Lower Waiwhakaiho
Air Discharges
Compliance Monitoring Programme
Annual Report
2018-2019

Technical Report 2019-71

ISSN: 1178-1467 (Online)
Document: 2358183 (Word)
Document: 2392768 (Pdf)

Taranaki Regional Council
Private Bag 713
STRATFORD

March 2020

Executive summary

The Lower Waiwhakaiho area of New Plymouth accommodates several industries that include three abrasive blasting operations, a fertiliser storage and distribution depot, and an asphalt plant. The companies hold resource consents to allow them to discharge emissions into the air. This report for the period July 2018 to June 2019 describes the monitoring programme implemented by the Taranaki Regional Council (the Council) to assess the companies' environmental performance during the period under review, and the results and environmental effects of the companies' activities in relation to emissions to the air.

The companies monitored during the period under review were Downer EDI Works Ltd, Fitzroy Engineering Group Ltd, Katere Surface Coatings Ltd, Intergroup Ltd, and Ravensdown Fertiliser Co-op Ltd.

The companies hold five resource consents, which include a total of 102 special conditions setting out the requirements that the companies must satisfy.

The Council's monitoring during the year under review included nine inspections and two deposition gauge surveys.

Overall, the companies assessed in this Lower Waiwhakaiho Air Discharge Compliance Monitoring Programme demonstrated a high level of environmental performance.

The deposition gauge surveys found that, in relation to dust resulting in deposited particulates, ambient air quality in the area during the year under review was good.

During the year, Downer EDI Works Ltd demonstrated a high level of environmental and administrative performance with their resource consent. Overall, the site was found to be well maintained.

During the year, Fitzroy Engineering Group Ltd demonstrated a high level of environmental and high administrative performance. Overall, there was a measured improvement in site management.

During the year, Katere Surface Coatings Ltd demonstrated a high level of environmental performance and a high level of administrative compliance with their resource consent. Overall, the site was found to be well maintained.

During the year, Ravensdown Fertiliser Co-op Ltd demonstrated a high level of environmental and administrative performance and compliance with their air discharge consent.

During the year, Intergroup Ltd demonstrated a good level of environmental and high administrative compliance with the resource consent. An abatement notice was issued for poor housekeeping practices onsite, which resulted in air discharges offsite that breached resource consent conditions. The issue was resolved and the likely environmental effect was considered to be low to negligible.

For reference, in the 2018-2019 year, consent holders were found to achieve a high level of environmental performance and compliance for 83% of the consents monitored through the Taranaki tailored monitoring programmes, while for another 13% of the consents, a good level of environmental performance and compliance was achieved.

This report includes recommendations relating to monitoring in the 2019-2020 year.

Table of contents

List of tables

List of figures

List of photos

1 Introduction

1.1 Compliance monitoring programme reports and the Resource Management Act 1991

1.1.1 Introduction

This report is the Annual Report for the period July 2018 to June 2019 by the Taranaki Regional Council (the Council) describing the results of the monitoring programme associated with the air discharge permits held by five industries in the Lower Waiwhakaiho area. The monitoring covers emissions to air from the companies' activities in the Fitzroy area of New Plymouth.

Since 1 October 1991, with the enactment of the *Resource Management Act 1991* (RMA), the Council has been the agency with primary responsibility for air quality management in the Taranaki region. Early in 1992, the Council initiated air quality monitoring programmes for industries holding discharge permits, and has subsequently issued and monitored air discharge permits for a number of other industrial and trade premises.

The Council began monitoring some of the industries in the Lower Waiwhakaiho area in 1992. This report is the 26th Annual Report to be prepared by the Council to cover the companies' air discharges and their effects. It is the 18th Annual Report to deal with emissions in the area as a combined monitoring report.

A separate report covers the results and findings of the Council's monitoring programmes associated with the water discharge permits held by some of these companies[1].

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 though annual programmes;
- the resource consents held by the companies in the Lower Waiwhakaiho area;
- the nature of the monitoring programme in place for the period under review; and
- a description of the activities and operations conducted in the Companies' site/catchment.

Each company's activity is then discussed in a separate section (Sections 2 to 7).

In the subsections for each company (e.g. Section 2.1) there is a general description of the industrial activity and its discharges, an aerial photograph or map showing the location of the activity, and an outline of the matters covered by the company's air discharge permit.

Subsection 1 provides a process description for each company.

Subsection 2 presents the results of monitoring of the companies' activities during the period under review, including scientific and technical data.

Subsection 3 discusses the results, their interpretation, and their significance for the environment in the immediate vicinity of the site under discussion.

Subsection 4 presents recommendations to be implemented in the 2019-2020 monitoring year.

---

[1] Lower Waiwhakaiho Catchment Monitoring Programme Annual Report, 2018-2019

Section 7 presents the results and findings in relation to any investigations, interventions, and incidents relevant to the Lower Waiwhakaiho area and discusses the deposition gauge results, their interpretation, and their significance for the environment in the Lower Waiwhakaiho area as a whole.

Section 8 presents a summary of recommendations made in relation to the monitoring of each company's activities.

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' inasmuch as is appropriate for each activity. Monitoring programmes are not only based on existing permit conditions, but also on the obligations of the RMA to assess the effects of the exercise of consents. In accordance with Section 35 of the RMA, the Council undertakes compliance monitoring for consents and rules in regional plans, and maintains an overview of the performance of resource users and consent holders. Compliance monitoring, including both activity and impact monitoring, enables the Council to continually re-evaluate its approach and that of consent holders to resource management and, ultimately, through the refinement of methods and considered responsible resource utilisation, to move closer to achieving sustainable development of the region's resources.

1.1.4 Evaluation of environmental and administrative performance

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 2018-2019 year, consent holders were found to achieve a high level of environmental performance and compliance for 83% of the consents monitored through the Taranaki tailored monitoring programmes, while for another 13% of the consents, a good level of environmental performance and compliance was achieved.[2]

---

[2] The Council has used these compliance grading criteria for 15 years. They align closely with the 4 compliance grades in the MfE Best Practice Guidelines for Compliance, Monitoring and Enforcement, 2018

1.2 Resource consents

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.

A list of the companies holding air discharge permits monitored as part of the Lower Waiwhakaiho Air Discharges Compliance Monitoring Programme is given in Table 1, and their locations are shown in Figure 1. Copies of the full consents are included (in alphabetical order) in Appendix I.

Table 1 Air discharge permits in the Lower Waiwhakaiho

Consent Holder	Consent No	Description	Granted	Next Review Date	Expiry Date
Air discharge permits					
Downer NZ Ltd	4060-4	To discharge emissions into the air from the manufacture of hot mix asphalt paving mixes and associated activities	March 2005	-	June 2020
Fitzroy Engineering Group Ltd	4025-3	To discharge emissions into the air from abrasive blasting operations and associated activities at the Fitzroy Engineering Group Ltd factory site and from yard blasting operations and from mobile abrasive blasting at various locations throughout the Taranaki region	November 2006	-	June 2020
Intergroup Ltd	7468-1	To discharge emissions to air from mobile blasting operations throughout the Taranaki region (excluding the Coastal Marine Area) and at a permanent facility	May 2009	-	June 2020
Katere Surface Coatings Ltd	4475-2	To discharge emissions to air from abrasive blasting and surface coating activities at a permanent site located at Katere Road, New Plymouth and from mobile operations throughout the Taranaki region including within the Coastal Marine Area at Port Taranaki	February 2009	-	June 2020
Ravensdown Ltd	4024-3	To discharge emissions into the air from the storage, blending and distribution of fertiliser	December 2008	June 2020	June 2026

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 air quality monitoring programme for the industries in the Lower Waiwhakaiho area consisted of up to three 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

Each site was visited up to three times during the monitoring period. Inspections focused on plant processes with associated actual and potential emission sources and characteristics, including potential odour, dust, noxious or offensive emissions. Sources of data being collected by the consent holder were identified and accessed, so that performance in respect of operation, internal monitoring, and supervision could be reviewed by the Council. The neighbourhood was surveyed for environmental effects.

1.3.4 Particulate deposition monitoring

Atmospheric particulate matter can arise from a number of sources, both natural and from human activity, for example vegetation pollens, smoke and ash, sea spray, dust from soils and paved surfaces, and manufacturing processes. While extremely fine particles may remain floating in the atmosphere for weeks or months, coarser dusts may settle out within timeframes ranging from a few seconds to minutes.

The environmental effects of dusts include loss of visibility, loss of the amenity and aesthetic values of a 'clear sky', irritation to breathing, and soiling of surfaces. It has been found that background rates of dust deposition in rural areas of New Zealand are typically 0.1-1.5 g/m^2/30 days, while in urban areas rates are generally higher, in the range of 0.6-3.0 g/m^2/30 days. From experience, rates above 3-4 g/m^2/30 days tend to lead to complaints by neighbours over the objectionable or offensive nature of dust emissions from particular sources.

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. From past results of deposition gauging it is likely that factors including seasonal weather variations, vehicle traffic about the site and the type of work being conducted can have some effect on the results.

Deposition gauges are basically buckets elevated on a stand to about 1.6 m. The buckets have a solution in them to ensure that any dust that settles out of the air is not re-suspended by wind. During processing, any insects and/or vegetative matter is removed by a 150 µm filter.

