. All blasting and painting is carried out in enclosed areas.

There are emissions into the air from the operations associated with blasting and coating (Figure 8). The blasting medium is usually dust-free, however after being propelled against surfaces to be treated, clouds of detritus are typically created. Paint fragments, rust particles, and shattered blast media may be carried several hundred metres if air pollution suppression equipment is not used. Paints are predominantly industrial zinc, primers, epoxies intermediate and acrylic epoxy finishes.



Figure 8 Aerial view of SRG yard and associated monitoring sites

The enclosed blasting facilities at this site are designed for control of emissions and recovery of blasting material. The larger blasting booth is a side draught booth connected to two dust collectors (both 550 m³/minute capacity wet scrubbers) in parallel.

The smaller grit blast booth has been recently upgraded and the previous wet scrubber fan and conveyor recycling system were replaced with a vacuum unit coupled to a reverse pulse dry bag dust control system located fully indoors with zero emissions.

SRG recently dug out areas of the metal yard and laid bidum cloth underlay prior to reinstating heavy rolled metal mixed with used road millings as a trial to reduce metallated yard dust. Early indications are that this

process has provided a less dusty more robust heavy traffic surface and is preventing fines from surfacing and becoming wind-blown dust. The company has committed to completing a further trial area of metal upgrading. It is estimated that total dust emission from the site has been reduced by a third as a result of the recent upgrades.

SRG also undertakes mobile blasting operations throughout Taranaki. Portable equipment is used for the blasting and coating of fixed structures such as bridges, water tanks, pipelines, buildings and steel structures. Temporary screens are constructed around the items being worked on to contain dust emissions and depositions, and to restrict the spread of blasting debris.

Where mobile blasting is to be done in residential or urban areas, NPDC is given prior notification. In cases where the material to be removed or applied is likely to contain toxic substances such as lead, arsenic, chromium or zinc, the Taranaki Health Board is informed.

SRG holds air discharge permit **4056-2** to cover emissions into the air from abrasive blasting operations and associated processes at a permanent site at Corbett Road, Bell Block, and from mobile operations at various locations throughout the Taranaki region.

10.2 Results

10.2.1 Inspections

Two routine inspections were conducted during the monitoring period, on 20 October 2020 and 14 December 2020.

20 October 2020

An inspection was conducted in overcast weather with light wind conditions. The site was noticeably tidier and showed evidence of improved housekeeping. Various machinery and parts were being removed and waste material and yard sweepings were stockpiled in certain areas around the site for disposal. The trees in the centre of the yard had been removed, along with the garnet debris that had accumulated in that area. Plans were being held to construct a new asbestos area at the rear of the site. Blasting was ongoing at the time, with minimal dust being discharged from the wet scrubbers. The scrubbers showed improvements as a result of the new maintenance and repairs programme, which was carried out on a monthly schedule. The paint shed was not in use at the time, and no odours were noted on the site. There were no offensive or objectionable air discharges beyond the boundary of the site, and all consent conditions were compliant.

14 December 2020

The site was inspected in fine weather with light wind conditions. The site was tidy and clean, with more works to remove old garnet debris from the north east corner planned. No blasting was occurring at the time, and the scrubbers were not in operation. Average dust levels on the site were measured at 0.034 mg/m³, well below consent concentration limits. Paint spraying was underway, with some odours encountered onsite. No dust or odour discharges were occurring beyond the boundary, and the site was compliant with consent conditions at the time.

10.2.1.1 Mobile blasting inspections

No notifications of off-site blasting were received during the monitoring period.

10.2.2 Results of receiving environment monitoring

Many industries emit dust from various sources during operational periods. In order to assess the effects of the emitted dust, industries have been monitored using deposition gauges.

Deposition gauges are basic buckets elevated on a stand to around 1.6 metres height. The buckets have a solution in them to ensure that any dust that settles out of the air is not re-suspended by wind.

Gauges are placed around the site and within the surrounding community. The gauges were deployed in the vicinity of the SRG site on one occasion during the year under review.

The rate of dust fall is calculated by dividing the weight of insoluble material (grams) collected by the cross-sectional area of the gauge (m²) and the number of days over which the sample was taken. The units of measurement are grams/m²/day (g/m²/day).

Guideline values used by the Council for dust deposition are 4 g/m²/30 days or 0.13 g/m²/day deposited matter. Consideration is given to the location of the industry and the sensitivity of the surrounding community, when assessing results against these values. However SRG have a condition on their consent that limits the dust deposition rate beyond the boundary of their property to 4 g/m²/30 days.

Material from the gauges was sifted to remove any incidental organic debris and insects, and then analysed for solid particulates.

The number and position of deposition gauges is governed by the location of potential dust emission sources, the direction of predominant winds, and the position of sensitive areas in the surrounding environment. The sites monitored for SRG's facility are shown in Figure 8 and site descriptions are given in Table 28.

Table 28 SRG particulate deposition monitoring sites

Site code	NZTM Coordinates	Location
AIR006501	1701416E – 5678078N	NE boundary, outside white gates - near scrubber sludge disposal area
AIR006502	1701275E – 5678067N	Inside boundary. Yard in NW corner, N of secondary blasting shed
AIR006505	1701488E – 5677988N	E boundary, at gap in shelter belt opposite blasting shed, near spent media disposal area
AIR006503	1701411E – 5677885N	S boundary, outside fabric screen at railway line
AIR006504	1701465E – 5677729N	Paddock beside house of nearest neighbour ~ 150 m S on Ninia Road

Site AIR006502 is positioned inside the property boundary screenings, and so the consent limit and guideline cannot be applied. However, measurements made at this site are useful for determining the potential for offsite effects and for assessing the source of particulates. The consent limit and guideline is applicable at sites AIR006501, AIR006503, AIR006504 and AIR006505.

Results of the monitoring for the period under review are given in Table 29.

Table 29 Deposition gauging results for the SRG site for 2020-2021

Site	Number of days deployed	Deposited particulate g/m ² /day	Consent limit g/m ² /day
AIR006501	19	0.06	0.13
AIR006502	19	0.04	-
AIR006503	19	0.06	0.13
AIR006504	19	0.03	0.13
AIR006505	19	0.03	0.13

The monitoring found that the deposited particulate collected at the monitoring locations at or beyond the site boundary complied with the limit set in the resource consent.

10.3 Evaluation of performance

A tabular summary of SRG's compliance record for the year under review is set out in Table 30.

Table 30 Summary of performance for SRG Global consent 4056-2

Purpose: To discharge emissions into the air from abrasive blasting operations and associated process at a permanent site at Corbett Road, Bell Block, and from mobile operations at various locations throughout the Taranaki Region		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Adoption of best practicable option to minimise effects on the environment	Inspection and discussion with consent holder	Yes
2. Blasting in enclosed facility	Inspection and discussion with consent holder	Yes
3. Sand to have low active silica content and percentage of fine particles	Sand not used during the year under review	N/A
4. Consideration of wind conditions to minimise off-site emissions	Inspection. No complaints received	Yes
5. Clearance of blasting material	Inspection	Yes
6. Offensive and objectionable odours and dust beyond boundary not permitted	Inspection and incident investigation	Yes
7. Avoidance of dry sand blasting for yard and mobile blasting	Inspection and liaison with consent holder	Yes
8. Compliance of operators with conditions	Inspection	Yes
9. Treatment of emissions prior to discharge at permanent facilities	Suspended particulate monitoring at inspection	Yes.
10. Dust deposition rate limit beyond boundary	Deposition gauge monitoring	Yes

Purpose: To discharge emissions into the air from abrasive blasting operations and associated process at a permanent site at Corbett Road, Bell Block, and from mobile operations at various locations throughout the Taranaki Region		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
11. Maximum concentrations of lead, chromium and zinc	Not measured. Discussions with consent holder about materials blasted	N/A
12. Infrequent allowance of yard operations	No notification of yard blasting received. No yard blasting found at inspections	Yes
13. Notification prior to yard operations	Inspection and observation when inspecting officer is in the vicinity of the site on other business. No yard blasting noted during year under review	N/A
14. Screening to contain emissions	No yard blasting noted during year under review	N/A
15. Screening of items to be blasted	Inspection	Yes
16. Notification to New Plymouth District Council prior to blasting in urban areas	Notification received	Yes
17. Notification to Council prior to blasting in close proximity to water course	Notification received	Yes
18. Written Council approval and notification of affected parties prior to blasting close to boundaries	No mobile blasting close to boundaries during the year under review	N/A
19. Ambient suspended particulate limit for public amenity areas	Not assessed	N/A
20. Effects on surface water bodies not permitted	Inspection	Yes
21. Optional review provision re environmental effects	No further option for review prior to expiry	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		High
Overall assessment of administrative performance in respect of this consent		High

N/A = not applicable or not assessed

During the year, SRG Global Asset Services (Taranaki) Ltd demonstrated a high level of environmental and administrative performance with the resource consent as defined in Section 1.1.4.

11 Symons Property Development Ltd

11.1 Site description

Symons Property Developments Ltd (Symons) holds a consent to discharge stormwater from their truck depot and pipe washing facility on Connett Road East, Bell Block. The site was recently developed, and formal drainage has been established. The companies operating from the site are: Symons Transport Ltd, operating road tankers that are used to transport bulk liquids between processing plants; and Symons Energy Ltd, providing support services to the oil and gas industry including transportation and cleaning of drilling pipes, and storage and distribution of products such as those used in drilling mud. Collectively, these companies are known as the Symons Group.

The Symons Property site has three main sections; the upper yard is occupied by Symons Transport and is used for truck washing and truck storage. The middle yard has amenities block, and administration building and pipe storage areas. The lower yard is used for pipe storage, pipe preparation and pipe washing (Figure 9).



Figure 9 Aerial view of Symons site and various work areas

Symons hold consent **7805-1** to discharge stormwater from a truck depot and pipe cleaning facility into the Waitaha Stream.

11.2 Results

11.2.1 Inspections

Four routine inspections were conducted during the monitoring period, on 24 August 2020, 30 November 2020, 10 February 2021, and 21 May 2021.

24 August 2020

An inspection of the site to assess compliance with resource consent conditions was carried out in overcast weather with moderate rain and wind conditions. The stormwater system was full and discharging due to the wet weather, and a large area of sediment-laden water had ponded on the lower site adjacent to the discharge point. The discharge was a turbid brown colour, and subsequent sampling and analysis found that suspended solids concentrations in the discharge had exceeded consent limits. The bunding in the truck load out area had become detached in one corner, which had compromised the containment in that area. Diesel from the nearby fuel tank had also been spilt on the yard, and this was tracking towards a stormwater drain. Staff were notified and immediately undertook to contain and clean the spill. There were no odour or dust issues noted.

30 November 2020

The site was inspected in overcast weather with light wind and rain conditions. The site was generally clean and tidy, despite heavy rainfall earlier in the day. Significant upgrades were being carried out to the stormwater system following the non-compliant sampling results from an earlier visit. Silt socks had been installed on the drains around the site, and were in need of maintenance. Some tracking of sediment was noted near the storm drains adjacent to the truck wash. There were no odour or dust issues, and the site was compliant with all resource consent conditions at the time.

10 February 2021

An inspection was conducted in cold weather with moderate wind and light rain conditions. A new sediment treatment system had been installed and was awaiting final modifications including debris grates on the inlet. The system now bypasses the existing interceptor which remains in situ. The site was generally clean and tidy, with no hydrocarbon spills or sheens noted. Heavy vehicle movement onsite had resulted in some sediment tracking towards the drains, which was pointed out to staff at the time. The bunding in the truck wash area was still requiring repairs, however truck wash procedures had been adjusted to ensure all wash water was being captured and directed to the trade waste system. There were no odour or dust issues noted, and all consent conditions were being complied with.

21 May 2021

The site was visited in fine, dry weather with light wind conditions. All three yards were clean and tidy, with stormwater drains clear and free-flowing. A small amount of hydrocarbon sheen was noted outside the truck wash area, however this was contained. A small leak of cooking oil was found from some IBC's on the site, however these had been stored appropriately and all oil had been captured and contained within the bunded area. Staff were advised to clean up the spill in case containment failed and the oil was discharged to the stormwater system. The 'Downstream Defender' sediment treatment system was still awaiting some final minor modifications, but was operating normally and not discharging at the time. The site was compliant with all consent conditions.

11.2.2 Results of discharge monitoring

The stormwater from the central section of the site combines with the stormwater from the eastern section of the site, after the eastern stormwater has passed through the detention tanks. This combined flow is sampled at site STW002083 (Figure 10).



Figure 10 Symons' stormwater discharge sampling point and downstream site

Samples were collected from the discharge to the Waitaha Stream on two occasions during the monitoring. The results are shown below in Table 31.

Table 31 Symons stormwater sampling results, site STW002083

Parameter	pH	Temperature	Conductivity	Suspended Solids	Oil & Grease	Hydrocarbons			
						C7 - C9	C10 - C14	C15 - C36	Total HC
Units	pH	°C	mS/cm	g/m ³	g/m ³	g/m ³	g/m ³	g/m ³	g/m ³
24 Aug 2020	8.5	-	14.7	1130	-	< 0.10	< 0.2	< 0.4	< 0.7
29 Mar 2021	7.8	22.2	11.4	72	< 4	< 0.10	< 0.2	< 0.4	< 0.7
<i>Consent limits</i>	6-9	-	-	100	15	-	-	-	-

The suspended sediment concentration of 1130 g/m³ in the sample collected in August 2020 was very elevated compared to consented limits and historical results (previous maximum value was 290 g/m³). Symons undertook investigation of the system following this (as discussed in section 11.3).

11.3 Investigations, interventions, and incidents

Table 32 below sets out details of any incidents recorded, additional investigations, or interventions required by the Council in relation to Symon's activities during the 2020-2021 period. This table presents details of all events that required further investigation or intervention regardless of whether these were found to be compliant or not.

Table 32 Incidents, investigations, and interventions summary

Date	Details	Compliant (Y/N)	Enforcement Action Taken?	Outcome
24 August 2020	Breach of suspended solids consent limit	N	14 day letter (explanation requested)	Explanation was requested and received. Further investigation determined a defence under the RMA

The sample that breached consent limits had been collected a short time after Symons had engaged a suitably qualified third party to install a new sediment treatment system on the site. Upon receipt of the sampling results, Symons immediately undertook an investigation that showed the system had been incorrectly sized and installed by the contractor, and carried out remedial works. This was proven to be a defence under the RMA and no further enforcement action was taken.

11.4 Evaluation of performance

A tabular summary of Symons' compliance record for the year under review is set out in Table 33.

Table 33 Summary of performance for Symons consent 7805-1

Purpose: To discharge of stormwater into the Waitaha Stream		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Adopt best practicable option	Inspection and programme supervision	Yes
2. Catchment not to exceed 3.14 ha	Inspection	Yes
3. Stormwater from Lot 24 DP376382 to be treated	Inspection	Yes
4. Hazardous substance to be stored correctly	Inspection	Yes
5. Discharge parameters not to exceed certain limits	Sampling	Yes – one exceedance of suspended solids limit not related to Symons activities
6. Discharge not to give rise to certain effects in receiving waters	Observations at inspection and during sampling	Yes
7. Prepare and maintain a contingency plan	Review of Council records	Yes
8. Prepare and maintain a stormwater monitoring plan	Review of Council records	Yes
9. Notify Council of changes at the site	Observations at inspection and review of Council records	Yes

Purpose: To discharge of stormwater into the Waitaha Stream		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
10. Review and update plans to suit any changes at the site	Observations at inspection and review of Council records. No changes made	Yes
11. Provide Council data on stormwater tank investigations	Investigation is optional and not yet undertaken	N/A
12. Lapse conditions	N/A	N/A
13. Review condition	No further option for review prior to expiry	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		High
Overall assessment of administrative performance in respect of this consent		High

N/A = not applicable or not assessed

During the year, Symons Property Development Ltd demonstrated a high level of environmental and administrative performance with the resource consent as defined in Section 1.1.4.

12 Taranaki Sawmills Ltd

12.1 Site description

Taranaki Sawmills Ltd (Taranaki Sawmills) operate a sawmilling and timber processing site situated on the banks of the Waitaha Stream (Photo 5).



Photo 5 Taranaki Sawmills site in the Waitaha Catchment

The majority of the site is gravelled or undeveloped. Stormwater generally soaks to ground; however, overland flow occurs during heavy rain. In heavier flows, stormwater is collected at several points around the operational areas and, until 2017, was discharged to an unnamed tributary of the Waitaha Stream and to the Waitaha Stream itself.

To better manage stormwater at the site, extensive works were undertaken by Taranaki Sawmills in the 2017-2018 period (Figure 11 and Figure 12). This included piping the unnamed tributaries that ran through the site and the construction of a stormwater treatment system. The system includes a pre-treatment pond with a level spreading bar outlet and a larger secondary pond with baffles. The secondary pond discharges to a riser via cantilevered skimmers which in turn discharges to the Waitaha Stream via an outlet structure. A large bund has been constructed between the stormwater treatment ponds and the Waitaha Stream for storage during heavy rainfall events (Figure 13).

Car parks and vehicle working areas are mostly unsealed, so that any fuel leaks or spillages will soak into the ground rather than run into the stormwater system. To reduce yard dust problems, the site is routinely sprayed with water during dry weather.

Taranaki Sawmills holds water discharge permit **2333-4** to cover the discharge of stormwater from a sawmill site into the Waitaha Stream.



Figure 11 Aerial view of Taranaki Sawmills site with recently developed area in yellow



Figure 12 Aerial view of site development at Taranaki Sawmills, c. 2018



Figure 13 Aerial view of new sediment treatment pond at Taranaki Sawmills

Sawmilling activities at the site generate wood waste. The sawdust, wood shaving, and wood chip components of this waste are reused on site for generating energy for the timber drying kilns. No timber tanalising occurs on site, so no tanalised timber wastes are incinerated. Incineration occurs in either an open fire-pit, or in boilers.

The open fire-pit is approximately 10 m wide x 10 m long x 2 m deep. The material incinerated in the open pit is dried untreated timber off-cuts, and occasionally other non-toxic materials such as paper, cardboard, and timber strapping.

There are boilers operated on the site, which run 24 hours a day, seven days a week, with emissions discharged via stacks. Emissions from the original 2 megawatt (MW) Entec Boiler discharge through a 12 m tall stack, which achieves dust/smoke emissions containing less than 500 mg/m³ of particulate. The second and third boilers are 4 MW Vekos Boilers, and the single stack for these boilers is 24 m high.

There are a number of potential contaminants which could be discharged into the air from the combustion of wood products. Modelling of the stack emissions undertaken by Taranaki Sawmill's has shown that contaminant concentrations at ground level are well below guideline levels.

The potential contaminant and effects area;

- Visibility and visual/aesthetic impacts
- Nitrogen oxides
- Dust
- Odour
- Sulphur dioxide
- Carbon monoxide (CO)
- Particulates

Taranaki Sawmills holds air discharge permit **4096-2** to cover discharge of emissions into the air from sawmilling and untreated timber processing and associated activities including the combustion of wood and/or coal within boilers and wastes in an open fire-pit.

12.2 Inspections

Four routine inspections were conducted during the monitoring period, on 10 November 2020, 22 December 2020, 30 March 2021, and 20 July 2021.

10 November 2020

An inspection of the site to assess compliance with resource consent conditions was carried out in fine weather with calm wind conditions. The site was found to be tidy with no issues noted. All kiln water was captured and directed to trade waste. Entranceways to buildings and sheds were tidy with no sign of dust or vehicle tracking. The stormwater drains onsite were damp and contained small amounts of accumulated sediment, but showed no sign of recent flow. The log yard was inspected and it was found that two new small-scale sediment retention ponds (SRP) had been installed to provide additional treatment prior to discharge to the main SRP. The main SRP was operating a moderately low level and was not discharging at the time. The receiving waters downstream were flowing clear and uncoloured. Works had been completed to the stormwater collection point adjacent to the access track to the log yard at the rear of the site. Previous inspection visits had found that this point had been discharging directly to the unnamed tributary of the Waitaha Stream. The drain and access track had been re-contoured and the camber increased to capture and direct runoff to the existing stormwater pond adjacent to the track, prior to discharge to the stream. The fire pit was in use at the time with no unauthorised material noted. No issues with dust or odour were noted during the visit.

22 December 2020

The site was inspected in fine weather with light northerly wind conditions. It was the last day of normal production on the site before the annual shut down period for maintenance. The kiln condensate collection pump was not operating at the time, and had been turned off, which had resulted in condensate overflowing from the IBC and entering a nearby stormwater drain. Staff undertook to turn the pump on as soon as this discovery was made to prevent further runoff. Dust and silt control plans were in place in anticipation of dry weather to prevent excessive discharges of dust. Improvements were planned for the sawdust/chip collection area in the next few months. At the time of inspection, all consent conditions were compliant.

30 March 2021

An inspection was conducted in wet weather with light north easterly winds. The site was generally tidy and the stormwater system was operating as normal, with all runoff onsite captured and directed to the SRP for treatment prior to discharge. The kiln condensate system was inspected, and it was found that the IBC's capturing the condensate had overflowed to the roadway. Both IBC's were in poor condition with cracks and splits which had resulted in condensate leaking from the containers, and they had not been correctly placed on the frame, which meant any leaks or discharges were not captured in the bunding around the area. As a result, the site was deemed to be non-compliant with resource consent conditions. The fire pit showed signs of recent use, and contained burnt aerosol cans. The presence of aerosol cans in the pit was not compliant with consent conditions.

20 July 2021

The site was visited in fine, dry weather with light wind conditions following heavy rain over the previous few days. The stormwater system was operating well and all runoff was captured and directed to the main SRP. Significant works had been carried out to divert runoff from the log yard to a newly-built soakage pit, bypassing the sediment pond. This was to avoid overloading the pond and allow for sufficient retention and treatment time. The kiln condensate area was tidy and well maintained with no sign of spills or leaks. The discharge from the SRP to the Waitaha Stream was clear and no adverse effects were noted downstream. The fire pit was in use at the time, and contained a small amount of wood. Minimal smoke was being emitted, and there were no offensive or objectionable discharges to air beyond the boundary. All consent conditions were compliant at the time of inspection.

12.2.1 Air inspections

Air inspections were carried out in conjunction with general site inspections. If warranted a Dust-Trak dust monitor was used to measure dust, both up and downwind of the site in conjunction with each site visit. Ongoing site improvements included sealing areas of the site to prevent dust generation.

There was one non-compliance recorded in relation to air discharges from the Taranaki Sawmills site for the year under review (section 12.5).

12.3 Water

12.3.1 Results of discharge monitoring

Prior to October 2018, the stormwater discharged from Taranaki Sawmills was sampled from an unnamed tributary of the Waitaha Stream (WTH000059). The headwaters sampling site (WTH000051) was situated in the middle of the sawmill site and originated from a stormwater drain adjacent to the dry store. This stormwater system was used to drain the sawmill site from between the administration building and the sorting table.

Since October 2018, all stormwater onsite has been directed to various small sediment retention ponds, before flowing to the newly-installed sediment treatment system and discharging directly to the Waitaha Stream. The discharge from the new sediment treatment pond replaces the piped tributary through the site that was previously sampled. A new sampling site, STW002103, has been created to monitor the Taranaki Sawmills treated stormwater discharge (Figure 14). This has replaced the previous site, WTH000059.

The special conditions of resource consent 2333 require that the oil and grease and suspended solids concentrations in the discharge must not exceed 15 g/m³ and 100 g/m³ respectively, and that the pH shall lie in the range 6.0-9.0. The consent also specifies that BOD in the discharge shall not exceed 10 g/m³.

Samples were collected from the discharge to the Waitaha Stream on two occasions during the monitoring. The results are shown in Table 34.

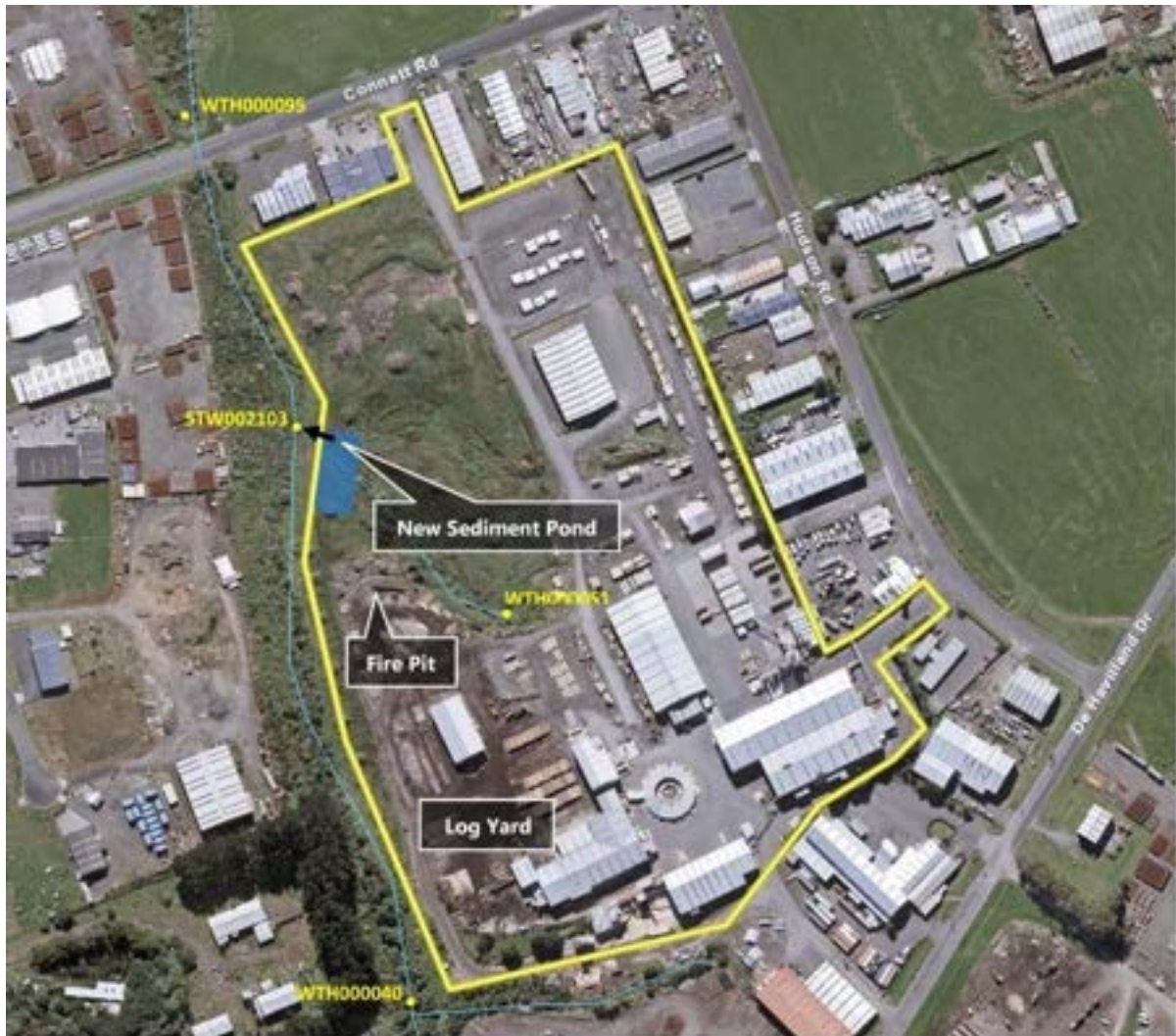


Figure 14 Taranaki Sawmills sampling sites including receiving waters in the Waitaha Stream

Table 34 Taranaki Sawmills stormwater discharge sampling results, site STW002103

Parameter	Unit	23 Sep 2020	29 Mar 2021	Consent limits
Temperature	°C	15.6	19.3	-
pH	pH	7.6	7.1	6-9
Conductivity	mS/m	23.5	7.3	-
Suspended solids	g/m ³	12	270	100

Parameter	Unit	23 Sep 2020	29 Mar 2021	Consent limits
Turbidity	FNU	35	270	
CBOD	g O ₂ /m ³	1.2	12.9	
TBOD	g O ₂ /m ³	1.9	16	-
Boron	g/m ³	0.29	0.029	
Copper (acid soluble)	g/m ³	-	0.042	-
Copper (dissolved)	g/m ³	-	0.0096	-
Hydrocarbons				
C7 - C9	g/m ³	< 0.10	-	-
C10 - C14	g/m ³	< 0.2	-	-
C15 - C36	g/m ³	0.6	-	-
Total HC	g/m ³	< 0.7	-	15*

*HC used in place of oil & grease

In general, the results were within consented limits and historical ranges for the year under review. The suspended solids and BOD results from the sample collected on 29 March 2021 were elevated compared to the consented limits and expected range. Further enforcement action was undertaken as a results (Section 12.5)

12.4 Air

12.4.1 Results of receiving environment monitoring

Particulates can derive from many sources, including motor vehicles (especially diesels), solid and oil-burning processes for industry and power generation, incineration and waste burning, photochemical processes, and natural sources such as pollen, abrasion and sea spray.

PM₁₀ particles are linked to adverse health effects that arise primarily from the ability of particles of this size to penetrate the defences of the human body and enter deep into the lungs. Health effects from inhaling PM₁₀ include increased mortality and the aggravation of existing respiratory and cardiovascular conditions such as asthma and chronic pulmonary diseases.

Taranaki Sawmill's air discharge consent limits the maximum ground level concentration of particulate of effective diameter of less than 10 micron (PM₁₀) so that it does not exceed 50 µg/m³ (one hour average exposure), on more than five occasions per year cumulative across any and all monitoring sites, and does not exceed 120 µg/m³ (one hour average exposure) at any time, at or beyond the boundary of the site.

In addition to this, in September 2004 the Ministry for the Environment introduced National Environmental Standards (NES) relating to certain air pollutants. The NES for PM₁₀ is 50 µg/m³ (24-hour average). This standard must also be met irrespective of any conditions on the consent holder.

During the reporting period, a "DustTrak" PM₁₀ monitor was deployed on one occasion in the vicinity of the Taranaki Sawmills site. The deployment lasted approximately 48 hours, with the instrument placed in a downwind position at the start of the deployment (Figure 15). Monitoring consisted of continual measurements of PM₁₀ concentrations.



Figure 15 View of DustTrak PM10 monitor during deployment

During the 48-hour run, from 1st to 3rd of February 2021, the average recorded PM₁₀ concentration for the first 24 hour period was 18.3 µg/m³ and 19.9 µg/m³ for the second 24 hour period (Table 35). These daily means equate to 37% and 40%, respectively, of the 50 µg/m³ value that is set by the National Environmental Standard.

Background levels of PM₁₀ in the region have been found to be typically around 11 µg/m³.

Table 35 Daily mean of PM₁₀ result during 48 hours monitoring at Taranaki Sawmills Ltd 2020-2021

	(48 hours) (01/02/2021 14:08 to 03/02/2021 13:57)	
24 hr. set	Day 1 (Start to 24 hrs)	Day 2 (24 hrs to end)
Daily average	18.3 µg/m ³	19.9 µg/m ³
NES	50µg/m ³	

Fifteen minute wind direct data obtained from the New Plymouth wastewater treatment plant weather station is given in Figure 16. The wind direction and strength is presented in Figure 17. The PM₁₀ data expressed in terms of a one hour average, as per Taranaki Sawmill's consent condition, is shown in Figure 18.

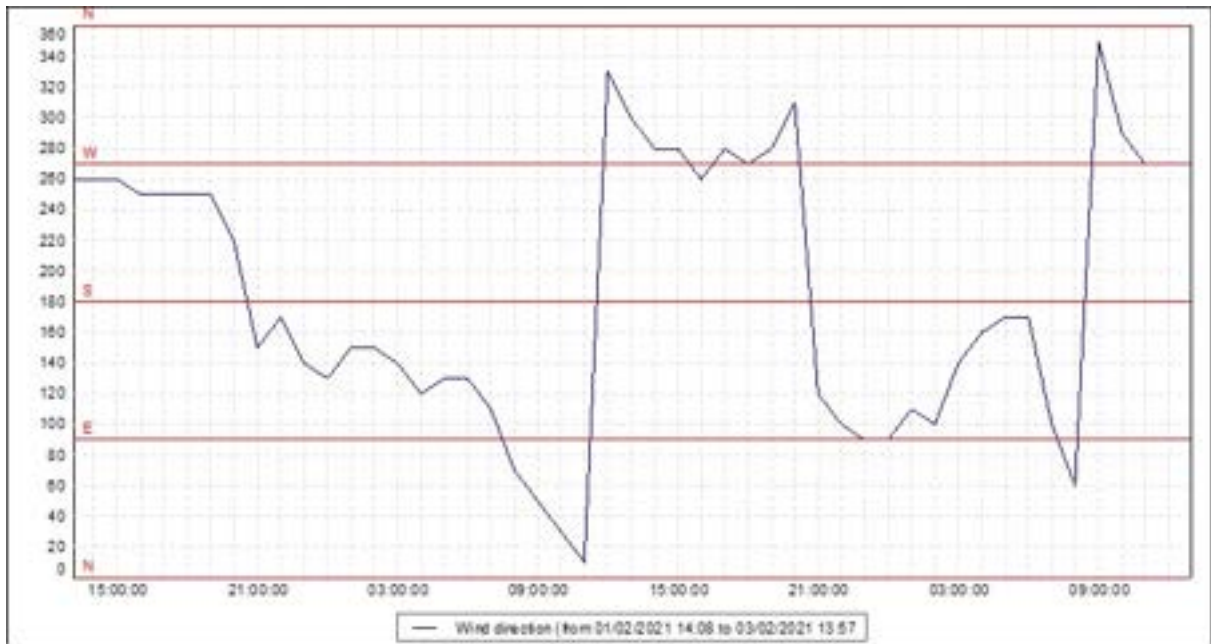


Figure 16 15-minute wind direction data for 2020-2021 deployment period

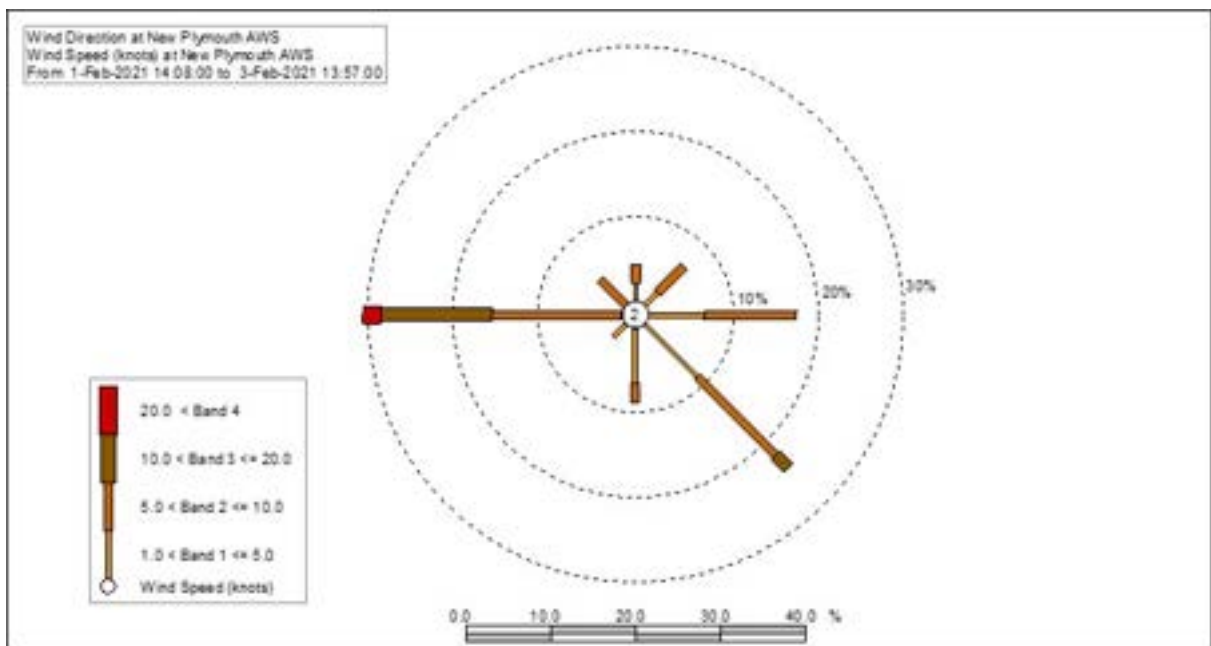


Figure 17 Prevailing wind direction and wind strength data for 2020-2021 deployment period



Figure 18 Taranaki Sawmills PM₁₀ µg/m³ one hour average for 2020-2021 deployment period

12.5 Investigations, interventions, and incidents

Table 36 below sets out details of any incidents recorded, additional investigations, or interventions required by the Council in relation to Taranaki Sawmill's activities during the 2019-2020 period. This table presents details of all events that required further investigation or intervention regardless of whether these were found to be compliant or not.