As a part of the Lower Waiwhakaiho Air Discharge Compliance Monitoring Programme, deposition gauges were placed in the vicinity of selected sites on two occasions during the year, and the collected samples were analysed for deposited particulate. The monitoring locations are shown in Figure 1. The gauges were left in place for approximately three weeks, on two separate occasions.

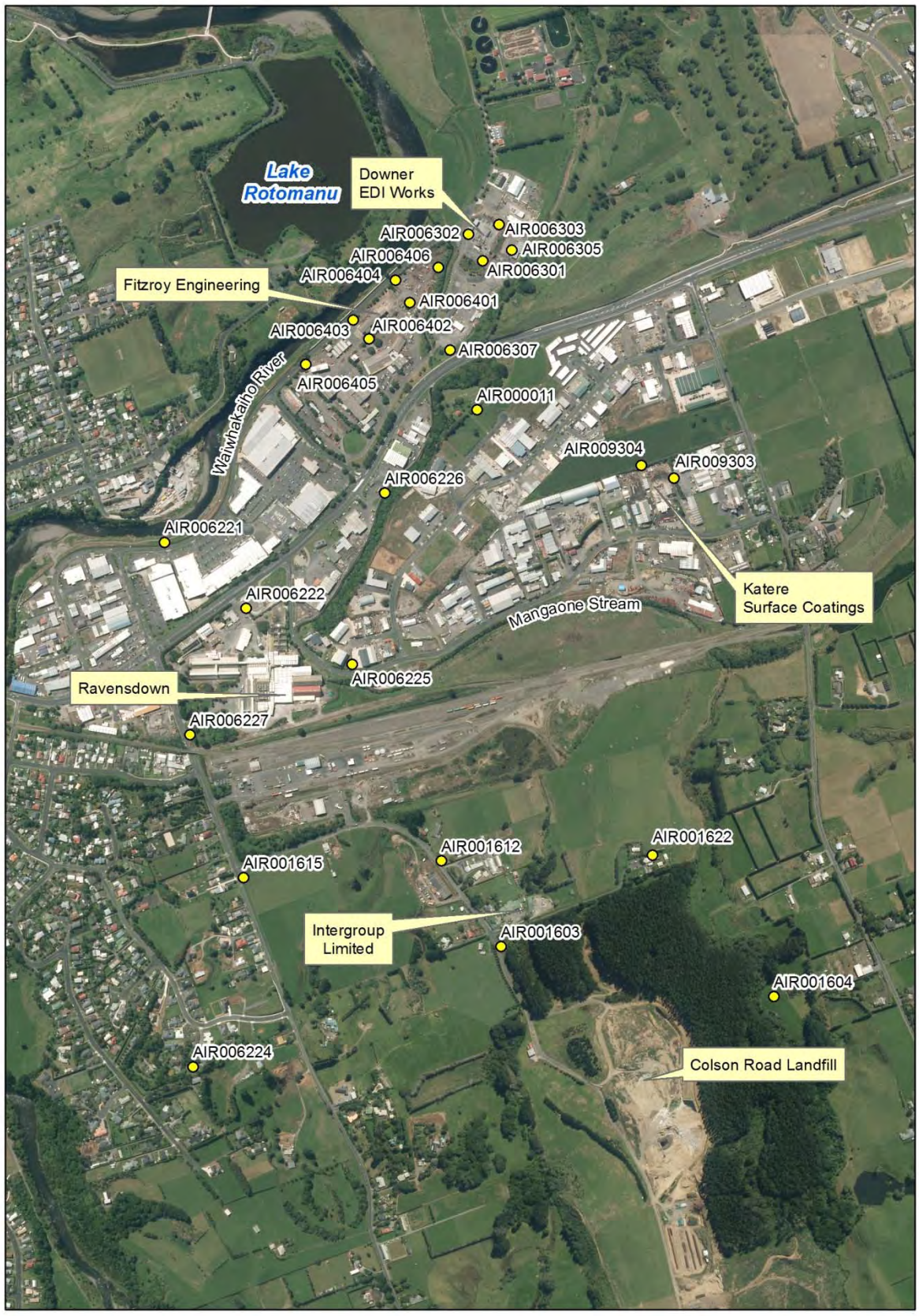


Figure 1 Location of industries holding air discharge permits, regional landfill and monitoring sites within the Lower Waiwhakaiho area

Photo 1 Examples of a deposition gauge set up and recovered filter pads

The rate of dustfall is calculated by dividing the weight of insoluble material (grams) collected by the cross-sectional area of the gauge m^2 and the number of days over which the sample was taken. The units of measurement are $g/m^2/day$.

Guideline values used by the Council for dust deposition are 4 g/m^2/30 days or 0.13 g/m^2/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. This guideline value has been incorporated as a limit in the companies' consents.

1.4 Incidents, investigations, and interventions

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

For all significant compliance issues, as well as complaints from the public, the Council maintains a database record. The record includes events where the individual/organisation concerned has itself notified the Council. Details of any investigation and corrective action taken are recorded for non-compliant events.

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

Details of incidents, investigations and interventions are provided under each Company's section of this report.

2 Downer EDI Works Ltd

2.1 Introduction

2.1.1 Process description

The purpose of the Downer EDI Works Ltd (Downer) plant is to produce asphalt for use on roads and driveways etc. A permanent drum mix plant has replaced the batch plant and mobile plant that were formerly in use at the site.

The asphalt production is achieved by the following processes. The plant is a parallel-flow drum mix plant consisting of a rotary drum (which is used to both dry and heat the aggregate and to mix the hot aggregate with bitumen), a dual fuel burner and integral combustion air fan, a bitumen drum injection system and expansion box. Aggregate is transferred into the rotating drum at the burner end and then travels down the slightly inclined rotating drum where products of combustion and excess air dry and heat the aggregate. The drum is fitted with flights, which achieve a lifting motion ensuring good contact between the drying gases and the aggregate. Hot liquid bitumen is injected into the drum about half way down. A steam barrier from the drying aggregate, and burner design, prevents the burner from impinging on the hot bitumen. Hot mix temperatures range from 135 °C to 170°C depending on the blend, and mixes generally contain about 5% bitumen. The product is removed continuously by a conveyor at the end of the drum and is transferred to insulated storage bins prior to discharge into trucks.

The spraying of bitumen into the aggregate, and the steam generated by drying the aggregate removes a substantial proportion of the entrained dust. The combustion products, dust, bitumen volatiles, and pyrolysis products are drawn through an expansion box where large dust particles settle out and drop into the aggregate/bitumen mix. The emissions then pass through a venturi water scrubber, which injects water into the exhaust gas stream and centrifugally separates out the water/dust prior to discharge from the 17 m stack.

Road patching mix can be manufactured in a pugmill serviced via a by-pass conveyor.

The current drum mix plant was installed in 2006. It has a maximum production rate of 80 tonnes per hour, but is normally operated at around 50 tonnes per hour, with the typical annual operating time being around 200 to 400 hours per year.

The major components of this drum mix plant were either new or refurbished, with only items such as the aggregate storage facilities, control room and weighbridge being existing facilities. The scrubber settling ponds, although existing, were deepened to increase retention/settling time.

The drum burner for this plant operates primarily on natural gas but with dual fuel capability. The plant is able to operate on diesel oil, primarily to give some commercial advantage when negotiating fuel contracts. The burner has a rated capacity of 12 MW gross, but the plant requires only 7 MW gross on average at the plant's maximum production rate of 80 tonnes per hour.

Diesel and kerosene are not blended or stored at the site but at Port Taranaki. If diesel firing of the dual fuel drum burner was required, the consent holder advised that the existing self bunded (double skinned) 10,000 litre fuel tank would be used for fuel storage.

The plant is designed to be capable of processing recycled asphalt, and Downer indicated that they may want to introduce this at a later date. However no information was provided to the Council at the time of their resource consent application regarding the potential effects from the processing of recycled asphalt paving and so it is not currently permitted by their consent.

The main potential issues associated with the discharges to air from the site are particulates, silica, organic compounds, carbon monoxide, nitrogen oxides and sulphur dioxide.