Table 36 Incidents, investigations, and interventions summary

Date	Details	Compliant (Y/N)	Enforcement Action Taken?	Outcome
14 March 2021	Breach of suspended solids consent limit	N	14 day letter (explanation requested)	Explanation received and stormwater upgrades undertaken by Taranaki Sawmills
30 March 2021	Kiln condensate overflowing into stormwater drain and unauthorised items in burn pit	N	Abatement notice EAC-23988 Abatement notice EAC-23989	Discharge of condensate ceased and management plan updated
17 May 2021	Discolouration of Waitaha Stream due to log yard stormwater	N	14 day letter (explanation requested)	Explanation received and new log yard retention pond installed by Taranaki Sawmills

12.6 Evaluation of performance

A tabular summary of Taranaki Sawmills' compliance record for the year under review is set out in Table 37 and Table 38.

Table 37 Summary of performance for Taranaki Sawmills Ltd consent 2333-4

Purpose: To discharge of stormwater from a sawmill site into the Waitaha Stream		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Adoption of best practicable option to minimise adverse effects on the environment	Inspection and discussion with consent holder	No – overflow of kiln condensate
2. Limit on catchment size	Inspection	Yes
3. Limits on chemical composition of discharge	Chemical sampling of discharges	No – one exceedance of suspended solids
4. Limit of effects on receiving waters	Inspection and sampling	No - log wash causing effects downstream
5. Contingency planning	Current as of January 2018	Yes
6. Maintain and adhere to a stormwater management plan	Updated plan received November 2018.	Yes
7. Notifications of changes in processes	Inspection and liaison with consent holder	Yes
8. Review condition	Next optional review in June 2026	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		Improvement Required
Overall assessment of administrative performance in respect of this consent		High

N/A = not applicable or not assessed

Table 38 Summary of performance for Taranaki Sawmills Ltd consent 4096-2

Purpose: Discharge of emissions into the air from sawmilling and untreated timber processing and associated activities including the combustion of wood and/or coal within boilers and wastes in an open firepit		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Adoption of best practicable option to minimise adverse effects on the environment	Inspection and discussion with consent holder	Yes
2. Minimisation of emissions due to control of plant and processes	Inspection and discussion with consent holder	Yes
3. Exercised in accordance with application	Inspection and discussion with consent holder	Yes
4. Boiler and stack operated in accordance with application	Inspection and discussion with consent holder	Yes

Purpose: Discharge of emissions into the air from sawmilling and untreated timber processing and associated activities including the combustion of wood and/or coal within boilers and wastes in an open firepit		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
5. Consultation prior to alterations to plant and processes	Inspection and discussion with consent holder	Yes
6. Notification in the event of coal usage for more than 72 hours in 14 days	No notifications received	N/A
7. Records of coal usage	No notifications received	N/A
8. Preparation and adherence to management plan	Observation at inspection	No – unauthorised material in burn pit
9. Level of environmental performance for fire-pit to be commensurate with management plan	Observation at inspection	Yes
10. Notification in the event of an incident having offsite effects	Observation of the surrounding area on inspection or when in the area on other business; any complaints received by Council	Yes
11. Adverse ecological effects in Taranaki from discharge not permitted	Observation of the surrounding area on inspection or when in the area on other business; any complaints received by Council	Yes
12. Objectionable odour at boundary not permitted	Observation of the surrounding area on inspection or when in the area on other business; any complaints received by Council	Yes
13. Definition of factors constituting an objectionable odour	N/A	N/A
14. Limits on objectionable suspended or deposited dust	Observation and/or ambient suspended particulate monitoring at inspection	Yes
15. Limit for ground level ambient concentration of sulphur dioxide	Not measured during the year under review. Only applicable when coal is used in the boilers	N/A
16. Limit for ground level ambient concentration of suspended particulate matter <10 microns	Two day deployment of 'Dust Trak' PM ₁₀ monitor	Yes
17. Noxious or toxic discharges not permitted at boundary	Observation of the surrounding area on inspection or when in the area on other business; any complaints received by Council	Yes
18. Limit on duration of emission of dark smoke	Observation of the surrounding area on inspection or when in the area on other business; review of any complaints received by Council	Yes
19. Minimum height of discharge	Observation during inspection. No decrease in stack height	Yes

Purpose: Discharge of emissions into the air from sawmilling and untreated timber processing and associated activities including the combustion of wood and/or coal within boilers and wastes in an open firepit		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
20. Lapsing of consent	Consent exercised	N/A
21. Optional review provision re environmental effects	Next optional review in June 2026	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		Improvement required High
Overall assessment of administrative performance in respect of this consent		

N/A = not applicable or not assessed

During the period under review, an improvement was required in Taranaki Sawmills Ltd's level of environmental performance in relation to its site on Hudson Road. Ongoing issues with sediment controls and onsite practices have since been addressed by the Company. Taranaki Sawmills demonstrated a high level of administrative performance with their resource consents as defined in Section 1.1.4.

13 Woodward's 2008 Ltd

13.1 Site description

Woodwards 2008 Ltd (Woodwards) operates a firewood business which generates wood waste such as sawdust, bark and offcuts. These are burnt in a fire pit on the site for which a consent was required.

The site is located at 124 De Havilland Drive, Bell Block; approximately 6.5 km east of New Plymouth city centre (Figure 19). The surrounding land use is predominantly industrial or trade premises; there is also pasture bordering the site to the east which is currently used for grazing livestock.

An open fire-pit is located at the eastern side of the site approximately 75 m south of De Havilland Drive. Industrial premises are currently located to the north, west and south of the property. The closest industrial premises are approximately 115 m north of the fire pit across De Havilland Drive.

The Waitaha Stream flows through a pipe underneath the site and resurfaces on the northern side of De Havilland Drive.



Figure 19 Aerial view of Woodward's site and fire pit location

Woodwards generates wood wastes which include timber blocks, bark and sawdust. They aim to burn the wood wastes daily, as it is generated, to prevent the waste from becoming saturated, which would make the potential for offsite effects harder to manage. The effects are managed by taking into account wind direction and strength, and by also taking into account the amount of material within the pit before it is lit.

The material incinerated in the open-pit is untreated timber off-cuts/sawdust. No tanned timber wastes or plastics are incinerated.

There are a number of potential contaminants that are discharged into the air from the combustion of wood products, however in this case these are primarily:

- particulates
- odour and dust
- carbon monoxide

Woodwards holds air discharge permit **7881-1** to cover discharge of emissions into the air from the combustion of untreated timber wastes.

13.2 Results

13.2.1 Inspections

Two routine inspections were conducted at the site during the monitoring period, on 11 August 2020 and 11 February 2021.

11 August 2020

An inspection was conducted in overcast weather with light rain and wind conditions. The site was tidy with normal operations ongoing. The boiler was not operating at the time and showed no sign of recent use. The kiln condensate container was near full and required maintenance. A small number of IBC's were stored onsite and contained oil from the previous oil burner kiln that had operated on the site, these were scheduled for removal. Staff were advised to regularly check the IBC's to ensure no oil was leaking onto the site. No recent burning of wood or waste material had been carried out on the site, and the burn pile did not contain any unauthorised material. No contaminants, including smoke and odour, were being discharged at the time, and all consent conditions were compliant.

11 February 2021

The site was inspected in fine weather with light wind conditions. The boiler and burn pile had not been lit in some time, and the burn pile was overgrown with vegetation but did not contain any unauthorised material. The kiln condensate collection system showed signs of recent maintenance and no evidence of discharges to land. The IBC's of oil noted in the previous visit had been relocated and some were now sitting outside of the bunded concrete area. Advice was given to staff to remove these containers to an appropriate storage location to ensure no oil was leaking offsite. There were no odour, smoke, or dust issues noted. At the time of inspection, the site was compliant.

13.3 Evaluation of performance

A tabular summary of Woodward's' compliance record for the year under review is set out in Table 39.

Table 39 Summary of performance for Woodward's consent 7881-1

Purpose: To discharge emissions into the air from the combustion of untreated timber wastes		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Adopt best practicable option. Controls over management practices and consideration of wind conditions	Inspection and discussion with consent holder	Yes
2. Combustion of only untreated wood and wood wastes. Fire pit 20 m from boundary	Inspection and discussion with consent holder. Observation of materials in fire pit	Yes

Purpose: To discharge emissions into the air from the combustion of untreated timber wastes		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
3. Offensive and objectionable odour at site boundary not permitted	Odour surveys during inspection	Yes
4. Supervision of fire. No fires to be lit after 12 noon	Inspection and observation while council officers in the area	Yes
5. Maximum dust deposition rate of 0.13 / m ² /day	No visible dust emissions reported at the time of inspection. Deposition rate not measured	N/A
6. Maximum suspended particulates of 3 mg/m ³	No visible dust emissions reported at the time of inspection	Yes
7. Prohibits noxious and toxic levels of contaminants beyond the boundary	Periodic inspection of log during inspection and review of documentation submitted to Council	Yes
8. Consent lapses if not exercised by 30 Sept 2016	Consent exercised	N/A
9. Optional review provision re environmental effects	No further option for review prior to expiry	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		High
Overall assessment of administrative performance in respect of this consent		High

N/A = not applicable or not assessed

During the year, Woodward's 2008 Ltd demonstrated a high level of environmental and administrative performance with the resource consent as defined in Section 1.1.4.

14 Zelum Ltd

14.1 Site description

Zelum Ltd (Zelum), operating internationally as Lonza, manufactures a range of specialised chemical products for the agricultural, horticultural and timber industries at a plant in the Bell Block industrial estate (Photo 6).



Photo 6 Zelum yard storage, November 2019

Zelum manufactures a range of chemicals that include 18 plant protectants and growth promotants, 23 herbicides, seven insecticides, seven additives (surface active agents), four sanitation products, and ten wood protection fungicides. Production is largely by formulation (blending active ingredients and other agents), and the production is based on batch processes (i.e. not continuous).

Three wet scrubbers are the only significant point sources that discharge emissions directly to air (Photo 7).

Zelum holds air discharge permit **4059-5** to cover discharge of emissions into the air from industrial agricultural chemical formulation processes and associated processes.



Photo 7 Zelum scrubber and associated bunding, September 2020

14.2 Results

14.2.1 Inspections

Two routine inspections were conducted during the monitoring period, on 14 September 2020 and 12 March 2021.

14 September 2020

An inspection was conducted in fine weather with light wind conditions. The site was tidy and operating as normal. Stormwater drains were clear and not discharging at the time. Waste IBC's that had previously been stored on the site were now mostly cleared with only a small number remaining, which were scheduled to be removed before the end of the year. Inspection of the end caps, insecticide and herbicide dust scrubbers found no objectionable particulates being discharged from the site. Odours were encountered in multiple locations around the site, however there were no offensive or objectionable discharges beyond the boundary. The site was compliant with resource consent conditions at the time of inspection.

12 March 2021

The site was inspected in warm, fine weather with light wind conditions. The site was operating normally, and all stormwater drains were clean with no sheens or foaming noted. All bunding around chemical storage areas and the dust scrubbers was intact and in good condition. The stormwater system was not discharging at the time. The end cap scrubber was not operating due to planned upgrades to the hot water system. The insecticide and herbicide scrubbers were also out of operation while upgrades to the chiller system were

being completed. A perimeter odour survey found no objectionable discharges beyond the boundary, and the all consent conditions were being complied with.

14.2.2 Results of receiving environment monitoring

Prior to site inspections the inspecting officer conducts a survey around the plant perimeter to check for any off-site odours, visible emissions or evidence of effects on the foliage of plants in the vicinity of the site.

Mild odours were noted around the site on one occasion but these were not detected beyond the property boundary.

14.3 Provision of company data

Zelam's consent contains requirements for the consent holder to monitor the pH of the forced draft scrubbers on a weekly basis (special condition 8) and free amine concentration of the air displacement scrubber prior to each production run (special condition 10), and to send this information through to the Council in the form of a written report on request.

A report containing this information was requested and received from Zelam. Review of the data found that all results for the monitoring period were within consent limits.

14.4 Evaluation of performance

A tabular summary of Zelam's compliance record for the year under review is set out in Table 40.

Table 40 Summary of performance for Zelam consent 4059-5

Purpose: To discharge emissions into the air from industrial agri-chemical formulation processes		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Minimisation of emissions to air	Inspection and discussion with consent holder	Yes
2. Consultation prior to alterations to plant or processes	Liaison during visits and consultation regarding the installation of a new granulation plant	Yes
3. Objectionable odour at site boundary not permitted	Odour surveys	Yes
4. Maximum concentration of benzyl chloride	Process no longer undertaken	N/A
5. Concentration of discharge of particulate matter	No visible emissions at the time of inspection	Yes
6. Immediate notification in the event of incident affecting off-site location	No incidents reported. No incidents found at inspection. No complaints received	Yes
7. pH of forced draft scrubber liquor	Periodic inspection of log during inspection and review of documentation submitted to Council	Yes
8. Monitoring of forced draft scrubber liquor pH	Not assessed during monitoring period	N/A
9. Free amine concentration of air displacement scrubber liquor	Process not undertaken	N/A
10. Monitoring of air displacement scrubber liquor free amine concentration	Process not undertaken	N/A

Purpose: To discharge emissions into the air from industrial agri-chemical formulation processes		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
11. Maximum ground-level concentrations of contaminants beyond boundary	Not monitored during year under review	N/A
12. Optional review provision re environmental effects	Optional review June 2020, recommendation attached in Section 14.3.6	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		High
Overall assessment of administrative performance in respect of this consent		High

N/A = not applicable or not assessed

During the year, Zelum Ltd demonstrated a high level of environmental and administrative performance with the resource consent as defined in Section 1.1.4.

15 Waitaha Stream

15.1 Water quality monitoring

During the monitoring period a wet weather survey of all site discharges and seven water quality sites in the Waitaha Stream was conducted by the Council (Figure 20).

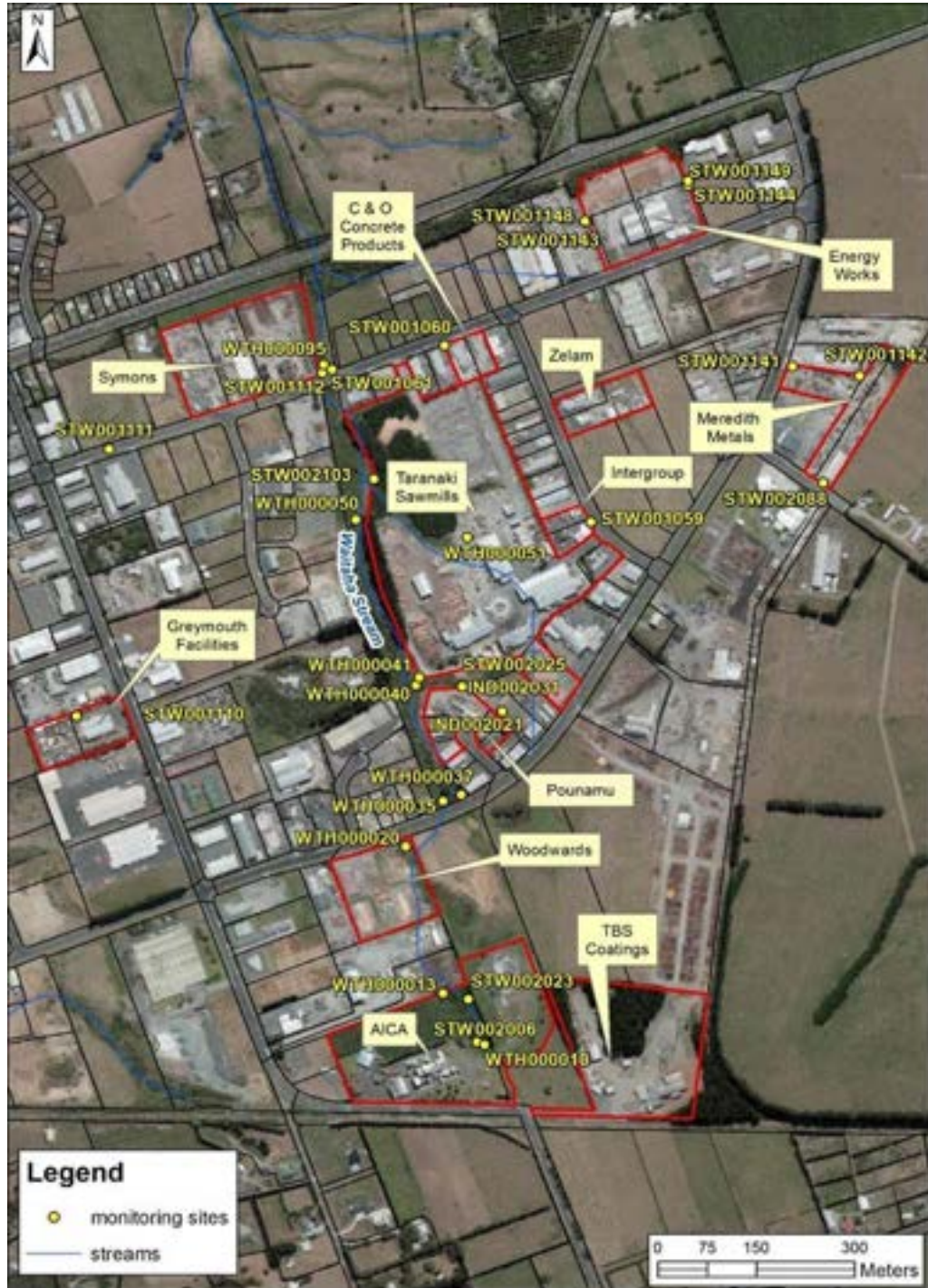


Figure 20 Aerial map showing site and sample locations in the Waitaha Catchment (TBS Coatings now SRG Global)

All samples were tested for pH, temperature, CBOD, conductivity, and turbidity. Further tests for metals, nutrients, formaldehyde, and/or phenol were carried out depending on the expected potential pollutants from industries in the vicinity of the sampling points.

The results of this sampling are presented in Table 41.

Table 41 Waitaha Stream wet weather sampling results, 29 March 2021

	Site	WTH000013	WTH000035	WTH000040	WTH000041	WTH000095
Parameter	Description	Waitaha Stream below AICA	Downstream de Havilland Dr	30 m downstream of unnamed trib	Unnamed trib between Pounamu & TSM	Below Connett Road
Temperature	°C	17.5	18.2	19	19.2	18.8
pH	pH	6.7	7.0	6.8	6.6	6.7
Boron	g/m ³					0.041
Conductivity	mS/m	8.1	11.4	15.7	8	16.5
Formaldehyde	g/m ³	< 0.02	-	-	-	-
Total Phenols	g/m ³	< 0.02	-	-	-	-
Turbidity	FNU	3.9	35	22	61	24
CBOD	g O ₂ /m ³	< 1.0	4.2	2.4	1.7	3.2
TBOD	g O ₂ /m ³	< 0.8	6.5	3.8	3.6	4.6
Metals (acid soluble)						
Copper	g/m ³	0.0013	0.0133	0.0074	0.0095	0.0093
Lead	g/m ³	-	0.0029	0.0015	-	0.00142
Manganese	g/m ³	-	-	-	-	0.4
Metals (dissolved)						
Copper	g/m ³	0.0008	0.0092	0.0044	0.0054	0.0051
Manganese	g/m ³	-	0.125	0.42	-	0.41
Nickel	g/m ³	< 0.0005	0.0006	0.0016	-	0.0019
Zinc	g/m ³	-	0.077	0.066	0.064	0.054
Nutrients						
NH ₃	g/m ³	0.00004	0.00073	0.00084	0.00022	0.0007
NH ₄	g/m ³	0.024	0.23	0.36	0.138	0.37
NNN	g/m ³	0.25	-	-	-	0.46
DRP	g/m ³	< 0.004	0.086	0.017	-	0.012
Urea	g/m ³	< 0.05	-	-	-	-

The results showed that the boron concentration recorded at the downstream site was lower than the high reliability trigger value of 0.37 g/m³ given in the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (2000) for slightly to moderately disturbed ecosystems. Monitoring also found no significant changes in the pH or temperature of the stream.

Historically the dissolved reactive phosphorus (DRP) concentration has generally been elevated in the upper to middle catchment, reducing at the site below Connett Road. This is likely to be due to farming activities above the headwaters of the catchment, and the presence of a horticultural supply business upstream of De

Havilland Drive. All but one of the samples retrieved during the wet weather survey were elevated above the ANZECC trigger value of 0.01 g/m³ that may cause algal or macrophytic growths.

During the wet weather surveys none of the unionised ammonia (NH₃) results exceeded the 0.025 g/m³ RFWP guideline value.

There are several guidelines for zinc and copper for assessing water quality in terms of suitability for sustaining aquatic life. The United States Environmental Protection Agency (USEPA), in defining metals criteria for protection of freshwater aquatic life, has adopted the use of dissolved metals as most closely approximating the bioavailable fraction of metal in the water column. Previously, water quality criteria were based on total recoverable metal concentration. Metal monitoring has been recently expanded to new sites to assist in determining potential sources (consented or otherwise) in the Waitaha Catchment.

The water quality criteria for dissolved copper (Cu) and zinc (Zn), for water of hardness 50 g/m³ CaCO₃, are 0.005 g/m³ for Cu and 0.058 g/m³ for Zn respectively as a four day average, for chronic (long term) exposure. The corresponding criteria for acute (four-hour) exposure are 0.007 g/m³ for Cu and 0.064 g/m³ for Zn. Only the acute criteria are applicable to wet weather sampling results, whereas both chronic and acute exposure criteria would be applicable to dry weather sampling results.

Two of the four wet weather samples taken in the Waitaha Stream system were found to be at or above the USEPA acute guideline for zinc, in keeping with trends shown in historical results. Elevated zinc concentrations are frequently detected throughout the catchment, and in particular in the section between de Havilland Drive and Connett Roads. It is likely that historic activities at sites within this zone have had influence on the levels of metal accumulations within the stream substrate and the surrounding areas. Another potential input is from the breakdown of zinc-coated roofing in the area, as was the case at a Taranaki Sawmills site on Katere Road. Ongoing monitoring for dissolved metals concentrations in discharges off nearby sites has found no evidence of more recent, significant inputs to the stream. Three of the five dissolved copper results were above the USEPA chronic guidelines and one was above the acute for the monitoring period under review.

As noted in previous monitoring reports, turbidity in the stream was elevated in the middle reaches of the stream, reducing at the downstream sites. This was thought to be a result of new development occurring on De Havilland Drive.

Council staff will continue to monitor suspended solids in discharges in the catchment, encourage better silt management by consent holders and also continue to investigate any unauthorised discharges that contribute to sediment loads.

The Waitaha Stream has a small catchment area and is coming under increasing pressure, as the land upstream of Devon Road is further developed. In order to improve the water quality of the stream, the Council will be focusing on ensuring special conditions on existing consents are adequate; identifying any sites that require discharge consents; and educating site operators in the catchment to ensure that they are aware of their obligations under Rule 23 of the RFWP for permitted stormwater discharges.

16 Discussion

16.1 Discussion of site performance

A total of 59 compliance monitoring site visits were made to consent holders in the Mangati Catchment during the monitoring year under review:

- 55 routine compliance monitoring inspections
- Two inspections to follow up on enforcement action
- Two chemical sampling surveys

Five of the routine site inspections (9%) resulted in non-compliance and further enforcement action.

In general, sites were found to be relatively clean and well-maintained. General housekeeping and maintenance, bunding requirements, drain cleaning and sediment controls were the most frequently mentioned areas requiring attention as noted by inspecting officers. Staff onsite were generally compliant and carried out required works in appropriate timeframes. Spills, sheens, and leaks noted onsite were dealt with promptly, and consent holders undertook upgrades and/or repairs to equipment and plant on each site as required. These works included installation of new sediment treatment systems and upgrades to existing systems, changes to onsite practices, and regular updating of site stormwater management and spill contingency plans.

The site performance for each of the consent holders during the year was of an acceptable standard, and is reflected in the low volume of public complaints and incidents recorded for this catchment (one incident noted over the 12-month monitoring period).

16.2 Environmental effects of exercise of consents

Council water quality surveys of the Waitaha Stream showed that the concentrations of contaminants were generally relatively stable throughout the length of the catchment. The primary contaminants of concern were metals and metalloids, nutrients (nitrogen and phosphorus), suspended sediment, and biological oxygen demand. Of these, nutrient values showed increases between upstream and downstream sites, but were within historical trends.

Metals and metalloid concentrations fluctuated throughout the catchment, and in-stream values were closely related to proximity to the source (site stormwater discharges). Both dissolved copper and zinc results for the period under review were elevated above acute and chronic toxicity guidelines at multiple sites. The Waitaha Stream has a recorded history of metal contaminants, and the concentrations of these do not show significantly increasing trends.

In general, samples collected from surface water sites did not show any significant visual or chemical effects related to individual site discharges.

16.3 Evaluation of performance

Tabular summaries of each consent holders' compliance record for the period under review are set out in their individual sections of this report.

16.4 Recommendations from the 2019-2020 Annual Report

In the 2019-2020 Annual Report, it was recommended:

1. THAT in the first instance, monitoring of consented activities at AICA Ltd in the 2020-2021 year continue at the same level as in 2019-2020.

2. THAT in the first instance, monitoring of consented activities at C&O Concrete Products Ltd in the 2020-2021 year continue at the same level as in 2019-2020.
3. THAT in the first instance, monitoring of consented activities at Energyworks Ltd in the 2020-2021 year continue at the same level as in 2019-2020.
4. THAT in the first instance, monitoring of consented activities at Greymouth Facilities Ltd in the 2020-2021 year continue at the same level as in 2019-2020.
5. THAT in the first instance, monitoring of consented activities at Intergroup Ltd in the 2020-2021 year continue at the same level as in 2019-2020.
6. THAT in the first instance, monitoring of consented activities at Meredith Metals Ltd in the 2020-2021 year continue at the same level as in 2019-2020.
7. THAT in the first instance, monitoring of consented activities by NPDC in the 2020-2021 year continue at the same level as in 2019-2020.
8. THAT in the first instance, monitoring of consented activities at Pounamu Oilfield Services Ltd in the 2020-2021 year continue at the same level as in 2019-2020.
9. THAT in the first instance, monitoring of consented activities at Symons Property Development Ltd in the 2020-2021 year continue at the same level as in 2019-2020.
10. THAT in the first instance, monitoring of consented activities at Taranaki Sawmills Ltd in the 2020-2021 year continue at the same level as in 2019-2020.
11. THAT in the first instance, monitoring of consented activities at TBS Coatings Ltd in the 2020-2021 year continue at the same level as in 2019-2020
12. THAT in the first instance, monitoring of consented activities at Woodward's 2008 Ltd in the 2020-2021 year continue at the same level as in 2019-2020.
13. THAT in the first instance, monitoring of consented activities at Zelam Ltd in the 2020-2021 year continue at the same level as in 2019-2020.
14. THAT should there be issues with environmental or administrative performance in 2020-2021, monitoring may be adjusted to reflect any additional investigation or intervention as found necessary.

16.5 Alterations to monitoring programme for 2021-2022

In designing and implementing the monitoring programmes for air/water discharges in the region, the Council has taken into account:

- the extent of information already made available through monitoring or other means to date;
- its relevance under the RMA;
- the Council's obligations to monitor consented activities and their effects under the RMA;
- the record of administrative and environmental performances of the consent holder; and
- reporting to the regional community.

The Council also takes into account the scope of assessments required at the time of renewal of permits, and the need to maintain a sound understanding of industrial processes within Taranaki exercising resource consents.

It is proposed that for 2021-2022 the programme continue at a similar level as that programmed for the 2020-2021 year.

17 Summary of recommendations

1. THAT in the first instance, monitoring of consented activities at AICA Ltd in the 2021-2022 year continue at the same level as in 2020-2021.
2. THAT in the first instance, monitoring of consented activities at C&O Concrete Products Ltd in the 2021-2022 year continue at the same level as in 2020-2021.
3. THAT in the first instance, monitoring of consented activities at Energyworks Ltd in the 2021-2022 year continue at the same level as in 2020-2021.
4. THAT in the first instance, monitoring of consented activities at Greymouth Facilities Ltd in the 2021-2022 year continue at the same level as in 2020-2021.
5. THAT in the first instance, monitoring of consented activities at Intergroup Ltd in the 2021-2022 year continue at the same level as in 2020-2021.
6. THAT in the first instance, monitoring of consented activities at Meredith Metals Ltd in the 2021-2022 year continue at the same level as in 2020-2021.
7. THAT in the first instance, monitoring of consented activities by NPDC in the 2021-2022 year continue at the same level as in 2020-2021.
8. THAT in the first instance, monitoring of consented activities at Pounamu Oilfield Services Ltd in the 2021-2022 year continue at a similar level as in 2020-2021, with the exception of a reduced site inspection frequency.
9. THAT in the first instance, monitoring of consented activities at SRG Global Asset Services (Taranaki) Ltd in the 2021-2022 year continue at the same level as in 2020-2021.
10. THAT in the first instance, monitoring of consented activities at Symons Property Development Ltd in the 2021-2022 year continue at the same level as in 2020-2021.
11. THAT in the first instance, monitoring of consented activities at Taranaki Sawmills Ltd in 2021-2022 year continue at the same level as in 2020-2021.
12. THAT in the first instance, monitoring of consented activities at Woodward's 2008 Ltd in the 2021-2022 year continue at the same level as in 2020-2021.
13. THAT in the first instance, monitoring of consented activities at Zelum Ltd in the 2021-2022 year continue at the same level as in 2020-2021.
14. THAT should there be issues with environmental or administrative performance in 2021-2022, monitoring may be adjusted to reflect any additional investigation or intervention as found necessary.

Glossary of common terms and abbreviations

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

BOD	Biochemical oxygen demand. A measure of the presence of degradable organic matter, taking into account the biological conversion of ammonia to nitrate.
Bund	A wall around a tank to contain its contents in the case of a leak.
CBOD	Carbonaceous biochemical oxygen demand. A measure of the presence of degradable organic matter, excluding the biological conversion of ammonia to nitrate.
Conductivity	Conductivity, an indication of the level of dissolved salts in a sample, usually measured at 25°C and expressed in mS/cm.
Cu*	Copper.
DRP	Dissolved reactive phosphorus.
FNU	Formazin nephelometric units, a measure of the turbidity of water
g/m ² /day	grams/metre ² /day.
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.
Investigation	Action taken by Council to establish what were the circumstances/events surrounding an incident including any allegations of an incident.
m ²	Square Metres.
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.
mS/cm	Millisiemens per centimetre.
NH ₄	Ammonium, normally expressed in terms of the mass of nitrogen (N).
NH ₃	Unionised ammonia, normally expressed in terms of the mass of nitrogen (N).
NNN	Nitrate-Nitrite nitrogen, normally expressed in terms of the mass of nitrogen (N).
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).
Pb*	Lead.
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, respectively).

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	<i>Resource Management Act 1991</i> and including all subsequent amendments.
SS	Suspended solids.
Temp	Temperature, measured in °C (degrees Celsius).
Turb	Turbidity, expressed in NTU.
Zn*	Zinc.

*an abbreviation for a metal or other analyte may be followed by the letters 'As', to denote the amount of metal recoverable in acidic conditions. This is taken as indicating the total amount of metal that might be solubilised under extreme environmental conditions. The abbreviation may alternatively be followed by the letter 'D', denoting the amount of the metal present in dissolved form rather than in particulate or solid form.

For further information on analytical methods, contact a Science Services Manager.

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Appendix I

Resource consents held by industries in the Waitaha Catchment (alphabetical order)

(For a copy of the signed resource consent
please contact the TRC Consents department)

Water abstraction permits

Section 14 of the RMA stipulates that no person may take, use, dam or divert any water, unless the activity is expressly allowed for by a resource consent or a rule in a regional plan, or it falls within some particular categories set out in Section 14. Permits authorising the abstraction of water are issued by the Council under Section 87(d) of the RMA.

Water discharge permits

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. Permits authorising discharges to water are issued by the Council under Section 87(e) of the RMA.

Air discharge permits

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. Permits authorising discharges to air are issued by the Council under Section 87(e) of the RMA.

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. Permits authorising the discharge of wastes to land are issued by the Council under Section 87(e) of the RMA.

Land use permits

Section 13(1)(a) of the RMA stipulates that no person may in relation to the bed of any lake or river use, erect, reconstruct, place, alter, extend, remove, or demolish any structure or part of any structure in, on, under, or over the bed, unless the activity is expressly allowed for by a resource consent, a rule in a regional plan, or by national regulations. Land use permits are issued by the Council under Section 87(a) of the RMA.

Coastal permits

Section 12(1)(b) of the RMA stipulates that no person may erect, reconstruct, place, alter, extend, remove, or demolish any structure that is fixed in, on, under, or over any foreshore or seabed, unless the activity is expressly allowed for by a resource consent, a rule in a regional plan, or by national regulations. Coastal permits are issued by the Council under Section 87(c) of the RMA.