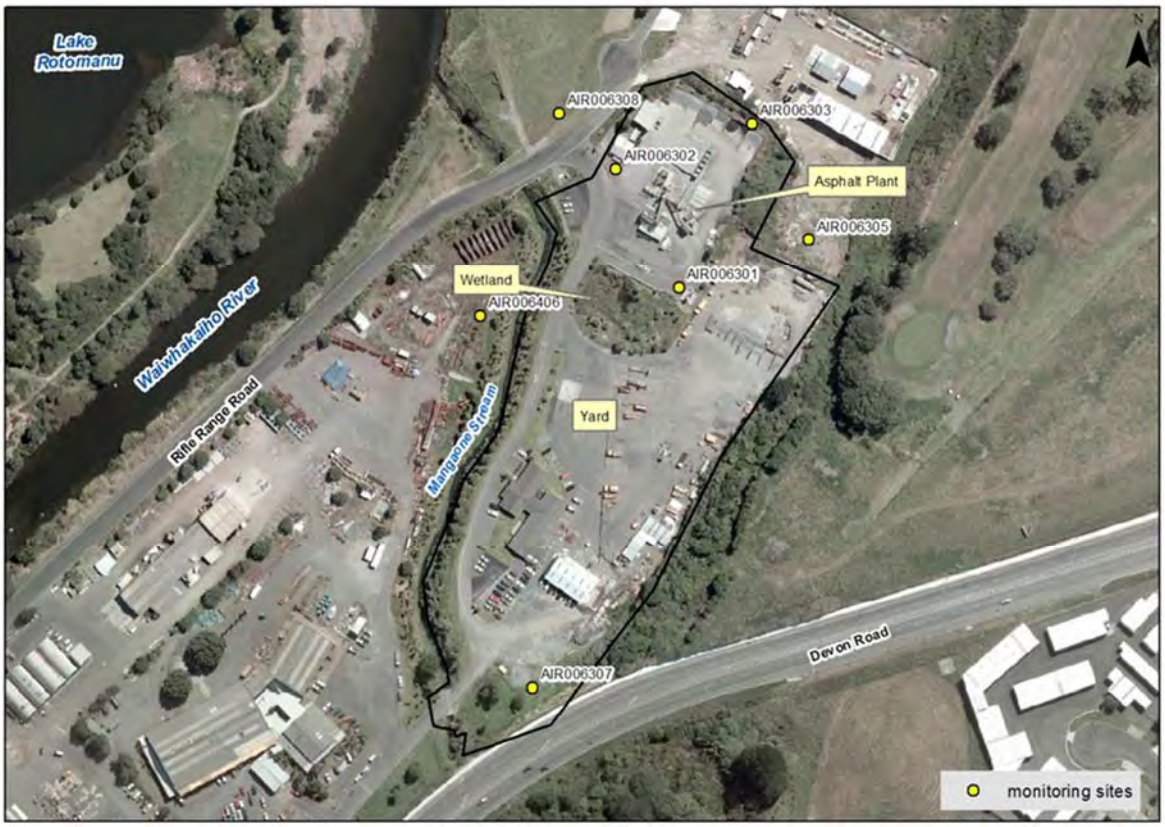


Figure 2 Location of Downer EDI Works Ltd and related deposition gauge sites

In addition to the emissions from the asphalt plant itself during normal operation, the main sources of additional particulates are:

- storage and movements of aggregate and crusher dust, the effects of which are mitigated by keeping the materials damp;
- washing out of the drum between substantially different batches of asphalt;
- run-out of aggregate loaded in excess of requirements;
- fugitive emissions, which are controlled by ensuring that adequate monitoring and maintenance is undertaken by operators at the site, and
- mobilisation of dust from the yard surface due to truck movements. The roads and yard areas have been progressively hard paved and these surfaces are kept damp when appropriate. The yard has been equipped with water sprays to assist in minimising dust during windy weather. Spillage of aggregate is scraped up and the area washed down as necessary. A speed limit of 10 km/h has been imposed to reduced dust generation from vehicle movements in dry weather.

Some of the total organic carbon (TOC) emissions can produce a noticeable odour, however it is expected that these odours would dissipate sufficiently so that they are not considered to be offensive beyond the boundary of the site. Bitumen odour can be apparent beyond the boundaries of the premises resulting from the dumping of hot mix or patching mix into waiting trucks. When the material is deposited in the truck, a moderate cloud of bitumen smoke may drift downwind. This event is of short duration.

Most of the sulphur dioxide and nitrogen oxides produced by the burning of fossil fuels in the plant are removed by the water scrubber in the cyclone.

Ground level concentrations of carbon monoxide and silica are estimated to be well below relevant guidelines.

2.2 Results

2.2.1 Inspections

Three inspections were carried out in the 2018-2019 period; these were conducted on the 13 December 2018, 1 May 2019, and 28 June 2019. Results from the inspections are below.

13 December 2018

An inspection was undertaken in fine weather conditions. The asphalt plant was not operating at the time of inspection, and there was no odour beyond the boundary of the property.

The site was tidy and compliant with resource consent conditions at the time.

1 May 2019

An inspection of the yard and plant was carried out in fine weather with light wind conditions. The plant was tidy with no dust or odour discharging beyond the boundary.

Overall, the site was compliant with resource consent conditions at the time.

28 June 2019

An inspection was undertaken in fine, cool weather with light wind conditions. An unexpected drum fire the day before had been well-managed and contained by staff onsite, with all discharges of contaminated stormwater and material contained within the treatment system. Clean-up was still ongoing at the time, and the rest of the site and yards were operating at their usual high standard and were in a tidy condition. Changes to the bitumen mix now included a low percentage of plastic flakes, and advice was given to ensure that these did not become mobilised and enter the stormwater system.

2.2.2 Results of receiving environment monitoring

2.2.2.1 Deposition gauging

Deposition gauges were deployed on two occasions during the monitoring period. The first deployment began in January 2019 and lasted 21 days. The second deployment began in February 2019 and lasted 22 days.

A site map marking the location of the gauges around the Downer site is shown in Figure 2, with the monitoring site locations also described in Table 2.

Material from the gauges was analysed for solid particulates with the results shown in Table 3. The prevailing wind directions during the surveys are shown in Appendix II.

Table 2 Downer EDI Works Ltd air monitoring site locations

Site code	Location description	At or beyond site boundary
AIR006301	Approx. 80 m SE of asphalt plant	Inside boundary
AIR006302	NW of asphalt plant approx. 10 m from Rifle Range Road	Inside boundary
AIR006303	NE of asphalt plant approx. 50 m along screening bank	Inside boundary
AIR006305	East. Near golf course track	Outside boundary
AIR006307	Between southern site entrance and Devon Road	Inside boundary

For an industry such as this, relatively high deposition rates are expected due to handling and processing of aggregate material. As can be seen from Table 3, five of the ten samples collected and analysed during the

year under review exceeded the Council's recommended guideline value of 0.13 g/m^2/day, or the consent limit of 4 g/m^2/30 days for deposited particulate at monitoring locations at the site boundary.

January 2019 survey

Two gauges (sites AIR006303 and AIR006305) showed elevated rates close to the guideline limit during the January survey, however there was also vegetative matter in the sample.

The appearance of the particulate matter collected was consistent with re-suspended yard dust from the surrounding area and vegetation.

February 2019 survey

Three gauges (sites AIR006302, AIR006303 and AIR006305) showed elevated rates at or above the guideline limit during the February survey.

The material collected ranged from green brown to dark brown. The appearance of the particulate matter collected was consistent with a high input from vegetation as opposed to re-suspended yard dust.

Table 3 Deposition gauge results from around the Downer EDI Works Ltd site

Site ID	Dust deposition rate (g/m^2/day)	
	Run 1 from 08/01/2019 to 29/01/2019	Run 2 from 05/02/2019 to 27/02/2019
AIR006301	0.05	0.11
AIR006302	0.07	**0.13**
AIR006303	**0.19**	**0.62**
AIR006305	**0.17**	**0.42**
AIR006307	0.03	0.06
Guideline value:	0.13 g/m^2/day	

Key: Results in bold are at recommended guideline value

2.2.3 Investigations, interventions, and incidents

Table 4 below sets out details of any incidents recorded, additional investigations, or interventions required by the Council in relation to Downer's activities during the 2018-2019 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 4 Incidents, investigations, and interventions summary table

Date	Details	Compliant (Y/N)	Enforcement Action Taken?	Outcome
January & February 2019	Exceedance in deposition rate	Y	None	Likely as a result of vegetative matter found in the gauge and re-suspended yard dust from the surrounding area.

2.3 Discussion

2.3.1 Discussion of site performance

Routine compliance monitoring inspections during the year under review found that activities at the site were well managed. There were no off site effects found from either dust or odour due to Downer's activities at the time of inspection. The asphalt plant was in operation on one of the three compliance monitoring inspections undertaken.

In terms of potential dust issues it is considered that activities at the site were generally well managed. There were five exceedances of the particulate deposition rate guideline value, or the consent limit, however the highest results were due to the presence of vegetative matter, and all others were only minor exceedances of the limit, potentially also affected by vegetative matter.

There were no dust or odour complaints received by the Council.

2.3.2 Environmental effects of exercise of consents

Deposition gauging was conducted for the 58th and 59th time during the 2018-2019 monitoring year around the Downer site.

The results from the dust deposition gaugings show that of the ten samples collected during the 2018-2019 period, five were in excess of the particulate deposition rate guideline values adopted by the Council (Figure 3). However, the results could not be directly attributed to Downer's site; rather the high particulate deposition was more likely due to vegetation input and yard dust re-suspension from the wider area. Predominant winds during the first gauging period were split between south westerlies and westerlies. During the second period this was split between south westerlies, and southeast and easterlies (Appendix II). Particularly due to these variable winds, the neighbouring properties cannot be discounted as potential contributors to the high deposition rate.

It is noted that there were no complaints received by the Council in relation to dust issues from the Downer site during the 2018-2019 year.