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

Name of
Consent Holder: AICA (NZ) Limited
Private Bag 2055
New Plymouth 4342

Decision Date
(Change): 20 September 2017

Commencement Date
(Change): 20 September 2017 (Granted Date: 24 September 2015)

Conditions of Consent

Consent Granted: To discharge stormwater from a chemical manufacturing complex to land via irrigation and into a wetland at the headwaters of the Waitaha Stream

Expiry Date: 1 June 2032

Review Date(s): June 2018, June 2019, June 2020, June 2026 and in accordance with special condition 14

Site Location: 149 Corbett Road, Bell Block

Grid Reference (NZTM) 1701127E-5678004N & 1701107E-5678066N &
1701133E-5677996N & 1701120E-5678022N &
1701122E-5678050N & 1701010E-5677850N
(being discharge points to the Waitaha Stream)
1701017E-5677999N
(being the centre of the irrigation discharge area)

Catchment: Waitaha

*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 consent holder shall at all times adopt the best practicable option, as defined in section 2 of the Resource Management Act 1991, to prevent or minimise any adverse effects on the environment from the exercise of this consent. Including as a minimum:
 - a) minimising the rate of discharge and concentration of entrained contaminants as far as practical to ensure effects are minimised; and
 - b) the preferential use of land based disposal, where appropriate, to ensure effects on the Waitaha Stream are minimised.
2. The stormwater discharged shall be from an area not exceeding 2.5 Ha.
3. The consent holder shall install flow meters and data loggers capable of measuring, separately, the discharge rates and volumes of stormwater discharged to land via irrigation and to the Waitaha stream. The discharge flow meters and data loggers shall be tamper-proof and shall measure and record the rate and volume of water discharge to an accuracy of $\pm 5\%$. Records of the date, the time and the rate and volume of water shall be taken at intervals not exceeding 15 minutes.
4. Prior to discharge from each stormwater retention pond the stormwater shall be analysed by the consent holder for:
 - a) pH;
 - b) ammoniacal nitrogen;
 - c) formaldehyde;
 - d) phenol;
 - e) temperature.
5. The constituents of the stormwater irrigated to land or discharged to the stream Waitaha Stream shall meet the standards as per the following table.

Constituent	Discharges to Stream	Irrigation to Land
pH	Within the range 6.0 to 9.0	Within the range 6.0 to 9.0
suspended solids	Concentration not greater than 100 gm ⁻³	N/A
oil and grease	Concentration not greater than 15 gm ⁻³	Concentration not greater than 25 g/m ³
formaldehyde	Concentration not greater than 2 gm ⁻³	Concentration not greater 10 gm ⁻³
phenol	Concentration not greater than 1 gm ⁻³	Concentration not greater than 1 gm ⁻³
ammoniacal nitrogen	Concentration not greater than 10 gm ⁻³	Concentration not greater than 50 gm ⁻³

Consent 2367-3.2

6. Prior to each discharge or irrigation event from either stormwater retention pond, the consent holder shall notify the Taranaki Regional Council and provide the following information:
- which pond is discharging;
 - an estimate of the times that discharges will occur and cease;
 - estimated volume of discharge;
 - discharge method (irrigation or to water);
 - results of analysis required by condition four; and
 - sample identification details.

Notifications shall be made at any time by emailing worknotification@trc.govt.nz and shall include in the subject line of the email the consent number and the consent holders' name.

7. Discharges to the Waitaha Stream other than those from a stormwater retention pond 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
oil and grease	Concentration not greater than 15 gm ⁻³
formaldehyde	Concentration not greater than 2 gm ⁻³
phenol	Concentration not greater than 1 gm ⁻³
ammoniacal nitrogen	Concentration not greater than 10 gm ⁻³

8. The discharges, either to the stream or to land via irrigation shall not, either by itself or in combination with other discharges, give rise to any or all of the following effects in the receiving water NZTM 1701073E-5678076N (at the site boundary):
- the production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials;
 - any conspicuous change in the colour or visual clarity;
 - any emission of objectionable odour;
 - the rendering of fresh water unsuitable for consumption by farm animals;
 - any significant adverse effects on aquatic life;
 - a concentration of unionised ammonia of greater than 0.025 g/m³; and
 - a concentration of phenol greater than 0.6 g/m³.
9. Discharge to land via irrigation, either by itself or in combination with other discharges (e.g. fertiliser application), shall not give rise to any of the following effects:
- direct surface run-off of irrigated fluid to the Waitaha Stream;
 - ponding within the irrigation area for more than one hour after irrigation ceases;
 - grass burn within the irrigation area;
 - spray drift beyond the property boundary or into the Waitaha Stream;
 - cause the ambient atmospheric concentration of formaldehyde to exceed 0.01 mg/m³ at the property boundary; and
 - cause the ambient atmospheric concentration of phenol to exceed 0.63 mg/m³ at the property boundary.

Consent 2367-3.2

10. The consent holder shall maintain and update a spreadsheet that contains the following data:

- a) results of analysis required by condition four;
- b) sample identification details;
- c) the rates and volumes of discharges to the Waitaha Stream; and
- d) the discharge rate and volumes used for irrigation.

The consent holder shall forward a copy of the spreadsheet to the Chief Executive, Taranaki Regional Council every 3 months, or upon request.

11. The consent holder shall maintain and regularly update a 'Contingency Plan' that details measures and procedures that will be undertaken to prevent, and to avoid environmental effects from, a spillage or any discharge of contaminants not authorised by this consent. The plan shall be approved by the Chief Executive, Taranaki Regional Council, acting in a certification capacity.

12. By 1 December 2017, the site shall be operated in accordance with a 'Management Plan' prepared by the consent holder and approved by the Chief Executive, Taranaki Regional Council, acting in a certification capacity. The plan shall detail how the site is to be managed to minimise the contaminants that become entrained in the stormwater and minimise effects on the environment and shall include as a minimum:

- a) the details loading and unloading of materials;
- b) maintenance of conveyance systems;
- c) general housekeeping;
- d) minimising the rate of discharge as far as practical to ensure effects are minimised;
- e) procedures to determine whether to discharge to water, irrigate, or discharge to trade waste;
- f) procedures or assessing suitability of conditions for irrigation.
- g) procedures for monitoring irrigation, including ambient air monitoring; and
- h) procedures for retention and preservation of samples of irrigated fluid with ammoniacal concentrations exceeding 30 g/m³.

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 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.

Consent 2367-3.2

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:
- a) during the month of June 2018, June 2019, June 2020 and/or June 2026;
 - b) within 3 months of receiving a notification under special condition 13 above;

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 and in particular to set a nitrogen land application limit if monitoring indicates that such a limit is warranted to prevent adverse effects.

Signed at Stratford on 20 September 2017

For and on behalf of
Taranaki Regional Council

A D McLay
Director - Resource Management

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

Name of
Consent Holder: Aica (NZ) Limited
Private Bag 2055
New Plymouth 4342

Decision Date: 26 May 2015

Commencement Date: 26 May 2015

Conditions of Consent

Consent Granted: To discharge emissions into the air from the manufacture of formaldehyde solution and urea formaldehyde resin, together with emissions from associated activities at the plant premises

Expiry Date: 1 June 2032

Review Date(s): June 2020, June 2026 and in accordance with special condition 12

Site Location: 149 Corbett Road, Bell Block

Legal Description: Lots 2 & 4 DP 41775 (Discharge source & site)

Grid Reference (NZTM) 1701038E-5677959N

*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 consent holder shall at all times adopt the best practicable option, as defined in section 2 of the Resource Management Act 1991, to prevent or minimise any adverse effects on the environment from the exercise of this consent.
2. Any discharge to air from the exercise of this consent shall not give rise to any offensive, objectionable or toxic levels of dust or odour at or beyond the boundary of the property.
3. The total emissions of formaldehyde from either the main stack of the multi-purpose plant or the vent of the formaldehyde absorber tower of the formaldehyde synthesis plant shall not exceed 1.0 kg/hr as formaldehyde.
4. The consent holder shall have emissions tests conducted on discharges from the "formaldehyde absorber tower" to demonstrate compliance with special conditions 3, unless advised by the Chief Executive, Taranaki Regional Council, that the tests are not required due to the clear evidence that no emission is being breached. These tests shall;
 - a) be conducted annually by 1 June each year, and
 - b) comprise not less than three separate samples taken during operating conditions that give rise to maximum emissions from the stack, and
 - c) be reported to the Chief Executive, Taranaki Regional Council, within 20 working days of the samples being taken. The report shall include the results of the tests, the relevant plant operating parameters over the period of each test, all the raw data and all the calculations.
5. The emissions tests referred to in special condition 4 shall be carried out in accordance with USEPA Method 0011, or any other equivalent method subject to the written approval of the Chief Executive, Taranaki Regional Council, and these tests shall be performed by a party independent from the consent holder, appropriately qualified and experienced in such testing to the satisfaction of the Chief Executive, Taranaki Regional Council.
6. The consent holder shall control all emissions of formaldehyde to the atmosphere to ensure that maximum ground level concentration of formaldehyde at any point beyond the site boundary does not exceed 0.10 mg/m³ (ambient conditions) at any time.
7. The consent holder shall control all emissions of phenol to the atmosphere to ensure that maximum ground level concentration of phenol at any point beyond the site boundary does not exceed 0.63 mg/m³ (ambient conditions) at any time.
8. The consent holder shall control all emissions of resorcinol to the atmosphere to ensure that maximum ground level concentration of resorcinol at any point beyond the site boundary does not exceed 1.5 mg/m³ (ambient conditions) at any time.

Consent 4021-3.0

9. The consent holder shall control all emissions of carbon monoxide, nitrogen dioxide, fine particles (PM10) and sulphur dioxide to the atmosphere from the site, in order that the maximum ground level concentration of any of these contaminants arising from the exercise of this consent measured under ambient conditions does not exceed the relevant ambient air quality standard as set out in the Resource Management (National Environmental Standards for Air Quality Regulations, 2004) at or beyond the boundary of the property on which the site is located.
10. Prior to undertaking any alterations to the plant, processes or operations, which may significantly change the nature or quantity of contaminants emitted to air from the site, the consent holder shall first consult with the Chief Executive, Taranaki Regional Council, and shall obtain any necessary approvals under the Resource Management Act 1991.
11. The consent holder shall provide to the Taranaki Regional Council during June of each year, for the duration of this consent, a report reviewing any technological advances in the reduction or mitigation of emissions, how these might be applicable and/or implemented at the plant, and the costs and benefits of these advances.
12. 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:
 - a) during the month of June 2020 and/or June 2026; and/or
 - b) within 3 months of any consultation under special condition 11 above;

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 26 May 2015

For and on behalf of
Taranaki Regional Council

A D McLay
Director - Resource Management

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

Name of
Consent Holder: C & O Concrete Products Limited
PO Box 7141
New Plymouth 4341

Decision Date: 09 December 2014

Commencement Date: 09 December 2014

Conditions of Consent

Consent Granted: To discharge stormwater from a concrete products manufacturing premises into the Waitaha Stream

Expiry Date: 01 June 2032

Review Date(s): June 2020, June 2026

Site Location: 194 Connett Road East, Bell Block

Legal Description: Lot 25 DP 12988 (Discharge source)

Grid Reference (NZTM) 1701106E-5679098N (sump)
1700897E-5679053N (Discharge point in the Waitaha Stream)

Catchment: Waitaha

*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 consent holder shall at all times adopt the best practicable option, as defined in section 2 of the Resource Management Act 1991, to prevent or minimise any adverse effects on the environment from the exercise of this consent.
2. The stormwater discharged shall be from a catchment area not exceeding 0.415 hectares.
3. All stormwater shall be directed for treatment through the stormwater treatment system for discharge in accordance with the special conditions of this permit.
4. 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
oil and grease	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.

5. After allowing for reasonable mixing, within a mixing zone extending 10 metres downstream of the discharge point, the discharge shall not, either by itself or in combination with other discharges, give rise to any or all of the following effects in the receiving water:
 - 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.
6. The consent holder shall maintain a contingency plan that details measures and procedures to be undertaken to prevent spillage or any discharge of contaminants not authorised by this consent. The contingency plan shall be followed in the event of a spill or unauthorised discharge and shall be certified by the Chief Executive, Taranaki Regional Council as being adequate to avoid, remedy or mitigate the environmental effects of such a spillage or discharge.

Consent 4777-2.0

7. The consent holder shall maintain an up to date stormwater management plan that documents how the site is to be managed to minimise the contaminants that become entrained in the stormwater. This plan shall be followed at all times, shall be certified by the Chief Executive, Taranaki Regional Council, and shall include but not necessarily be limited to:
- a) the loading and unloading of materials;
 - b) maintenance of conveyance systems;
 - c) general housekeeping;
 - d) management of the interceptor system; and
 - e) names and contact details of relevant staff.

A Stormwater Management Plan template is available in the Environment section of the Taranaki Regional Council's web site www.trc.govt.nz.

8. 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.
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 2020 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 09 December 2014

For and on behalf of
Taranaki Regional Council

A D McLay
Director - Resource Management

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

Name of
Consent Holder: Energyworks Limited
PO Box 346
New Plymouth 4340

Decision Date 3 September 2020

Commencement Date 3 September 2020

Conditions of Consent

Consent Granted: To discharge emissions into the air associated with abrasive blasting operations, spray painting and associated activities at a permanent site at Connett Road East, Bell Block and from mobile operations throughout the Taranaki region, including parts of the coastal marine area

Expiry Date: 1 June 2038

Review Date(s): June 2023 and 3-yearly thereafter

Site Location: 221A Connett Road East, Bell Block & various locations throughout the Taranaki region and the coastal marine area

Grid Reference (NZTM) 1701320E-5679340N (permanent site)

Catchment: Waitaha
Tasman Sea
Various locations throughout the Taranaki region

*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 conditions of this consent shall apply to the various operations of the consent holder as follows:
 - a. Special Conditions 2-6 apply to all operations.
 - b. Special Conditions 7-9 apply to operations conducted within the permanent facility at Connett Road East, Bell Block.
 - c. Special Conditions 10-19 apply to operations conducted at any other site other than the permanent facility at Connett Road East, Bell Block.
 - d. Special Conditions 20 (review) applies to the consent generally.

All operations

2. The activity shall be undertaken in general accordance with the information provided in the application documentation. In the case of any contradiction between the application and the conditions of this consent, the conditions of this consent shall prevail.
3. The exercise of this consent shall not give rise to any offensive, objectionable, noxious, hazardous or dangerous levels of dust or odour at or beyond the boundary of the property on which the abrasive blasting is occurring.
4. As far as is practicable, work areas and surrounding areas shall be cleared of accumulations of blasting material at the end of each blasting session and by the end of each working day.
5. Blasting media used for dry abrasive blasting shall contain less than 2% by dry weight dust able to pass through a 0.15 mm sieve and sand used for dry abrasive blasting shall contain less than 5% by dry weight free silica.
6. From November 2020 onwards all blasting operations and site management shall be undertaken in accordance with an Air Discharge Management Plan ('the Plan') that has been approved by the Chief Executive, Taranaki Regional Council, acting in a certification capacity. The Plan shall detail procedures and methods that will be used to achieve compliance with the conditions of this consent and shall include but not be limited to details of:
 - a. blasting operations;
 - b. screening/containment of offsite blasting;
 - c. monitoring and maintenance of the blasting buildings and air discharge treatment systems;
 - d. handling of potentially hazardous substances;
 - e. recording of maintenance;
 - f. staff training; and
 - g. general housekeeping, site clean-up and yard maintenance.

Discharges at the permanent facility at 221A Connett Road East, Bell Block

7. All abrasive blasting at 221A Connett Road East, Bell Block shall be carried out in an enclosed booth or shed.
8. All emissions at 221A Connett Road East, Bell Block shall be contained and treated prior to discharge from the operations enclosure. All exhaust air ventilated or otherwise emitted from an enclosure shall be treated to a concentration of total particulate matter of less than 125 mg/m³ (natural temperature & pressure) corrected to dry gas basis, at any time.
9. The dust deposition rate beyond the property boundary of the site at 221A Connett Road East, Bell Block arising from the discharge, shall be less than 0.13 g/m²/day.

Operations conducted at any site other than the permanent facility

10. All items or premises to be blasted shall be screened by means of covers, tarpaulins, cladding, or other means, as completely as practicable, to contain dust emissions and depositions and, as far as practicable, avoid any discharge beyond the immediate work area.
11. Where abrasive blasting or surface coating is to take place within 25 metres of the coastal marine area or of a waterbody, the consent holder shall notify the Chief Executive, Taranaki Regional Council, at least two working days before the activity commences. The notice shall include details of: the location, the specific blasting proposed, the screening (required by condition 10 above), dates and times of the discharge. It shall be served by completing and submitting the 'Notification of work' form on the Council's website (<http://bit.ly/TRCWorkNotificationForm>).

For clarity, this consent does not authorise any discharge to water except of contaminants of very small volumes that cannot practicably be contained and which have less than minor adverse environmental effects.

12. There shall be no discharge within 150 metres of:
 - a. any fenced (or otherwise identified) urupa without the written approval of the relevant Iwi; or
 - b. any marae, unless the written approval of the marae Chair has been obtained to allow the discharge at a closer distance; or
 - c. any site of significance to Maori as defined in any Proposed Regional Coastal Plan or any Operative Regional Coastal Plan unless prior approval is obtained from the relevant iwi.
13. This consent shall not be exercised within the Coastal Marine Area between the Waingongoro River and the southern boundary of the Taranaki Region.
14. The suspended particulate matter shall not exceed 3 mg/m³ (measured under ambient conditions), and the deposition of dust shall not exceed 0.13 g/m²/day beyond the property boundary or beyond 50 metres of the discharge when sited on land where the public has free access, whichever is less.
15. All abrasive blasting is to be conducted with taking into account wind direction and wind strength, such that off-site effects are kept to a practicable minimum.

Consents 9606-2.0 & 10073-2.0

16. The consent holder shall keep a record of abrasive blasting, including, but not limited to the following information:
- Location (property address and map reference);
 - the type of blasting material used;
 - date; and
 - time/duration of work.

The record of mobile shall be made available to the Chief Executive, Taranaki Regional Council on request.

17. Noise generated by blasting within the Coastal Marine Area shall not exceed the following at any point landward of the boundary of the Coastal Marine Area.

Time (any day)	Limit
7am – 7pm	50 dB L_{Aeq} (15 mins)
7pm – 10pm	45 dB L_{Aeq} (15 mins)
10pm – 7am	40 dB L_{Aeq} (15 mins)
10pm to 7am	70 dB L_{Amax}

Noise shall be measured in accordance with the *New Zealand Standard NZS 6801:2008 Acoustic – Measurement of Environmental Sound* and assessed in accordance with *New Zealand Standard NZS 6802:2008 Acoustic Environmental Noise*.

18. Any exclusive occupation of the coastal space within 1 km of mean high water springs shall not occur for a period of more than 48 hours.
19. The discharge authorised by this consent is permitted to occur only within areas identified as “Open Coast” within the *Proposed Regional Coastal Plan for Taranaki* (as modified by council decisions, October 2019).

Review

20. 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 2023 and 3-yearly thereafter, 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 3 September 2020

For and on behalf of
Taranaki Regional Council

A D McLay
Director - Resource Management

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

Name of
Consent Holder: Energyworks Limited
PO Box 346
New Plymouth 4340

Decision Date: 11 November 2014

Commencement Date: 11 November 2014

Conditions of Consent

Consent Granted: To discharge stormwater via the New Plymouth District Council reticulated stormwater system into an unnamed tributary of the Waitaha Stream

Expiry Date: 01 June 2032

Review Date(s): June 2020, June 2026 and in accordance with special condition 8

Site Location: 231 Connett Road, Bell Block

Legal Description: Lots 79, 81-82 DP 14600 (Discharge source & site)

Grid Reference (NZTM) 1701300E-5679286N & 1701441E-5679341N

Catchment: Waitaha

*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 consent holder shall at all times adopt the best practicable option, as defined in section 2 of the Resource Management Act 1991, to prevent or minimise any adverse effects on the environment from the exercise of this consent.
2. The stormwater discharged shall be from a catchment area not exceeding 2.5 ha.
3. Constituents of the discharge shall meet the standards shown in the following table.

<u>Constituent</u>	<u>Standard</u>
pH	Within the range 6.0 to 9.0
suspended solids	Concentration not greater than 100 gm ⁻³
oil and grease	Concentration not greater than 15 gm ⁻³
free chlorine	Concentration not greater than 0.2 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.

4. After allowing for reasonable mixing, within a mixing zone extending 10 metres downstream of the point where the discharge enters the Waitaha Stream, the discharge shall not, either by itself or in combination with other discharges, give rise to any or all of the following effects in the receiving water:
 - 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 site shall be operated in accordance with the 'Stormwater Management Plan' prepared by the consent holder and approved by the Chief Executive, Taranaki Regional Council, acting in a certification capacity.
6. The consent holder shall maintain and regularly update a 'Contingency Plan' that details measures and procedures that will be undertaken in the event of a spill or an unauthorised discharge. The plan shall be approved by the Chief Executive, Taranaki Regional Council, acting in a certification capacity as being adequate to avoid, remedy or mitigate the environmental effects of such an event.

Consent 9962-1.0

7. 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 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.
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:
 - a) during the month of June 2020 and/or June 2026 and/or
 - b) within 3 months of receiving a notification under special condition 7 above;

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 11 November 2014

For and on behalf of
Taranaki Regional Council

A D McLay
Director - Resource Management

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

Name of
Consent Holder: Greymouth Facilities Limited
PO Box 3394
Fitzroy
New Plymouth 4341

Decision Date
(Change): 01 August 2014

Commencement Date
(Change): 01 August 2014 (Granted Date: 08 May 2014)

Conditions of Consent

Consent Granted: To discharge untreated stormwater from a yard used for storage and maintenance of hydrocarbon exploration drilling equipment directly onto and into land, and to discharge treated stormwater into the Waitaha Stream via the New Plymouth District Council reticulated stormwater system, from an interceptor

Expiry Date: 01 June 2032

Review Date(s): June 2017, June 2020, June 2023, June 2026, June 2029 and/or within 3 months of receiving a notification under special condition 13

Site Location: 58 Corbett Road, Bell Block

Legal Description: Lots 1 & 2 DP 16891 (Discharge source and site)

Grid Reference (NZTM) 1700523E-5678513N (source)
1700582E-5678541N (discharge from site)
1700889E-5679046N (discharge to stream)

Catchment: Waitaha

*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. This consent authorises the discharge of stormwater onto land only when the capacity of the primary discharge pipe to the New Plymouth District Council reticulated stormwater system is exceeded.
2. The consent holder shall record all occasions on which a discharge authorised by condition 1 occurs. These records shall be retained and be made available to the Chief Executive of the Taranaki Regional Council upon request.
3. The consent holder shall at all times adopt the best practicable option, as defined in section 2 of the Resource Management Act 1991, to prevent or minimise any adverse effects on the environment from the exercise of this consent.
4. The stormwater discharged shall be from a catchment area not exceeding 1.065 ha
5. Before 31 October 2014, the interceptor and bunding shall be installed such that stormwater shall be directed for treatment through the interceptor discharge in accordance with the special conditions of this permit.
6. 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
oil and grease	Concentration not greater than 15 gm ⁻³
chloride	Concentration not greater than 50 gm ⁻³

This condition shall apply before entry of the treated stormwater into the New Plymouth District Council reticulated stormwater system at a designated sampling point approved by the Chief Executive, Taranaki Regional Council.

7. For the purpose of assessing compliance with special condition 6 the consent holder shall install and maintain access to the designated sampling point.
8. After allowing for reasonable mixing, within a mixing zone extending 10 metres downstream of the discharge point, the discharge shall not, either by itself or in combination with other discharges, give rise to any or all of the following effects in the receiving water:
 - 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.*

Consent 9868-1.1

9. The consent holder shall maintain a contingency plan that details measures and procedures to be undertaken to prevent spillage or any discharge of contaminants not authorised by this consent. The contingency plan shall be followed in the event of a spill or unauthorised discharge and shall be certified by the Chief Executive, Taranaki Regional Council as being adequate to avoid, remedy or mitigate the environmental effects of such a spillage or discharge.
10. Within three months of the granting of this consent the consent holder shall prepare and maintain a stormwater management plan that documents how the site is to be managed to minimise the contaminants that become entrained in the stormwater. This plan shall be followed at all times, shall be certified by the Chief Executive, Taranaki Regional Council, and shall include but not necessarily be limited to:
- the loading and unloading of materials;
 - maintenance of conveyance systems;
 - general housekeeping; and
 - management of the structural and procedural controls in place to minimise the concentration of contaminant present in the discharge.
 - maintenance and cleaning of the interceptor

A Stormwater Management Plan template is available in the Environment section of the Taranaki Regional Council's web site www.trc.govt.nz.

11. The discharge of stormwater either from the interceptor to land, or directly to land, shall not result in the discharge of contaminants beyond the boundary of the site.
12. The concentration of hydrocarbons in the soil shall not exceed the soil acceptance criteria shown in the following table:

Contaminant	Soil acceptance criteria (mg/kg)	
<i>Total Petroleum Hydrocarbons</i>	C7-C9	590
	C10-C14	1400
	C15-C36	NA ¹
<i>Monoaromatic Hydrocarbons</i>	Benzene	0.0054
	Toluene	1.0
	Ethylbenzene	1.1
	Xylenes	0.61
<i>Polycyclic Aromatic Hydrocarbons</i>	Naphthalaene	0.043
	Non-carc. (Pyrene)	1.2
	Benzo(a)pyrene	0.85

¹ NA indicates contaminant not limiting as estimated health-based criterion is significantly higher than that likely to be encounter on site

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.

Consent 9868-1.1

14. This consent shall lapse on 30 June 2019, unless the consent is given effect to before the end of that period or the Taranaki Regional Council fixes a longer period pursuant to section 125(1)(b) of the Resource Management Act 1991.
15. 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:
 - a) during the month of in June 2017 and/or June 2020 and/or June 2023 and/or June 2026 and/or June 2029 and/or
 - b) within 3 months of receiving a notification under special condition 13 above;

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 01 August 2014

For and on behalf of
Taranaki Regional Council



A D McLay
Director - Resource Management

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

Name of
Consent Holder: Intergroup Limited
PO Box 58087
Botany
Auckland 2163

Decision Date: 31 March 2016

Commencement Date: 31 March 2016

Conditions of Consent

Consent Granted: To discharge treated stormwater from a liquid wastes processing and chemical consolidation facility onto and into land and into the Waitaha Stream via the New Plymouth District Council reticulated stormwater system

Expiry Date: 1 June 2032

Review Date(s): June 2020, June 2026 and/or within 3 months of receiving notification under special condition 8

Site Location: 28 Hudson Road, Bell Block

Grid Reference (NZTM) 1701296E-5678821N

Catchment: Waitaha

*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 consent holder shall at all times adopt the best practicable option, as defined in section 2 of the Resource Management Act 1991, to prevent or minimise any adverse effects on the environment from the exercise of this consent.
2. Before 31 May 2016 all areas of site used for storing unwashed storage vessels shall be bunded such that any stormwater is captured and directed to the site stormwater treatment system.
3. The stormwater discharged shall be from a catchment area not exceeding 0.4 Ha.
4. Constituents of the discharge shall meet the standards shown in the following table.

<u>Constituent</u>	<u>Standard</u>
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 before entry of the treated stormwater into the New Plymouth reticulated stormwater network at a designated sampling point approved by the Chief Executive, Taranaki Regional Council.

5. After allowing for reasonable mixing, within a mixing zone extending 10 metres downstream of the discharge point to the Waitaha Stream, the discharge shall not, either by itself or in combination with other discharges, give rise to any or all of the following effects in the receiving water:
 - 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.
6. The consent holder shall maintain and regularly update a 'Contingency Plan' that details measures and procedures that will be undertaken to prevent, and to avoid environmental effects from, a spillage or any discharge of contaminants not authorised by this consent. The plan shall be approved by the Chief Executive, Taranaki Regional Council, acting in a certification capacity.

Consent 4776-2.0

7. The site shall be operated in accordance with a 'Management Plan' prepared by the consent holder and approved by the Chief Executive, Taranaki Regional Council, acting in a certification capacity. The plan shall detail how the site is to be managed to minimise the contaminants that become entrained in the stormwater and shall include as a minimum:
 - a) details of unloading of materials to the central trade waste system;
 - b) general housekeeping; and
 - c) management of the stormwater treatment system.
8. 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.
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:
 - a) during the month of June 2020 and/or June 2026; and/or
 - b) within 3 months of receiving a notification under special condition 8 above;

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 31 March 2016

For and on behalf of
Taranaki Regional Council

A D McLay
Director - Resource Management

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

Name of Consent Holder:	GJ Meredith Limited	
Decision Date (Change):	14 July 2021	
Commencement Date (Change):	14 July 2021	(Granted Date: 4 June 2014)

Conditions of Consent

Consent Granted:	To discharge contaminants onto and into land associated with scrap metal storage and processing at 7 Catalina Place	
Expiry Date:	1 June 2032	
Review Date(s):	June 2026	
Site Location:	7 Catalina Place, Bell Block	
Grid Reference (NZTM)	1701719E-5679009N	
Catchment:	Waiongona Waitaha	
Tributary:	Mangaoraka	

*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 consent holder shall at all times adopt the best practicable option, as defined in section 2 of the Resource Management Act 1991, to prevent or minimise any actual or likely adverse effect on the environment associated with the discharge of contaminants from the site.
2. The discharge shall not result in any contaminants reaching any adjacent property.
3. The exercise of this consent shall not result in any contaminant concentration within groundwater, which after reasonable mixing, exceeds the background concentration for that particular contaminant.
4. 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.
5. Constituents in the soil shall not exceed the standards shown in the following table:

<u>Constituent</u>	<u>Standard</u>	<u>Where the standards came from</u>
Arsenic	70 mg/kg	Summary of Soil Contaminant Standards and Guideline Values (Table 54 – Industrial standards)
Cadmium (pH 5)	1,300 mg/kg	
Chromium (VI)	6,300 mg/kg	
Lead	3,300mg/kg	
Mercury	4,200 mg/kg	
Nickel	6,000 mg/kg	Australian NEPM [Schedule B1 Table 1A(1)] - guideline for Commercial/Industrial (2013 amendment) .
Sodium Adsorption Ratio (SAR)	12	Canadian Council of minister of the Environment – Soil Quality Guidelines for the Protection of Environmental and Health (Industrial)
MAHs PAHs TPH	Guidelines for Assessing and Managing Petroleum Hydrocarbon Contaminated Sites in New Zealand (Ministry for the Environment, 1999). Tables 4.11 and 4.14, for soil type sand.	Guidelines for Assessing and Managing Petroleum Hydrocarbon Contaminated Sites in New Zealand (Ministry for the Environment, 1999).

MAHs - benzene, toluene, ethylbenzene, xylenes
 PAHs - naphthalene, non-carc. (pyrene), benzo(a)pyrene eq.
 TPH - total petroleum hydrocarbons (C7-C9, C10-C14, C15-C36)

Consent 9911-1.3

6. This consent may not be surrendered at any time until the standards in condition 5 have been met.
7. 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 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 14 July 2021

For and on behalf of
Taranaki Regional Council



A D McLay

Director - Resource Management

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

Name of
Consent Holder: GJ Meredith Limited

Decision Date
(Change): 19 May 2021

Commencement Date
(Change): 19 May 2021 (Granted Date: 10 July 2014)

Conditions of Consent

Consent Granted: To discharge stormwater from scrap metal storage and processing into the Waitaha Stream and into an unnamed tributary of the Mangaoraka Stream via the New Plymouth District Council reticulated stormwater system

Expiry Date: 1 June 2032

Review Date(s): June 2026

Site Location: 7 Catalina Place, Bell Block

Grid Reference (NZTM) 1701708E-5679041N & 1701652E-5678874N

Catchment: Waiongana
Waitaha

Tributary: Mangaoraka

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

Consent 9912-1.2

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 consent holder shall at all times adopt the best practicable option, as defined in section 2 of the Resource Management Act 1991, to prevent or minimise any adverse effects on the environment from the exercise of this consent.
2. The stormwater discharged shall be from a catchment area not exceeding 1.2 hectares. As shown in the attached stormwater map (Appendix 1).
3. 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
oil and grease	Concentration not greater than 15 gm ⁻³
chloride	Concentration not greater than 50 gm ⁻³

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

4. From 1 April 2021 the consent holder shall ensure that there is always clear and safe all-weather access to a point where the discharge can be sampled to check compliance with condition 3 above.
5. After allowing for reasonable mixing, within a mixing zone extending 7 metres downstream of the discharge point, the discharge shall not, either by itself or in combination with other discharges, give rise to any or all of the following effects in the receiving water:
 - 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.
6. Within three months of the granting of this consent the consent holder shall prepare and maintain a contingency plan that details measures and procedures to be undertaken to prevent spillage or any discharge of contaminants not authorised by this consent. The contingency plan shall be followed in the event of a spill or unauthorised discharge and shall be certified by the Chief Executive, Taranaki Regional Council as being adequate to avoid, remedy or mitigate the environmental effects of such a spillage or discharge.

Consent 9912-1.2

7. Within three months of the granting of this consent, the consent holder shall prepare and maintain a stormwater management plan that documents how the site is to be managed to minimise the contaminants that become entrained in the stormwater. This plan shall be followed at all times, shall be certified by the Chief Executive, Taranaki Regional Council, and shall include but not necessarily be limited to:
 - a) the loading and unloading of materials;
 - b) general housekeeping; and
 - c) management of the interceptor system.

A Stormwater Management Plan template is available in the Environment section of the Taranaki Regional Council's web site www.trc.govt.nz.