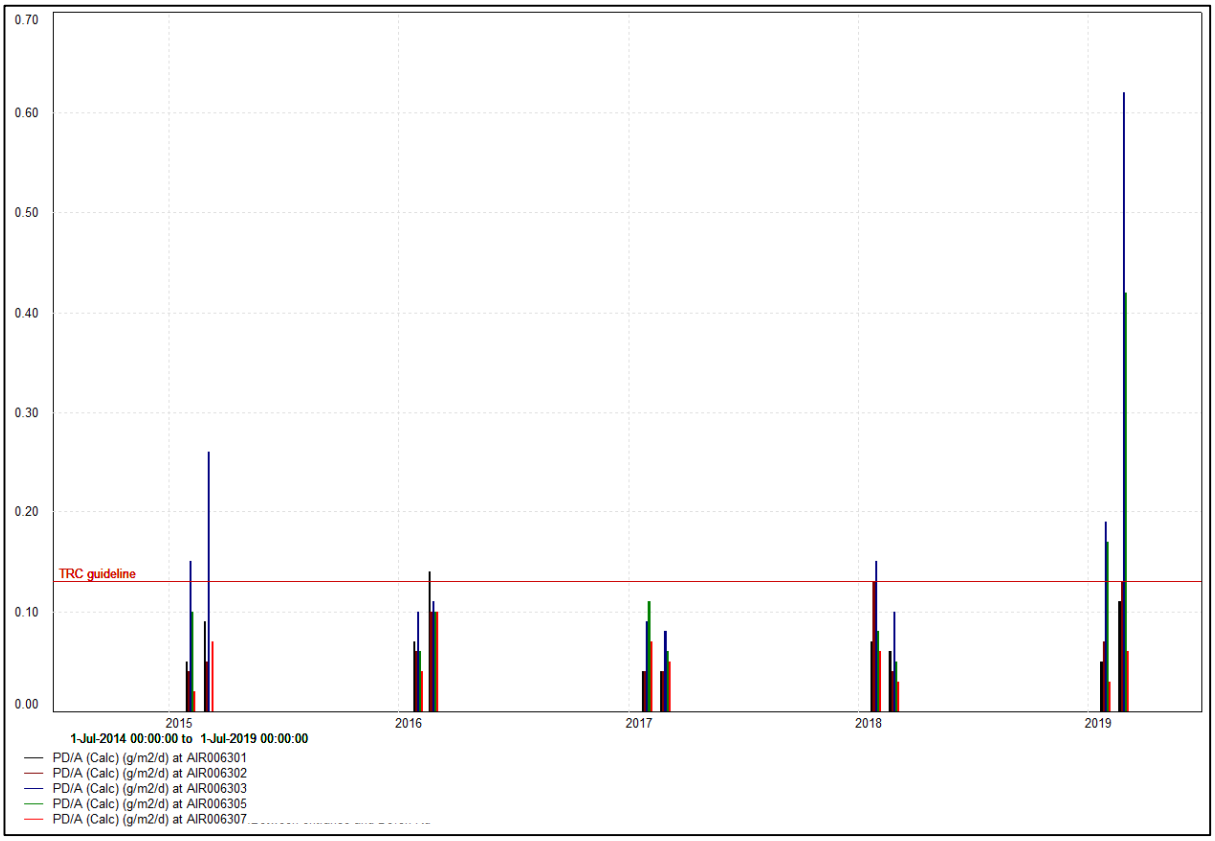


Figure 3 Deposition gauge results at Downer EDI Works monitoring sites (July 2014 – July 2019)

2.3.3 Evaluation of performance

A tabular summary of Downer's compliance record for the year under review is set out in Table 5.

Table 5 Summary of performance for Consent 4060-4, Downer EDI Works Ltd discharge of emissions to air

Purpose: ***To discharge emissions to air from the manufacture of hot mix asphalt paving mixes and associated activities***		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
1. Exercised in accordance with the application	Inspection	Yes
2. Adoption of action likely to minimise adverse effects on the environment	Inspection, liaison with consent holder	Yes
3. Approval prior to alterations to plant or processes	Inspection and liaison with consent holder	N/A
4. Prohibition of recycled asphalt processing	Inspection and liaison with consent holder	Yes

Purpose: *To discharge emissions to air from the manufacture of hot mix asphalt paving mixes and associated activities*		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
5. Reduction of noxious emissions through six monthly burner maintenance	Discussed during inspection	Yes
6. Operation using waste oil not permitted	Inspection and liaison with consent holder	Yes
7. Sulphur content of fuel	Discussed during inspection. Diesel not used in asphalt plant	Yes
8. Treatment prior to gas discharge	Inspection found emissions captured and treated satisfactorily. No complaints received. Emissions monitoring undertaken twice during the monitoring period	Yes
9. Stack emissions testing between 2016-2020	Review of documentation provided to the Council. Plant conditions required for monitoring clarified	N/A
10. Definition of methodology to be used for stack emissions testing	Review of documentation provided to the Council	N/A
11. Particulate deposition rate at site boundary	Deposition gauge monitoring	Five of ten gauges above limit, but may be attributable to vegetation input
12. Objectionable odour or level of dust not permitted at site boundary	Inspection and observation when inspecting officer is in the vicinity of the site on other business	Yes
13. Definition of factors constituting an objectionable odour	N/A	N/A
14. Limit on suspended particulate matter at or beyond boundary	No visible dust at boundary at inspection	Yes
15. No noxious or toxic levels of airborne contaminants at site boundary	Inspection and observation when inspecting officer is in the vicinity of the site on other business	Yes
16. Control of ground levels of nitrogen dioxide	Future monitoring as required	N/A
17. Control of ground levels of sulphur dioxide	Compliance previously demonstrated, and consent holder did not use diesel during year under review	N/A
18. Minimisation of dust emissions from aggregate and crusher dust through treatment and shielding	Inspection and observation when inspecting officer is in the vicinity of the site on other business. No dust complaints received	Yes
19. Cleaning of yard	Inspection and observation when inspecting officer is in the vicinity of the site on other business. No dust complaints received	Yes

Purpose: *To discharge emissions to air from the manufacture of hot mix asphalt paving mixes and associated activities*		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
20. Duration of smoke discharges	Inspection and observation when inspecting officer is in the vicinity of the site on other business. No complaints received regarding visible emission/smoke	Yes
21. Maintenance of equipment important to controlling emissions	Information discussed at inspection and observation when inspecting officer is in the vicinity of the site on other business	Yes
22. Inspection of water scrubber and settling pond	Discussed at inspection	Yes
23. Maintenance of a log	Discussed at inspection	Yes
24. Availability of log to Chief Executive of the Council	Available on request	Yes
25. Maximum temperature in hotmix drum	Inspection and liaison with consent holder	Yes
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**

During the year, the Downer EDI Works Ltd demonstrated a high level of environmental performance and administration performance and compliance with their resource consent, as defined in Section 1.1.5. No unauthorised incidents were recorded in relation to their activities on the site. The likely environmental effects of this discharge were considered to be low to negligible.

Although there were exceedances of the particulate deposition rate recorded, these were considered to be a result of vegetation input and yard dust re-suspension from the surrounding area, and no complaints were received in relation to their activities during the year.

2.3.4 Recommendations from the 2017-2018 Annual Report

In the 2017-2018 Annual Report, it was recommended:

1. THAT monitoring of consented activities at the Downer EDI Works Ltd site in the 2018-2019 year continues at the same level as in 2017-2018.

This recommendation was implemented.

2.3.5 Alterations to monitoring programmes for 2019-2020

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 the 2019-2020 year the programme continues at the same level as in 2018-2019.

It should be noted that the proposed programme represents a reasonable and risk-based level of monitoring for the site in question. The Council reserves the right to subsequently adjust the programme from that initially prepared, should the need arise if potential or actual non-compliance is determined at any time during 2019-2020.

2.4 Recommendation

1. THAT monitoring of consented activities at the Downer EDI Works Ltd site in the 2019-2020 year continues at the same level as in 2018-2019.
2. THAT should there be issues with environmental or administrative performance in 2019-2020, monitoring may be adjusted to reflect any additional investigation or intervention as found necessary.

3 Fitzroy Engineering Group Ltd

3.1 Introduction

3.1.1 Process description

Fitzroy Engineering Group Ltd (Fitzroy Engineering) carries out abrasive blasting to clean and prepare surfaces for painting. The process involves blasting "garnet", an abrasive sand-like 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.

Emissions from abrasive blasting operations have the potential to cause nuisance and possible health risks, especially when conducted within populated areas. The Fitzroy Engineering permanent site is within an industrial area. The environmental effects of dusts can include loss of visibility, loss of the amenity and aesthetic values of a `clear sky', irritation to breathing, and soiling of surfaces. In the case of dust emissions from Fitzroy Engineering's blasting operation, there is also the potential for the dust to contain metals such as lead, zinc and chromium from the surface of the items blasted. The potential for lead to be contained in the dust has been significantly reduced as Fitzroy Engineering now undertakes lead testing as a matter of course. If a positive result is obtained, special procedures apply to contain and dispose of the debris in accordance with Department of Labour Guidelines. Fitzroy Engineering has also informed Council that the blasting of chromium items is not undertaken.

Fitzroy Engineering has carried out abrasive blasting in the permanent facilities and in the yard at their site on Rifle Range Road, New Plymouth since 1990, and also undertakes abrasive blasting work on fixed items at various locations throughout the Taranaki region (mobile blasting).

At the Fitzroy Engineering site there is a permanent facility called the "grit room". The grit room has a wet scrubber unit on its discharge outlet to minimise emissions to the atmosphere. The wet scrubber was commissioned in July 1995. The canvas curtains at the north-east end of the building were replaced by solid doors during the 1998-1999 monitoring period. These doors more effectively contained dust emissions from the operation. The grit room is now used very infrequently, and was not used at all during the year under review.

Fitzroy Engineering has another facility on its premises to provide for unusually sized and/or shaped objects. This facility is called the "garnet shed". A scrubber tower and spray system was installed to mitigate emissions from the garnet shed in June 2000, which was expected to provide a decrease in particulate levels on and off site. An upgrade was carried out in January 2003 when a stack extension, incorporating a third ring of water spray nozzles, was added. Further upgrades were undertaken during the 2005-2006 year when it was found that the discharge from the stack did not comply with condition 7, limiting the particulate emissions to less than 125 mg/m^3. The upgrade consisted of a reduction in nozzle size to achieve a more effective droplet size, and changing the spray configuration from a circumferential pattern to a centrally located arrangement. These upgrades were intended to generate a more effective water mist within the tower. Spent garnet and waste removed from the bottom of the scrubber towers was stored in bags in the yard, which were then disposed of by a contracted company on an as required basis.

In 2015, a new 'Blastquip' fabric filter air treatment system was installed at the garnet shed (Photograph 2). This new system is considered to be the best practicable option for air treatment and a significant improvement from the wet scrubber system. Essentially, air is extracted from the roof at the northern end of the shed and directed through a filter system. The treated air is then returned to the shed at the southern end of the roof. The system is largely 'closed loop'; however, some of the treated air is discharged to the atmosphere with ambient air introduced into the shed, in order to control the shed temperature.

Photo 2 Blastquip fabric filter air treatment system at Fitzroy Engineering

The 'Blastquip' system has since been inspected by an external consultant from JCL Air and Environment Ltd in order to assess the feasibility and necessity of emission monitoring. Due to a number of factors, the consultant determined that emission monitoring was not feasible. Furthermore, the system's specifications provided by Blastquip indicated that the particulate concentration of treated air would be around 0.1 mg/m^3; well below the guideline level of 125 mg/m^3. Instead, the consultant's recommendation was to require compliance of the consent holder through the implementation of a management plan for the 'Blastquip' air treatment system. All these recommendations were set out as new conditions in a consent change in June 2016. They have subsequently been implemented.

Yard blasting is carried out when items cannot be blasted within the grit room or garnet shed. The yard areas on site are predominantly gravel, and therefore any sandblasting material spilt or deposited on site from aerial emissions is difficult to manage, and may be re-suspended by wind or vehicle movements. A substantial area of the yard near the offices at the Rifle Range Road end of the site was sealed during the 2002-2003 monitoring period.

The containment of emissions from yard and mobile blasting is limited to the use of screens, tarpaulins and other similar methods of airborne particulate suppression due to the temporary nature of the work being carried out.

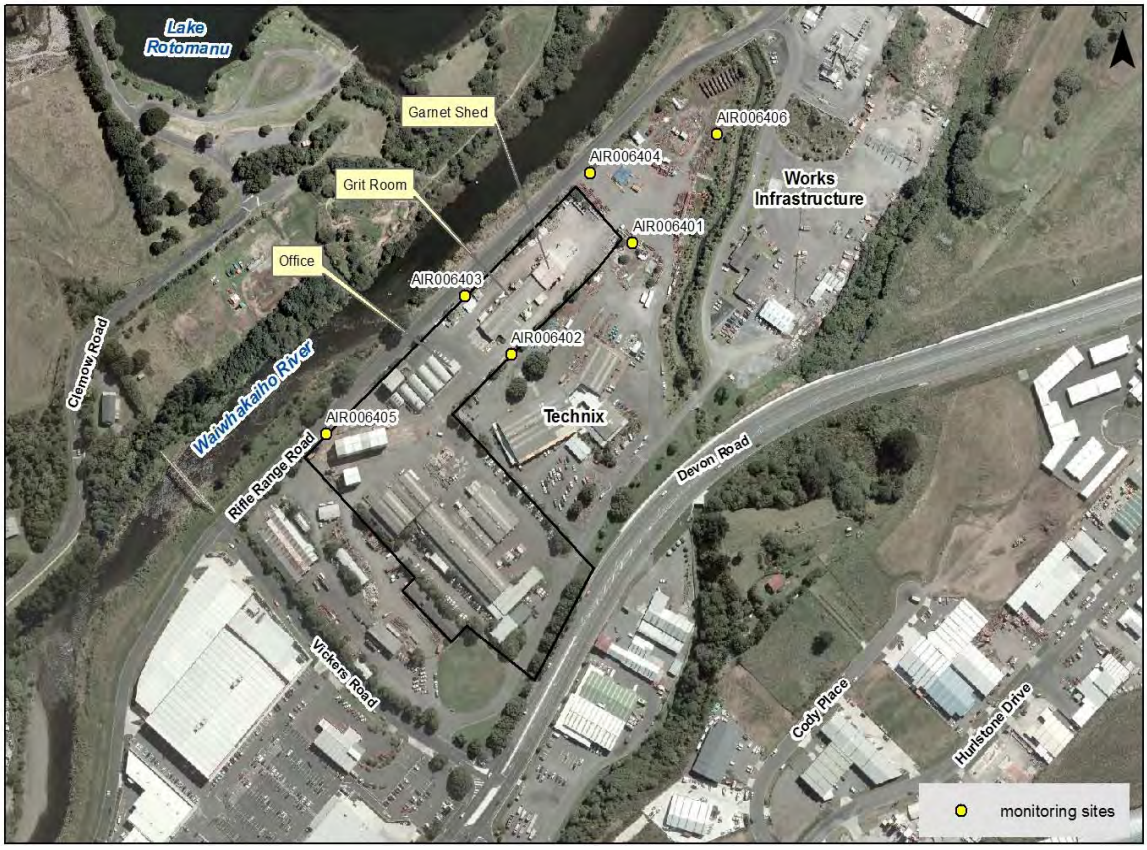


Figure 4 Fitzroy Engineering Group Ltd site and deposition gauge locations

3.2 Results

3.2.1 Inspections

Two routine compliance monitoring inspections were undertaken during the 2018-2019 year, on 6 December 2018 and 1 May 2019. Inspections were undertaken in relation to monitoring of the stormwater consent for the site, which was previously reported here but is now included in Fitzroy Engineering's section of the Lower Waiwhakaiho Catchment Monitoring Report.

There is also provision for a further inspection of mobile blasting operations to be undertaken by the Council if notification of mobile blasting is received. No mobile blasting notification was received, and as such no inspections were required.

6 December 2018

An inspection was carried out in fine, calm weather. The Council officer and was accompanied by D Timanus of Fitzroy Engineering. The general appearance and operation of the site had improved substantially since the previous inspection, and improvements had been made to the scrubbers and storage and work areas. The stormwater discharge inspection was carried out at the same time.

The site was compliant with resource consent conditions at the time of inspection.

1 May 2019

An inspection was carried out in fine weather with light wind conditions. The site was tidy with normal operations underway, and there was no dust or odour discharging beyond the boundary of the site.

The site was compliant with resource consent conditions at the time of inspection.

3.2.1.1 Mobile blast inspections

No notification was received by the Council regarding mobile blasting being undertaken by Fitzroy Engineering during the year under review and therefore, no inspections were carried out in relation to this activity.

3.2.2 Provision of company data

3.2.2.1 Operation, Management and Maintenance Plan

As per special conditions 12, 13 and 14 of the new consent, Fitzroy Engineering was required to update and maintain an Operation, Management and Maintenance Plan (OMMP) which detailed their procedures. This includes:

- Staff training
- General housekeeping and yard maintenance
- Blasting operations
- Monitoring and maintenance of the blasting buildings and air discharge treatment systems
- Records of training, monitoring and maintenance, and complaints.

The most up-to-date version of this OMMP was received from Fitzroy Engineering on 1 October 2019, and has been subsequently implemented into the monitoring programme. Adherence to this plan is assessed during compliance monitoring inspection visits.

3.2.3 Results of receiving environment monitoring

3.2.3.1 Deposition gauging

Deposition gauges were deployed on two occasions during the monitoring period. The first deployment began in January 2019 and lasted 21 days. The second deployment began in February 2019 and lasted 22 days.

A site map marking the location of the gauges around the Fitzroy Engineering site are shown in Figure 4. The results for the year under review are given in Table 6, with the prevailing wind directions during the surveys given in Appendix II.

Table 6 Deposition gauge results from around the Fitzroy Engineering Group Ltd site

Site ID	Dust deposition rate (g/m^2/day)	
	Run 1 from 08/01/2019 to 29/01/2019	Run 2 from 05/02/2019 to 27/02/2019
AIR006401	**0.40**	**0.23**
AIR006402	**0.13**	**0.21**
AIR006403	0.11	0.10
AIR006404	0.10	**0.23**
AIR006405	**0.26**	**0.58**
AIR006406	0.11	0.07
Guideline value:	0.13 g/m^2/day	

Key: Results in bold exceed recommended guideline value

The monitoring showed that the deposited particulate was at or in excess of Fitzroy Engineering's consent limit in seven of the twelve gauges collected during the year under review. Specifically, the samples collected from gauging locations AIR006401, AIR006402, and AIR006405 exceeded the limit on both occasions.