8. 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.
9. This consent shall lapse on 30 September 2019, unless the consent is given effect to before the end of that period or the Taranaki Regional Council fixes a longer period pursuant to section 125(1)(b) of the Resource Management Act 1991.
10. 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 2020 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 19 May 2021

For and on behalf of
Taranaki Regional Council

A D McLay
Director - Resource Management

Appendix 1



Figure 1: Stormwater map for consent 9912-1.2 (Catalina PI)

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

Name of
Consent Holder: New Plymouth District Council
Private Bag 2025
New Plymouth 4342

Decision Date: 22 March 2017

Commencement Date: 22 March 2017

Conditions of Consent

Consent Granted: To discharge stormwater from industrial land in the Waitaha catchment via multiple outfalls between De Havilland Drive and State Highway 3 into the Waitaha Stream and various unnamed tributaries of the Waitaha Stream

Expiry Date: 1 June 2032

Review Date(s): June 2018, June 2020, June 2023, June 2026, June 2029

Site Location: Auster Place, Connett Road East, De Havilland Drive, Hudson Road, and Mustang Drive, Bell Block, New Plymouth

Grid Reference (NZTM) 1700890E-5679047N (discharge reference: 1)
1700898E-5679053N (discharge reference: 2)
1701065E-5678369N (discharge reference: 3)
1700876E-5678493N (discharge reference: A)
1701020E-5678500N (discharge reference: B)
1701047E-5678464N (discharge reference: C)
1701092E-5678383N (discharge reference: D)
1701190E-5678585N (discharge reference: E)
1700961E-5679207N (discharge reference: F)

Catchment: Waitaha

*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 consent holder shall at all times adopt the best practicable option, as defined in section 2 of the Resource Management Act 1991, to prevent or minimise any adverse effects on the environment from the exercise of this consent. Including by the appropriate use of planning and regulatory processes to ensure that sites, connecting to the stormwater network use methods of treatment and disposal of stormwater appropriate to the activity being undertaken on the site.
2. The stormwater discharged shall be from a catchment area not exceeding 110 Ha within the area identified in Appendix 1 (attached).
3. After allowing for reasonable mixing, within a mixing zone extending 10 metres downstream of any discharge point, the discharge shall not, either by itself or in combination with other discharges, give rise to any or all of the following effects in the receiving water:
 - 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.
4. The consent holder shall prevent, where practicable, or mitigate any erosion occurring as a result of the exercise of this consent.
5. The activity authorised by this consent shall not cause any increase in depth or frequency of flooding on downstream or adjacent properties.
6. After a date no later than 1 December 2020 the consent shall be exercised in accordance with a 'Catchment Management Plan' prepared by the consent holder and approved by the Chief Executive, Taranaki Regional Council, acting in a certification capacity. The plan shall detail how the catchment will be managed to ensure that the conditions of this consent are met and include as a minimum:
 - a) A plan of maintenance activities including but not limited to inspections, sump cleaning, and road sweeping.
 - b) A schedule of monitoring and reporting of the increase of semi-pervious and impervious surfacing in the catchment as a result of development.
 - c) Long-term planning to provide for the mitigation of any effects arising from any changes in characteristics of the discharge as a result of development within the catchment. This planning shall include as minimum; the identification of potential procedural, regulatory and/or structural mitigation measures to ensure that the flooding, erosion, and receiving water quality provisions of this consent are met for the duration of this consent.

Consent 0609-3.0

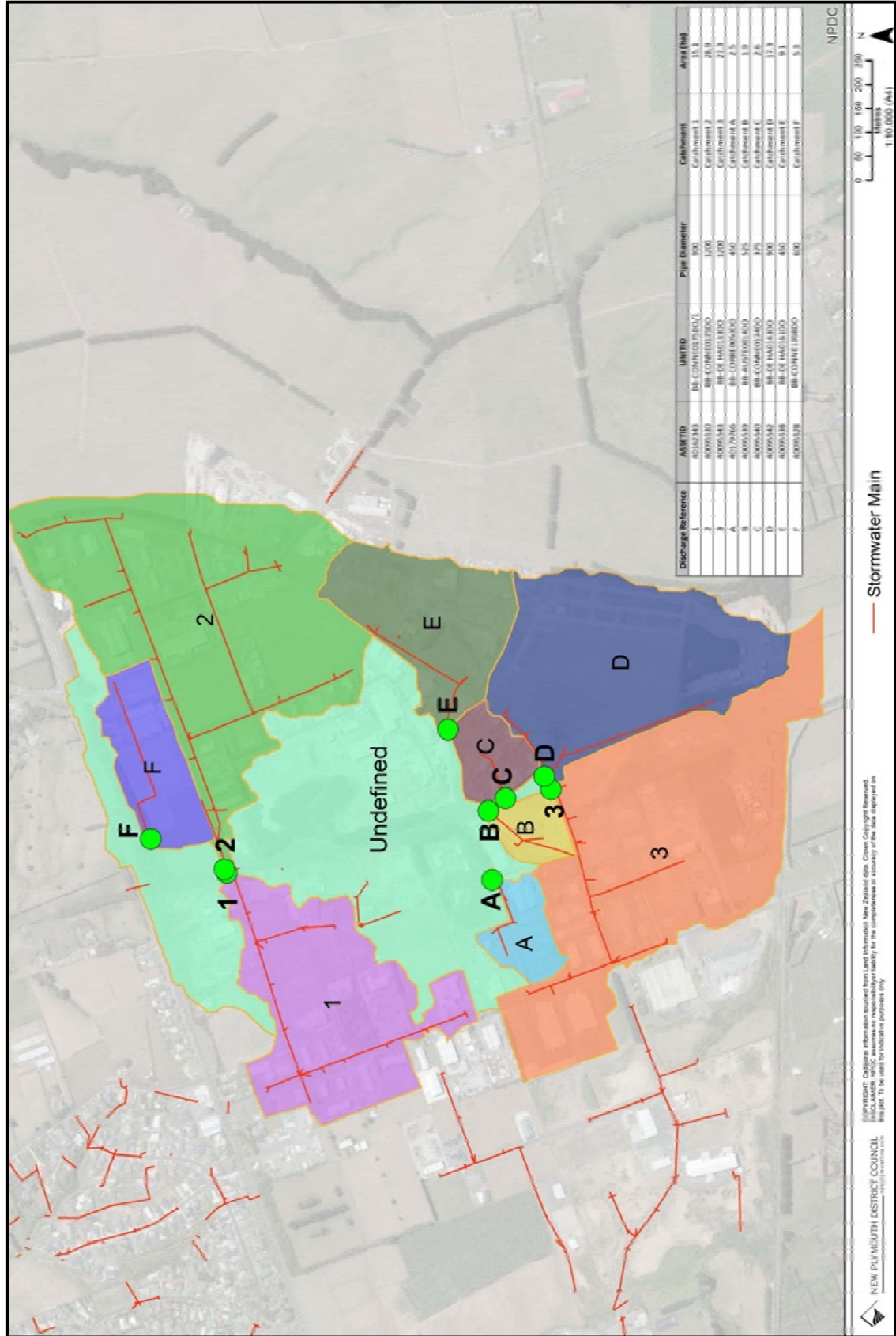
7. In accordance with section 128 and section 129 of the Resource Management Act 1991, the Taranaki Regional Council may serve notice of its intention to review, amend, delete or add to the conditions of this resource consent by giving notice of review during the month of June 2018, and/or June 2020, and/or June 2023, and/or June 2026, and/or June 2029, 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 March 2017

For and on behalf of
Taranaki Regional Council

B G Chamberlain
Chief Executive

Appendix 1- Map of stormwater catchment



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

Name of Consent Holder: Pounamu Oilfield Services Limited
PO Box 66
Oakura 4345

Decision Date: 11 July 2016

Commencement Date: 11 July 2016

Conditions of Consent

Consent Granted: To discharge treated and untreated stormwater from an oilfield engineering services premises onto land and into an unnamed tributary of the Waitaha Stream and into the Waitaha Stream

Expiry Date: 1 June 2032

Review Date(s): June 2018, June 2020, June 2026 and in accordance with special condition 9

Site Location: 10 Dakota Place, Bell Block

Grid Reference (NZTM) 1701080E-5678556N (discharge point 1)
1701045E-5678464N (discharge point 2)
1701161E-5678515N (discharge point 3)

Catchment: Waitaha

*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 consent holder shall at all times adopt the best practicable option, as defined in section 2 of the Resource Management Act 1991, to prevent or minimise any adverse effects on the environment from the exercise of this consent.
2. The stormwater discharged shall be from a catchment area not exceeding 2.267 Ha.
3. All stormwater shall be directed for treatment through a stormwater treatment system for discharge in accordance with the special conditions of this permit.
4. 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
oil and grease (to water)	Concentration not greater than 15 gm ⁻³
oil and grease (to land)	Concentration not greater than 25 gm ⁻³
dissolved zinc	Concentration not greater than 0.65 gm ⁻³
dissolved nickel	Concentration not greater than 0.1 gm ⁻³
dissolved copper	Concentration not greater than 0.05 gm ⁻³
acid soluble lead	Concentration not greater than 0.1 gm ⁻³

5. After allowing for reasonable mixing, within a mixing zone extending 10 metres downstream of any discharge point, the discharge shall not, either by itself or in combination with other discharges, give rise to any or all of the following effects in the receiving water:
 - 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.
6. The consent holder shall maintain and regularly update a 'Contingency Plan' that details measures and procedures that will be undertaken to prevent, and to avoid environmental effects from, a spillage or any discharge of contaminants not authorised by this consent. The plan shall be approved by the Chief Executive, Taranaki Regional Council, acting in a certification capacity.

Consent 4775-2.0

7. Within 3 months of this consent being granted the site shall be operated in accordance with a 'Management Plan' and approved by the Chief Executive, Taranaki Regional Council, acting in a certification capacity. The plan shall be updated as required and detail how the site is to be managed to minimise the contaminants that become entrained in the stormwater and ensure compliance with the conditions of this consent. It shall include as a minimum:
- a) the loading and unloading of materials;
 - b) proposed site remediation activities and timelines;
 - c) details, maps, and diagrams of current stormwater treatment measures;
 - d) detailed procedures for managing the lower wash pad interceptor to ensure no discharge of wash water to the Waitaha Stream system occurs; and
 - e) a timeline for the development of an alternative wash water collection/ disposal system that meet best practice requirements.
 - f) general housekeeping; and
 - g) details of the inspection and maintenance of stormwater treatment measures.

Note: A Stormwater Management Plan template is available in the Environment section of the Taranaki Regional Council's web site www.trc.govt.nz.

8. 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 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.
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:
- a) during the month of June 2018 and/or June 2020 and/or June 2026.
 - b) within 3 months of receiving a notification under special condition 8 above;

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.

Transferred at Stratford on 13 February 2019

For and on behalf of
Taranaki Regional Council

A D McLay
Director - Resource Management

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

Name of
Consent Holder: SRG Global Asset Services (Taranaki) Ltd
PO Box 7057
New Plymouth 4341

Decision Date 11 December 2020

Commencement Date 11 December 2020

Conditions of Consent

Consent Granted: To discharge emissions into the air from abrasive blasting operations at a permanent site at Corbett Road, Bell Block, and from mobile operations at various locations throughout the Taranaki region, excluding the Coastal Marine Area

Expiry Date: 1 June 2038

Review Date(s): June 2023, June 2026, June 2029, June 2032, June 2035

Site Location: 161 Corbett Road, Bell Block and various locations throughout the Taranaki region

Grid Reference (NZTM) 1701410E - 5677950N

*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 conditions of this consent shall apply to the various operations of the consent as follows:
 - a) Special Conditions 2 - 6 apply to all operations.
 - b) Special Conditions 7 - 10 apply to operations conducted within the permanent facility at 161 Corbett Road, Bell Block.
 - c) Special Conditions 11 - 17 apply to mobile blasting operations.
 - d) Condition 18 applies to the consent generally.

All Operations

2. The activity shall be undertaken in general accordance with the information provided in the application documentation. In the case of any contradiction between the application and the conditions of this consent, the conditions of the consent shall prevail.
3. The exercise of this consent shall not give rise to any offensive, objectionable, noxious, hazardous or dangerous levels of dust or odour beyond the boundary of the property on which the abrasive blasting is occurring.
4. As far as practicable, work areas and surrounding areas shall be cleared of accumulations of blasting material at the end of each blasting session and by the end of each working day.
5. Blasting media used for dry abrasive blasting shall contain less than 2% by dry weight dust able to pass through a 0.15 mm sieve and sand used for dry abrasive blasting shall contain less than 5% by dry weight free silica.
6. From 1 January 2021 onwards, all blasting operations and site management shall be undertaken in accordance with an Air Discharge Management Plan ('the Plan') that has been approved by the Chief Executive, Taranaki Regional Council, acting in a certification capacity. The plan shall detail procedures and methods that will be used to achieve compliance with the conditions of this consent and shall include, but not be limited to, details of:
 - a. Blasting operations;
 - b. Screening/ containment of offsite blasting;
 - c. Monitoring and maintenance of the blasting buildings and air discharge treatment systems;
 - d. Handling of potentially hazardous substances;
 - e. Recording of maintenance;
 - f. Staff training; and
 - g. General house keeping, site clean-up and yard maintenance

Discharges at the permanent facility at Corbett Road Bell Block

7. As far as practicable, all abrasive blasting at 161 Corbett Road, Bell Block shall be carried out in an enclosed booth or shed.
8. All emissions at 161 Corbett Road, Bell Block shall be contained and treated prior to discharge from the operations enclosure. All exhaust air ventilated or otherwise emitted from an enclosure shall be treated to concentration of total particulate matter of less than 125 mg/m³ [natural temperature and pressure] corrected to dry gas basis, at any time.
9. Any items to be blasted at 161 Corbett Road, Bell Block that are too large or otherwise not able to be blasted within the enclosed facility shall be screened by means of covers, tarpaulins, cladding, or other means, as completely as practicable, to contain dust emissions and depositions and, as far as practicable, to avoid any discharge beyond the immediate work area.
10. The dust deposition rate beyond the property boundary of the site at 161 Corbett Road arising from the discharge shall be less than 0.13 g/m²/day.

Operations conducted at any site other than the permanent facility

11. All items to be blasted shall be screened by means of covers, tarpaulins, cladding or other means, as completely as practicable, to contain dust emissions and depositions and, as far as practicable, avoid any discharge beyond the immediate work area.
12. Where abrasive blasting or surface coating is to take place within 25 metres of a watercourse or the sea, the consent holder shall notify the Chief Executive, Taranaki Regional Council, at least two working days before the activity commences. The notice shall include details of: the location, the specific blasting proposed, the screening (required by condition 11 above), dates and times of the discharge. It shall be served by completing and submitting the 'Notification of work' form on the Council's website (<http://bit.ly/TRCWorkNotificationForm>).

For clarity, this consent does not authorise any discharge to water except of contaminants of very small volumes that cannot practicably be contained and which have less than minor adverse environmental effects.

13. There shall be no discharge within 150 metres of:
 - a. any fenced (or otherwise identified) urupa without the written approval of the relevant Iwi; or
 - b. any marae, unless the written approval of the marae Chair has been obtained to allow the discharge at a closer distance.
14. The suspended particulate matter shall not exceed 3 mg/m³ [measured under ambient conditions], and the deposition of dust shall not exceed 0.13 g/m²/ day beyond the property boundary or beyond 50 metres of the discharge when sited on land where the public has free access, whichever is less.
15. All abrasive blasting is to be conducted with taking into account wind direction and wind strength, such the off- site effects are kept to a practicable minimum.

Consent 4056-3.0

16. Abrasive blasting within 200 metres of any dwelling house or property boundary may take place only after either public notice or individual notice to all affected owners or occupiers is given.
17. The consent holder shall keep a record of abrasive blasting, including but not limited to the following:
 - a. Location (property address and map reference);
 - b. The type of blasting material used;
 - c. Date; and
 - d. Time/ duration of work

The record of mobile blasting shall be made available to the Chief Executive, Taranaki Regional Council on request.

Review

18. 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 the review during the month of June 2023, and at 3 yearly intervals thereafter, 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 11 December 2020

For and on behalf of
Taranaki Regional Council



A D McLay
Director - Resource Management

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

Name of
Consent Holder: Symons Property Developments Limited
179 Surrey Hill Road
R D 4
NEW PLYMOUTH 4374

Decision Date: 9 May 2011

Commencement
Date: 9 May 2011

Conditions of Consent

Consent Granted: To discharge stormwater from a truck depot and pipe
cleaning facility into the Waitaha Stream at or about
(NZTM) 1700740E-5678991N and 1700804E-5679014N

Expiry Date: 1 June 2026

Review Date(s): June 2014, June 2020

Site Location: 141 to 145 Connett Road East, Bell Block, New Plymouth

Legal Description: Lot 6 DP 373725 Lot 26 DP 376382 and part of Lot 24 DP
376382 subject to survey [Discharge source & site]

Catchment: Waitaha

*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 to section 36 of the Resource Management Act.

Special conditions

1. The consent holder shall at all times adopt the best practicable option, as defined in section 2 of the Resource Management Act 1991, to prevent or minimise any adverse effects on the environment from the exercise of this consent.
2. The stormwater discharged shall be from a catchment area not exceeding 3.14 ha.
3. By 13 May 2011, all stormwater from part of Lot 24 DP 376382, as identified in Appendix I attached to this consent, shall be directed for treatment through the stormwater treatment system for discharge in accordance with the special conditions of this permit.
4. Any significant volumes of hazardous substances [e.g. bulk fuel] on site shall be:
 - a) contained in a double skinned tank, or
 - b) stored in a dedicated bunded area with drainage to sumps, or to other appropriate recovery systems, and not directly to the site stormwater system.
5. Constituents of the discharge shall meet the standards shown in the following table.

<u>Constituent</u>	<u>Standard</u>
pH	Within the range 6.0 to 9.0
suspended solids	Concentration not greater than 100 gm ⁻³
oil and grease	Concentration not greater than 15 gm ⁻³
chloride	Concentration not greater than 50 gm ⁻³
BOD	Concentration not greater than 5 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.

6. After allowing for reasonable mixing, within a mixing zone extending 10 metres downstream of the discharge point, the discharge shall not, either by itself or in combination with other discharges, give rise to any or all of the following effects in the receiving water:
 - 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.

7. 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.
8. The consent holder shall maintain a stormwater management plan. This plan shall be adhered to at all times and shall, to the satisfaction of the Chief Executive, Taranaki Regional Council document how the site is to be managed in order to minimise the contaminants that become entrained in the stormwater. The plan shall include but not necessarily be limited to:
 - a) the loading and unloading of materials;
 - b) maintenance of conveyance systems;
 - c) general housekeeping; and
 - d) management of the interceptor systems.