January 2019 survey

The January survey found that the particulate deposition rate limit was exceeded at three sites, AIR006401 (SE of the blasting shed), AIR006402 (opposite the loading ramp), and AIR006405 (first gate on SE of site).

The appearance of the particulate matter collected was consistent with re-suspended yard dust from the surrounding area rather than blasting media.

February 2019 survey

The February survey found that the particulate deposition rate limit was exceeded at four sites, AIR006401 (SE of the blasting shed), AIR006402 (opposite the loading ramp), AIR006404 (W end of site), and AIR006405 (first gate on SE of site). Each of these sites contained vegetative material, excluding AIR006404.

The material collected ranged in colour from green brown to brown, with an appearance consistent with re-suspended yard dust from the surrounding area and vegetation rather than blasting media.

No dust complaints were received regarding dust issues originating from the Fitzroy Engineering site.

The available evidence indicates that the elevated levels of dust deposition found in the gauges around Fitzroy Engineering were not as a result of the activities occurring on this site.

3.2.4 Investigations, interventions, and incidents

Table 7 below sets out details of any incidents recorded, additional investigations, or interventions required by the Council in relation to Fitzroy Engineering's activities during the 2018-2019 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 7 Incidents, investigations, and interventions summary table

Date	Details	Compliant (Y/N)	Enforcement Action Taken?	Outcome
January & February 2019	Exceedance in deposition rate	Y	None	Likely as a result of vegetative matter found in the gauge.

3.3 Discussion

3.3.1 Discussion of site performance

During the year under review, no blasting activities were occurring onsite during inspections and there were no reported issues associated with the condition of the plant. There were also no visible emissions noted, following an upgrade to the air discharge treatment system.

The Operation, Management and Maintenance Plan continued to be implemented and operational throughout the monitoring year, with no issues noted during compliance monitoring inspections. Site inspections continued to show an improvement in general management and housekeeping, with no unauthorised incidents occurring during the monitoring period.

During the year under review there were no complaints received by the Council relating to dust emissions or off site odours from the site.

3.3.2 Environmental effects of exercise of consent

Abrasive blasting operations have the potential to create adverse effects on health and the environment as well as creating nuisance. The impact that sandblasting has is determined by the type of abrasive material used (for example if it is sand that is dust free with low silica content), the effectiveness of the blasting enclosure and treatment system, the procedures followed by staff when blasting outside the blasting room (for example temporary screening), and the items blasted (e.g. with coatings such as lead-based paints or larger rusted areas resulting in generation of extra detritus).

Deposition gauging was conducted for the 46th and 47th time during the 2018-2019 monitoring year around the Fitzroy Engineering site.

The results from the gaugings found that seven of the twelve samples collected during the 2018-2019 period were in excess of the consent limit (Figure 5). However, the results could not be directly attributed to Fitzroy Engineering's site; rather the high particulate deposition was more likely due to vegetation input and yard dust re-suspension from the wider area. Predominant winds during the first gauging period were split between south westerlies and westerlies. During the second period this was split between south westerlies, and southeast and easterlies (Appendix II). Particularly due to these variable winds, the neighbouring properties cannot be discounted as potential contributors to the high deposition rate.

The site and immediate surrounding landscape has been significantly reshaped by human activity, and has no features of particular aesthetic, cultural, or other value. The main highway, golf course, and Mangaone Stream/Waiwhakaiho River are unlikely to be affected by activities on the site.

There is the potential for the staff and property of industries in the surrounding area to be affected by dust generated by Fitzroy Engineering and during recent years a significant amount of commercial development has occurred in the area. This increases the potential for complaints, as the number of people working in this area, and the number of public visiting the area has increased.

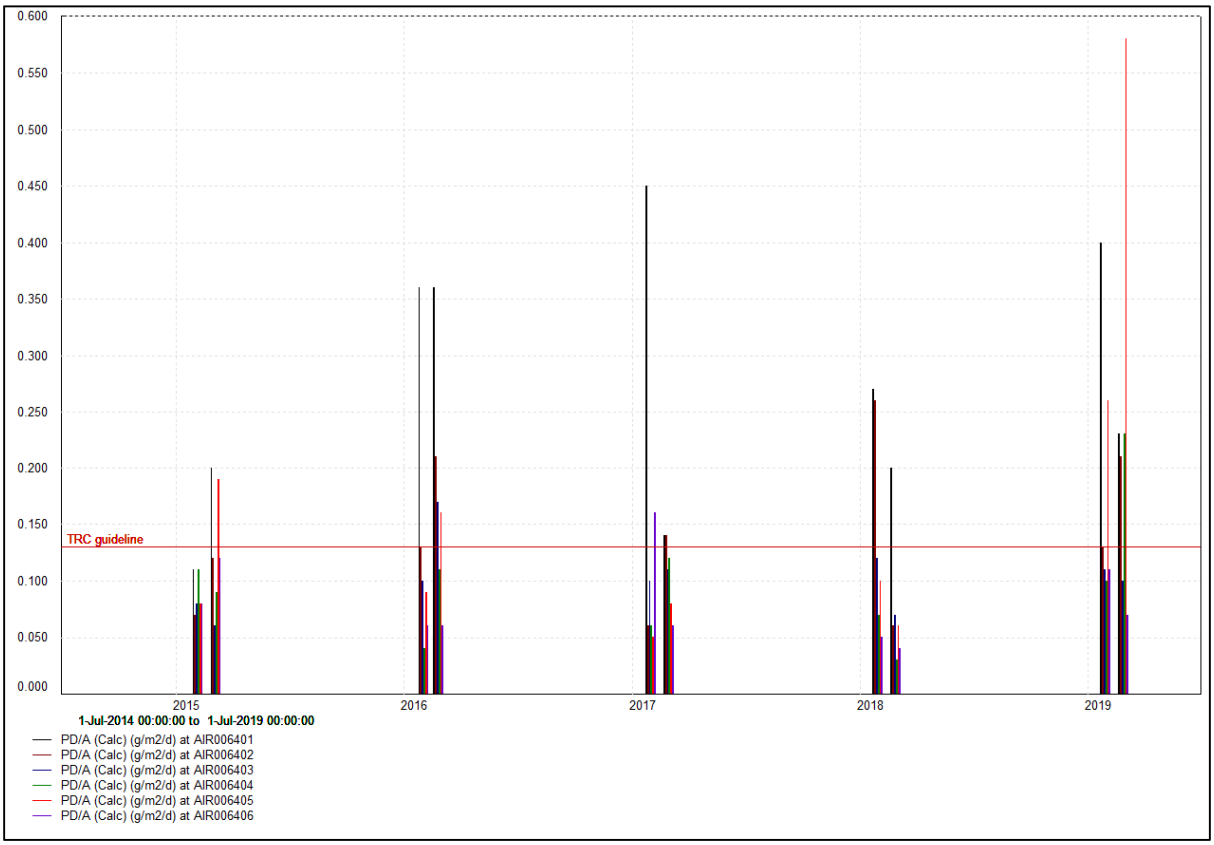


Figure 5 Deposition gauge results for the Fitzroy Engineering monitoring sites from July 2014 to July 2019

3.3.3 Evaluation of performance

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

Table 8 Summary of performance for Consent 4025-3, Fitzroy Engineering Group Ltd discharge of emissions to air

Purpose: ***To discharge emissions to air from abrasive blasting operations and associated activities at the factory site and from yard blasting operations and mobile abrasive blasting at various locations throughout the Taranaki region***		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
All operations		
1. Adopt best practicable option to avoid, remedy, or mitigate effects	Inspection, liaison with consent holder and observation when inspecting officer is in the vicinity of the site on other business, along with deposition gauge monitoring	Yes – improvement from previous years
2. Exercise consent in manner consistent with consent application	Inspection and liaison with consent holder	Yes
3. Sand-free silica limit of 5% and limit of 2% finer than 0.15 mm diameter	Inspection and liaison with consent holder. Dry sand not used	Yes

Purpose: *To discharge emissions to air from abrasive blasting operations and associated activities at the factory site and from yard blasting operations and mobile abrasive blasting at various locations throughout the Taranaki region*		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
4. No offensive, objectionable or toxic odour or dust beyond boundary. Suspended particulate <3 mg/m^3	Inspection and observation when inspecting officer is in the vicinity of the site on other business	Yes
5. Take account of wind conditions to minimise off-site emissions	Inspection and observation when inspecting officer is in the vicinity of the site on other business	Yes
6. Clearance of blasting material	Inspection	Yes
7. Avoidance of dry sand blasting	Inspection and liaison with consent holder. Dry sand not used	Yes
8. Particulate deposition rate limit of 0.13 g/m^2/day	Deposition gauging	Seven of twelve gauges above limit, but may be attributable to vegetation input
9. Compliance of operators with conditions	Inspection	Yes
Operations within permanent facilities		
10. Enclosed blasting at permanent site	Inspection and observation when inspecting officer is in the vicinity of the site on other business	Yes
11. All emissions contained and treated as far as practicable	Inspection and observation when inspecting officer is in the vicinity of the site on other business	Yes
12. Provision and maintenance of Management Plan	Plan on file	Yes
13. Consent to be exercised in line with management plan	Inspection and liaison with consent holder	Yes
14. Availability of information collected for condition 12	Inspection and liaison with consent holder, and accessing information recorded by consent holder	Yes
15. If control of windblown dust not effective, condition 19 to apply	Inspection and observation when inspecting officer is in the vicinity of the site on other business, deposition gauge results	Yes
16. Yard and roadways to be sealed and maintained subject to condition 18	N/A	N/A
17. Notification prior to using more than three blasting nozzles	Check of the Council records, inspection and liaison with consent holder. No more than three nozzles used	N/A
18. Notification prior to using grit room	Receipt of notifications, inspection and liaison with consent holder. Grit room not used	N/A

Purpose: *To discharge emissions to air from abrasive blasting operations and associated activities at the factory site and from yard blasting operations and mobile abrasive blasting at various locations throughout the Taranaki region*		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
19. Emissions limits for lead, chromium and zinc	Not measured. Discussions with consent holder about materials blasted	Yes
Yard operations		
20. Infrequent yard blasting	Inspection and observation when inspecting officer is in the vicinity of the site on other business	Yes
21. Screening at yard blasting to contain dust emissions	Inspection and observation when inspecting officer is in the vicinity of the site on other business	N/A
Mobile operations		
22. Screening at mobile blasting to contain emissions	Inspection and observation when inspecting officers travelling in region	Yes
23. Notification seven days to 48 hours before blasting near watercourses	Notification received	Yes
24. Prohibited effects in surface watercourses	Inspection	Yes
25. Notification if blasting close to dwelling or property boundary	No notifications received. No complaints received	N/A
26. Suspended particulate limit of 3 mg/m^3 and deposited particulate of 0.13 g/m^2/day beyond boundary	Not measured during year under review	N/A
Review		
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**

During the year, Fitzroy Engineering Group Ltd demonstrated a high level of environmental and a high level of administrative performance as defined in Section 1.1.5. No unauthorised incidents were recorded in relation to their activities on the site. The likely environmental effects of this discharge were considered to be low to negligible.

Although there were exceedances of the particulate deposition rate recorded, these were considered to be a result of vegetation input and yard dust re-suspension from the surrounding area, and no complaints were received in relation to their activities during the year.

3.3.4 Recommendations from the 2017-2018 Annual Report

In the 2017-2018 Annual Report, it was recommended:

1. THAT monitoring of consented activities at the Fitzroy Engineering Group Ltd site in the 2018-2019 year continues at the same level as in 2017-2018.

This recommendation was implemented.

3.3.5 Alterations to monitoring programmes for 2019-2020

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 2019-2020 the programme remains unchanged, with the exception of a change to the consent holder name. In September 2019, Fitzroy Engineering Group Ltd transferred consent 4025-3 to Dialog Fitzroy, which will subsequently replace Fitzroy Engineering from the 2019-2020 year onwards.

It should be noted that the proposed programme represents a reasonable and risk-based level of monitoring for the site in question. The Council reserves the right to subsequently adjust the programme from that initially prepared, should the need arise if potential or actual non-compliance is determined at any time during 2019-2020.

3.4 Recommendation

1. THAT monitoring of consented activities at the Fitzroy Engineering Group Ltd site in the 2019-2020 year continues at the same level as in 2018-2019.
2. THAT the 2019-2020 report be updated to include changes to the consent holder name.
3. THAT should there be issues with environmental or administrative performance in 2019-2020, monitoring may be adjusted to reflect any additional investigation or intervention as found necessary.

4 Katere Surface Coatings Ltd

4.1 Introduction

4.1.1 Process description

Katere Surface Coatings Ltd (Katere Surface Coatings) operates an abrasive blasting and surface coating business from a mobile unit at a permanent site on Katere Road. A map showing the location of the site is provided in Figure 6.

The emissions from abrasive blasting operations may include sand, grit, dust, silicates, rust, detritus, and various metal compounds including zinc, iron, lead and arsenic. Emissions from surface coating processes may include objectionable odours and spray drift.

Blasting takes place within an enclosed building with emissions passed through a scrubber system before being discharged to the atmosphere. Some items are too large to process in the building and are, therefore, blasted outside. All outside work requires effective screening measures such as tarpaulins and similar covers to contain emissions within the site boundary. Screening also applies to operations carried out by the mobile unit. Weather conditions must be considered before any outside work is carried out.

The 2018-2019 monitoring year was the 28th year in which the Council has monitored air emissions from the Katere Surface Coatings site (formerly Vinsen G M Ltd) and their effects within the region.

Figure 6 Location of Katere Surface Coatings Ltd and their deposition gauge sites

4.2 Results

4.2.1 Inspections

Two routine compliance monitoring inspections were carried out during the monitoring period, on 13 November 2018 and 9 May 2019.

4.2.1.1 Site inspections

13 November 2018

An inspection was undertaken in fine weather with light wind conditions. The yard was very tidy and repairs had been made to the blasting shed to minimise build-up of dust. Blasting was not occurring at the time of inspection and air particulate testing showed compliance with consent requirements. No dust was discharging beyond the boundary. The site was operating within resource consent conditions at the time of inspection.

9 May 2019

An inspection was carried out in fine weather with light wind conditions. General housekeeping onsite was in need of improvement. It was advised that the consent required the site to be cleaned of garnet dust and blasting materials at the end of each day, and that any open storage containers needed to be covered and bunded. The construction of a new blasting building had not yet been completed, and repairs were required to the existing building to prevent spillage and overflow from activities in the shed.

4.2.1.2 Mobile blast inspections

No notifications were received by the Council regarding mobile blasting being undertaken by Katere Surface Coatings during the year under review.

4.2.2 Results of receiving environment monitoring

4.2.2.1 Deposition gauging

Deposition gauges were deployed on two occasions during the monitoring period. The first deployment began in January 2019 and lasted 21 days. The second deployment began in February 2019 and lasted 22 days.

A site map marking the location of the gauges around the Katere Surface Coatings site is shown in Figure 6, and the results of the 2018-2019 gauging surveys are presented in Table 9. The prevailing wind directions during the surveys are shown in Appendix II.

Table 9 Deposition gauge results from around the Katere Surface Coating Ltd site

Site ID	Dust deposition rate (g/m^2/day)	
	Run 1 from 08/01/2019 to 29/01/2019	Run 2 from 05/02/2019 to 27/02/2019
AIR009303	**0.13**	0.03
AIR009304	0.09	**0.26**
Guideline value:	0.13 g/m^2/day	

January 2019 survey

One gauge (site AIR009303) was at the guideline limit for the January survey. The material collected was a slimy green with some bugs present. The appearance of the particulate matter was consistent with vegetation and organic matter rather than blasting media.

February 2019 survey

One gauge (site AIR009304) showed an exceedance of the guideline limit for the February survey. The material collected was green brown with roots present. The appearance of the particulate matter was consistent with vegetation rather than blasting media.

4.2.3 Investigations, interventions, and incidents

Table 10 below sets out details of any incidents recorded, additional investigations, or interventions required by the Council in relation to Katere Surface Coating's activities during the 2018-2019 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 10 Incidents, investigations, and interventions summary table

Date	Details	Compliant (Y/N)	Enforcement Action Taken?	Outcome
January & February 2019	Exceedance in deposition rate	Y	None	Likely as a result of vegetative and organic matter found in the gauge.

4.3 Discussion

4.3.1 Discussion of site performance

There were no complaints received during the 2018-2019 year in relation to Katere Surface Coating's activities.

Substantial improvements that were made at the site in the 2012-2013 year in relation to the treatment systems for both the blast booth and the paint shed have continued to produce significant reductions in emissions from the site.

General housekeeping at the site had improved from the previous monitoring period, and the Council was not required to issue any further abatement notices in regards to accumulation of blast material on the ground around the vicinity of the blast booth.

There was a single exceedance at one site during both the January 2019 and the February 2019 surveys. However, the results could not be directly attributed to activities on the site; rather the high particulate deposition was more likely due to vegetation input from the wider area.

4.3.2 Environmental effects of exercise of consents

Abrasive blasting operations have the potential to create adverse effects on health and the environment as well as creating nuisance. The impact that sandblasting has is determined by the type of abrasive used (for example is it sand that is dust free with low silica content), the effectiveness of the blasting enclosure and treatment system, the procedures followed by staff when blasting outside the blasting room (for example temporary screening), and the items blasted (for example with coatings such as lead-based paints or larger rusted areas resulting in generation of extra detritus).

The particulate deposition rate was exceeded in two of the gauges deployed during the year under review (Figure 7). There were no complaints received regarding dust impacting beyond the boundary of the property. Predominant winds during the first gauging period were split between south westerlies and westerlies. During the second period this was split between south westerlies, and southeast and easterlies (Appendix II). Due to these variable winds, neighbouring properties cannot be discounted as potential contributors to the deposition rate.