A Stormwater Management Plan template is available in the Environment section of the Taranaki Regional Council's web site www.trc.govt.nz.

9. 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 worknotification@trc.govt.nz.
10. The consent holder shall review the Symons Group Stormwater Management Plan and Symons Spill Contingency Plan prior to making any changes to the processes or operations undertaken at the site and/or on receiving written notice from the Taranaki Regional Council of:
 - the requirement to review the Plans;
 - the matters which shall be addressed within the plan review; and
 - the reasons or anticipated results of the matters requiring review.

The reviewed Plan(s) shall document all operations, maintenance activities, and mitigation and contingency measures and shall be submitted for approval to the Chief Executive, Taranaki Regional Council, acting in a certification capacity, at least two weeks prior to making any changes to the operations on site and/or within one month of receiving written notice of the requirement to review the Plan.

11. The data obtained from any investigations into the effectiveness of the stormwater detention tanks installed at the site is to be made available to the Chief Executive, Taranaki Regional Council upon request.

Consent 7805-1

12. This consent shall lapse on 30 June 2016, 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.
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:
 - a) during the month of June 2014 and/or June 2020 and/or
 - b) within 3 months of receiving a notification under special condition 9 above;

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 9 May 2011

For and on behalf of
Taranaki Regional Council

Director-Resource Management

Appendix I



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

Name of
Consent Holder: Taranaki Sawmills Limited
PO Box 7145
Fitzroy
New Plymouth 4341

Decision Date (Review): 6 August 2020

Commencement Date 6 August 2020 (Granted Date: 8 March 2018)
(Review):

Conditions of Consent

Consent Granted: To discharge stormwater from a sawmill site into the
Waitaha Stream

Expiry Date: 1 June 2032

Review Date(s): June 2026 and in accordance with special condition 9

Site Location: 32 Hudson Road, Bell Block

Grid Reference (NZTM) 1700934E-5678885N

Catchment: Waitaha

*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 consent holder shall at all times adopt the best practicable option, as defined in section 2 of the Resource Management Act 1991, to prevent or minimise any adverse effects on the environment from the exercise of this consent.
2. The stormwater discharged shall be from a catchment area not exceeding 10.75 Ha.
3. Constituents of the discharge shall meet the standards shown in the following table.

<u>Constituent</u>	<u>Standard</u>
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
biochemical oxygen demand	Concentration not greater than 10 gm ⁻³

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

4. From 1 April 2021 the consent holder shall ensure that there is always clear and safe all-weather access to a point where the discharge can be sampled to check compliance with condition 3 above.
5. After allowing for reasonable mixing, within a mixing zone extending 15 metres downstream of the discharge point, the discharge shall not, either by itself or in combination with other discharges, give rise to any or all of the following effects in the receiving water:
 - 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.
6. The consent holder shall maintain and regularly update a 'Contingency Plan' that details measures and procedures that will be undertaken to prevent, and to avoid environmental effects from, a spillage or any discharge of contaminants not authorised by this consent. The plan and any amended versions shall be provided to the Chief Executive of the Taranaki Regional Council.

Consent 2333-4.4

7. The site shall be operated in accordance with a 'Management Plan'. The plan shall detail how the site is managed to minimise the contaminants that become entrained in the stormwater, and generally ensure that the conditions of this consent will be met. It shall include as minimum:
- a) the loading and unloading of materials;
 - b) maintenance of conveyance systems;
 - c) general housekeeping; and
 - d) management of the interceptor system.

The Management Plan shall be made available to a Taranaki Regional Council Enforcement Officer upon request.

Note: A Stormwater Management Plan template is available in the Environment section of the Taranaki Regional Council's web site www.trc.govt.nz.

8. 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.
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:
- a) during the month of June 2020 and/or June 2026;
 - b) within 3 months of receiving a notification under special condition 8 above;

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 6 August 2020

For and on behalf of
Taranaki Regional Council

A D McLay
Director - Resource Management

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

Name of
Consent Holder: Taranaki Sawmills Limited
P O Box 7145
Fitzroy
NEW PLYMOUTH

Consent Granted
Date: 27 January 2004

Conditions of Consent

Consent Granted: To discharge emissions into the air from sawmilling and untreated timber processing and associated activities including the combustion of wood and/or coal within boilers and wastes in an open firepit at or about GR: Q19:110-405

Expiry Date: 1 June 2032

Review Date(s): June 2008, June 2014, June 2020, June 2026

Site Location: Hudson Road, Bell Block, New Plymouth

Legal Description: Lot 1 DP 13792 Blk II Paritutu SD

Catchment: Waitaha

Consent 4096-2

General conditions

- a) On receipt of a requirement from the Chief Executive, Taranaki Regional Council the consent holder shall, within the time specified in the requirement, supply the information required relating to the exercise of this consent.
- b) Unless it is otherwise specified in the conditions of this consent, compliance with any monitoring requirement imposed by this consent must be at the consent holder's own expense.
- c) The consent holder shall pay to the Council all required administrative charges fixed by the Council pursuant to section 36 in relation to:
 - i) the administration, monitoring and supervision of this consent; and
 - ii) charges authorised by regulations.

Special conditions

1. The consent holder shall at all times adopt the best practicable option, as defined in section 2 of the Resource Management Act 1991, to prevent or minimise any adverse effects on the environment from the exercise of this consent.
2. The consent holder shall minimise the emission and effects of contaminants discharged to air from the property, by the selection of the best practicable process equipment, process control equipment, contaminant abatement equipment, and methods of control, supervision and operation, and the proper and effective operation, supervision, control and maintenance of all equipment and processes at all times.
3. The exercise of this consent shall be undertaken generally in accordance with the documentation submitted in support of Application 2797. In the case of any contradiction between the documentation submitted in support of application 2797 and the conditions of this consent, the conditions of this consent shall prevail.
4. The Vekos boiler, stack and associated equipment shall be constructed, operated, and maintained generally as specified in the attachments to application 93/337 lodged with the Taranaki Regional Council on 18 August 1993. In the case of any contradiction between the documentation submitted in support of application 93/337 and the conditions of this consent, the conditions of this consent shall prevail.
5. Prior to undertaking any alterations to the plant, processes or operations, as specified in the application, which may significantly change the nature or quantity of contaminants emitted from the site, the consent holder shall consult with the Chief Executive, Taranaki Regional Council, and shall obtain any necessary approvals under the Resource Management Act 1991 and any amendments.
6. The consent holder shall notify the Chief Executive, Taranaki Regional Council, in writing as soon as is practicable, and in any case within one working day, of any use of coal as a fuel (whether as a sole fuel or blended with other fuels) on the site in the exercise of this consent. This condition applies when the intended or anticipated cumulative duration of the use of coal is more than 72 hours within any 14 day period.
7. The consent holder shall record all use of coal as a fuel, including the rate of consumption and the time and duration, and shall make this information available to the Chief Executive, Taranaki Regional Council, upon reasonable request.

Consent 4096-2

8. Within three months of the granting of this consent, the consent holder shall prepare and submit to the Chief Executive, Taranaki Regional Council, a management and operations plan for the combustion of wastes in the fire pit on the property. Upon the approval of the Chief Executive, Taranaki Regional Council, the consent holder shall thereafter maintain and comply with the plan. In the case of any contradiction between the plan and the conditions of this consent, the conditions of this consent shall prevail.
9. The plan for the management and operation of combustion of wastes in the firepit shall ensure a level of environmental performance that is to no less a level than that which would be achieved by compliance with the plan submitted in application 2797, and in particular but without exclusion or limitation, section 6.1.4 (B) and Appendix 3 of that application.
10. In the event of any incident having an adverse effect beyond the boundary of the property of the consent holder, the consent holder shall, as immediately as is practicable, notify the Chief Executive, Taranaki Regional Council.
11. The discharges authorised by this consent shall not give rise to any significant adverse ecological effect on any ecosystems in the Taranaki region.
12. The discharges authorized by this consent shall not give rise to an odour at or beyond the boundary of the site that is offensive or objectionable.
13. For the purposes of condition 12, without restriction, an odour shall be deemed to be offensive or objectionable if:
 - a) it is held to be so in the opinion of an enforcement officer of the Taranaki Regional Council, having regard to the duration, frequency, intensity and nature of the odour; and/or
 - b) an officer of the Taranaki Regional Council observes that an odour is noticeable, and either it lasts longer than three (3) hours continuously, or it occurs frequently during a single period of more than six (6) hours; and/or
 - c) no less than three individuals from at least two different properties, each declare in writing that an objectionable or offensive odour was detected beyond the boundary of the site, provided the Council is satisfied that the declarations are not vexatious and that the objectionable or offensive odour was emitted from the site as specified in (b). Each declaration shall include the individuals' names and addresses, the date and time the objectionable or offensive odour was detected, the location of the individual when it was detected and the prevailing weather conditions during the event. The declarations shall be signed and dated.
14. The discharges authorised by this consent shall not give rise to suspended or deposited dust at or beyond the boundary of the site that, in the opinion of at least one enforcement officer of the Taranaki Regional Council, is offensive or objectionable. For the purpose of this condition, ambient levels of dust in excess of the following limits are deemed to be offensive or objectionable:
 - a) dust deposition rate 0.13 g/m²/day; and/or
 - b) suspended dust level 1.5 mg/m³.
15. The consent holder shall control all emissions of sulphur dioxide to the atmosphere from the site, in order that the maximum ground level concentration of sulphur dioxide arising from the exercise of this consent measured under ambient conditions on land does not exceed 350 micrograms per cubic metre [one-hour average exposure] or 125 micrograms per cubic metre [twenty-four hour average exposure] at or beyond the boundary of the site.

Consent 4096-2

16. The consent holder shall control all emissions of particulate of effective diameter of less than 10 micrometres (PM10) to the atmosphere from combustion sources, whether alone or in conjunction with any other emissions from the site, in order that the maximum ground level concentration of PM10 arising from the exercise of this consent measured under ambient conditions does not exceed 50 micrograms per cubic metre [one hour average exposure], on more than 5 occasions per year cumulative across any and all monitoring sites, and does not exceed 120 micrograms per cubic metre [one hour average exposure] at any time, at or beyond the boundary of the site.
17. The discharges authorized by this consent shall not give rise to a level of a contaminant or contaminants at or beyond the boundary of the site that is noxious or toxic.
18. There shall be no emissions of dark smoke from the boiler stack(s) for any continuous period of 2 minutes or for more than 4 minutes cumulative in any 60 minute period, except:
 - a) during soot blowing, which may occur up to 4 times per day for a total cumulative duration of 20 minutes in any 24 hour period; and
 - b) during the first 30 minutes following the lighting up of any boiler
19. The minimum height of discharge of products of combustion from the boilers shall be 12 metres above the ground level prevailing at the time of lodging the application for this consent.
20. This consent shall lapse on the expiry of five years after the date of issue of this consent, 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.
21. 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 2008 and/or June 2014 and/or June 2020 and/or June 2026, for the purpose or purposes of:
 - a) 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; and/or
 - b) to address via a more appropriate condition or conditions any adverse effect on the environment arising from odour emissions or discharges of other contaminants to air; and/or
 - c) to further specify 'best practicable option' in terms of the consent holder's management, supervision, maintenance and/or operation of its processes on the property; and/or
 - d) to specify numerical values for any operating or environmental effects parameter.

Signed at Stratford on 27 January 2004

For and on behalf of
Taranaki Regional Council

Director-Resource Management

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

Name of
Consent Holder: Woodwards 2008 Limited
 P O Box 9036
 NEW PLYMOUTH 4351

Decision Date: 17 August 2011

Commencement
Date: 17 August 2011

Conditions of Consent

Consent Granted: To discharge emissions into air from the combustion of
 untreated timber wastes at or about (NZTM)
 1701037E-5678250N

Expiry Date: 1 June 2026

Review Date(s): June 2014, June 2020

Site Location: 124 De Havilland Drive, Bell Block

Legal Description: Lot 8 DP 11912 [Discharge site]

*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 to section 36 of the Resource Management Act.

Special conditions

1. The consent holder shall at all times adopt the best practicable option, as defined in section 2 of the Resource Management Act 1991, to prevent or minimise any adverse effects on the environment from the exercise of this consent including [but not limited to]:
 - having regard to the prevailing and predicted wind speed and direction at the time of burning in order to minimise offsite effects;
 - allowing the waste material to dry before burning;
 - starting a small fire with the driest material and adding further material once it is blazing, as opposed to igniting a large stack and leaving it unattended.
2. The materials for combustion are restricted to untreated wood and wood wastes; and shall be combusted only when placed in a pit no closer than 20 metres to any boundary.
3. There shall be no objectionable or offensive odour to the extent that it causes an adverse effect at or beyond the boundary of the site.

Note: For the purposes of this condition:

- The site is defined as Lot 8 DP 11912; and
 - Assessment under this condition shall be in accordance with the *Good Practice Guide for Assessing and Managing Odour in New Zealand, Air Quality Report 36, Ministry for the Environment, 2003.*
4. The consent holder, or an authorised agent, shall supervise burning at all times and the fires shall not be lit later than 12 noon on any day.
 5. The dust deposition rate beyond the property boundary arising from the discharge shall be less than 0.13 g/m²/day.
 6. Any discharge to air from the site shall not give rise to any offensive, objectionable, noxious or toxic levels of dust at or beyond the boundary of the property, and in any case, suspended particulate matter shall not exceed 3 mg/m³ [measured under ambient conditions] beyond the boundary of the site.
 7. The discharges authorised by this consent shall not give rise to a level of a contaminant or contaminants at or beyond the boundary of the site that is noxious or toxic.
 8. This consent shall lapse on 30 September 2016, 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 7881-1

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 2014 and/or June 2020, 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 August 2011

For and on behalf of
Taranaki Regional Council

Director-Resource Management

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

Name of
Consent Holder: Zelam Limited
 P O Box 7142
 NEW PLYMOUTH 4341

Change To 1 September 2009 [Granted: 13 February 2008]
Conditions Date:

Conditions of Consent

Consent Granted: To discharge emissions into the air from industrial
 agri-chemical formulation processes and associated
 processes at or about (NZTM) 1701317E-5678995N

Expiry Date: 1 June 2026

Review Date(s): June 2014, June 2020

Site Location: 13 Hudson Road, Bell Block

Legal Description: Lot 1 DP 17241 Blk II Paritutu SD

General conditions

- a) On receipt of a requirement from the Chief Executive, Taranaki Regional Council the consent holder shall, within the time specified in the requirement, supply the information required relating to the exercise of this consent.
- b) Unless it is otherwise specified in the conditions of this consent, compliance with any monitoring requirement imposed by this consent must be at the consent holder's own expense.
- c) The consent holder shall pay to the Council all required administrative charges fixed by the Council pursuant to section 36 in relation to:
 - i) the administration, monitoring and supervision of this consent; and
 - ii) charges authorised by regulations.

Special conditions

Conditions 1 to 6 [unchanged]

1. The consent holder shall at all times adopt the best practicable option, as defined in section 2 of the Resource Management Act 1991, to prevent or minimise any adverse effects on the environment from the exercise of this consent.
2. Prior to undertaking any alterations to the plant, processes or operations, which may significantly alter the nature or quantity of contaminants emitted from the site, the consent holder shall consult with the Chief Executive, Taranaki Regional Council, and shall obtain any necessary approvals under the Resource Management Act 1991.
3. The discharges authorised by this consent shall not give rise to any offensive or objectionable odour at or beyond the site boundary in the opinion of an enforcement officer of the Taranaki Regional Council.
4. The concentration of benzyl chloride discharge from any vent shall not exceed 1 part per million [vol/vol].
5. The discharge of particulate matter from any vent or source shall not exceed 125 milligrams per cubic metre corrected to 0 degrees Celsius, 1 atmosphere of pressure and a dry gas basis.
6. In the event of any incident arising from the discharge of contaminants to air having an effect beyond the boundary of the site, the consent holder shall contact the Chief Executive, Taranaki Regional Council as soon as is practicable.

Conditions 7 & 8 [changed]

7. The consent holder shall maintain the scrubber liquor of the forced draft scrubbers at or greater than pH 9.

Consent 4059-5

8. The consent holder shall monitor and record the pH of the forced draft scrubber liquors on a weekly basis. The consent holder shall forward this information in the form of a written report to the Chief Executive, Taranaki Regional Council, upon request.

Conditions 9 & 10 [new]

9. The consent holder shall maintain the excess free amine concentration of the scrubber liquor of the air displacement scrubber at or greater than 0.5%.
10. The consent holder shall monitor and record the excess free amine concentration of the scrubber liquor of the air displacement scrubber prior to each quaternary process run. The consent holder shall forward this information in the form of a written report to the Chief Executive, Taranaki Regional Council, upon request.

Conditions 11 & 12 [unchanged, formerly conditions 9 & 10]

11. The consent holder shall control all emissions to the atmosphere from the site so that the maximum ground level concentration for any particular contaminant arising from the exercise of this consent measured at or beyond the boundary of the site shall not exceed:
 - a) 1/30th of the relevant Occupation Threshold Value Time Weighted Average as defined in the Department of Labour Workplace Exposure Standards and Biological Indices for New Zealand; or
 - b) by more than the Short Term Exposure Limit as defined in the Department of Labour Workplace Exposure Standards and Biological Indices for New Zealand; or
 - c) if no Short Term Exposure Limit is set, more than three times the Time Weighted Average at any time.
12. 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 2014 and/or June 2020, 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 1 September 2009

For and on behalf of
Taranaki Regional Council

Director-Resource Management