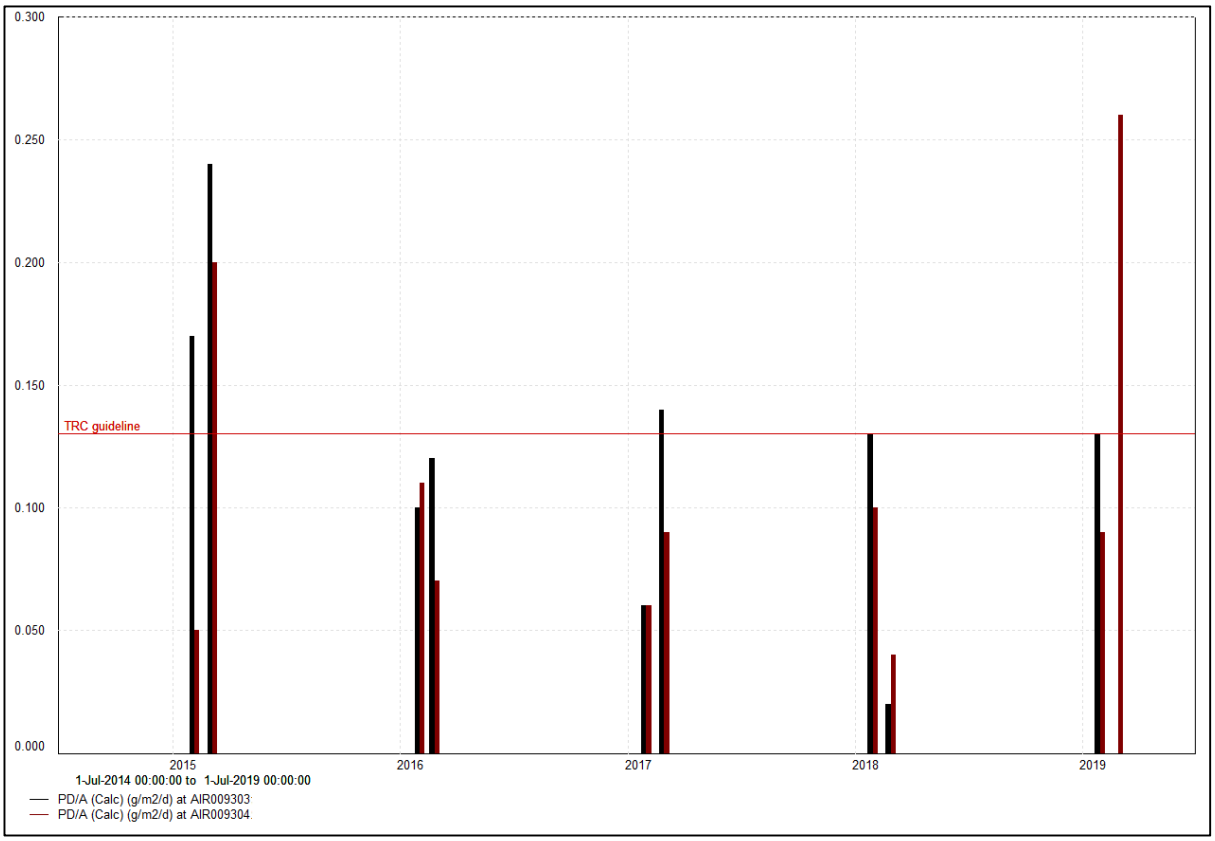


Figure 7 Deposition gauge results for the Katere Surface Coatings monitoring sites from July 2014 to July 2019

There were no off site emissions or odours noted during any inspections, and there were no complaints related to paint odours and overspray. It appears that the treatment system installed on the paint shed during the 2012-2013 year has continued to be effective in preventing the odour and overspray issues that resulted in a number of complaints during previous monitoring years.

The results of the 2018-2019 monitoring indicate that there were no significant adverse environmental effects that occurred as a result of Katere Surface Coatings' activities.

4.3.3 Evaluation of performance

A tabular summary of Katere Surface Coating's compliance record for the year under review is set out in Table 11.

Table 11 Summary of performance for Consent 4475-2, Katere Surface Coatings Ltd discharge of emissions to air

Purpose: ***To discharge emissions to air from abrasive blasting and surface coating activities at a permanent site located at Katere Road, New Plymouth and from mobile operations throughout the Taranaki region including within the Coastal Marine Area at Port Taranaki***		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
1. Specifies which special conditions apply to which activities	N/A	N/A
All Activities		
2. Adoption of best practicable option to minimise effects on the environment	Inspection and discussion with consent holder	Yes
3. No offensive, objectionable or toxic odour or dust beyond boundary	Inspection and observation when inspecting officer is in the vicinity of the site on other business	Yes
4. Consideration of wind conditions to minimise off-site emissions	Inspection	Yes
5. Clearance of blasting material	Inspection	Yes
6. Sand has low active silica content and limited fine particles	N/A – garnet used	N/A
7. Avoidance of dry sand blasting	Inspection and liaison with consent holder. Dry sand has not been used	Yes
8. Compliance of operators with conditions	Inspection	Yes
Within the permanent facility		
9. Except as provided for by S.C. 12 to 14 blasting must be in enclosed facility	Inspection and discussion with consent holder	Yes
10. Treatment of emissions prior to discharge. Limit on emissions from enclosure of 125 mg/m^3	Inspection and point source suspended particulate monitoring	Yes
11. Particulate deposition rate limit of 0.13 g/m^2/day	Deposition gauging	Two of four gauges above limit, but may be attributable to surrounding vegetation
Yard blasting at Katere Road site		
12. States provisions for occasional yard blasting as per S.C. 12 to 14	Inspection	Yes
13. Email notification to the Council seven days to 48 hrs prior to yard operations	Inspection and observation when inspecting officer is in the vicinity of the site on other business	Yes

Purpose: *To discharge emissions to air from abrasive blasting and surface coating activities at a permanent site located at Katere Road, New Plymouth and from mobile operations throughout the Taranaki region including within the Coastal Marine Area at Port Taranaki*		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
14. Screening of items to be blasted	Discussion with consent holder. Water blasting used rather than dry abrasive blasting	Yes
Any site other than Katere Road		
15. Screening to contain emissions	No mobile blasting undertaken	N/A
16. Notification to District Council prior to blasting in residential areas	Discussion with consent holder, and review of the Council records. No notifications received as no mobile blasting undertaken	N/A
17. Email notification to the Council seven days to 48 hrs prior to blasting in close proximity to watercourse	Discussion with consent holder, and review of the Council records. No notifications received as no mobile blasting undertaken	N/A
18. Notification to affected parties prior to blasting close to boundaries	No notification of mobile blasting received and no complaints	N/A
19. Suspended and deposited particulate limits 3 mg/m^3 and 0.13 g/m^2/day respectively	No mobile blasting notification received	N/A
All Activities		
20. Provision for consent to lapse if not exercised	Consent exercised	N/A
21. Optional review provision re environmental effects	No further opportunities for review	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**

During the year, Katere Surface Coatings demonstrated an overall high level of environmental and administrative performance as defined in Section 1.1.5. No significant adverse environmental effects were noted due to the activities of Katere Surface Coatings during the period under review.

4.3.4 Recommendations from the 2017-2018 Annual Report

In the 2017-2018 Annual Report, it was recommended:

1. THAT monitoring of consented activities of Katere Surface Coatings Ltd in the 2018-2019 year continues at the same level as in 2017-2018.

This recommendation was implemented.

4.3.5 Alterations to monitoring programmes for 2019-2020

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 2019-2020, the monitoring remains unchanged.

It should be noted that the proposed programme represents a reasonable and risk-based level of monitoring for the site in question. The Council reserves the right to subsequently adjust the programme from that initially prepared, should the need arise if potential or actual non-compliance is determined at any time during 2019-2020.

4.4 Recommendation

1. THAT monitoring of consented activities of Katere Surface Coatings Ltd in the 2019-2020 year continues at the same level as in 2018-2019.
2. THAT should there be issues with environmental or administrative performance in 2019-2020, monitoring may be adjusted to reflect any additional investigation or intervention as found necessary.

5 Ravensdown Fertiliser Co-operative Ltd

5.1 Introduction

5.1.1 Process description

Ravensdown Fertiliser Co-operative Ltd (Ravensdown) operates a storage, blending and distribution depot at the site which is bounded by Smart, Devon and Katere Roads in the Waiwhakaiho area of New Plymouth. Urea and phosphate fertiliser products are transported to the Ravensdown storage facility by rail or by road from the port.

The product is received either into the "intake" area or directly into the stores by tipping the truck out onto the floor within the store. Product unloaded at the "intake" is then transferred to the stores by an overhead belt transfer system. In the case of the high analysis store, product is sometimes deposited onto the ground outside the store and transferred into the store by front end loader.

In general, products are dispatched by loading the product into a hopper, which feeds a mechanical elevator to the overhead belt system. This then carries the product to the load-out/weighbridges.

The closure of the fertiliser manufacturing plants at the Ravensdown site, in July 1997, eliminated the potential for emissions of gases such as sulphur dioxide and hydrogen sulphide into the air, but an unforeseen dust problem occurred. This was due to the dry fine grain nature of the superphosphate compared to the moist product that was stored after manufacture at the site prior to July 1997.

The main activities that result in the generation of dust are the receipt of product and load-out of product at the weighbridges. The principal potential consequences of these discharges are air-borne dust nuisance effect, soiling of property, and nutrient enrichment of the groundwater and stormwater run-off in the vicinity of the site.

Ravensdown have taken the following steps to mitigate the dust problem:

- establishing two superphosphate receiving sheds, one at the north of the plant and one at the south of the plant;
- initiated procedures where the receiving shed will be selected according to the wind direction at the time of receipt;
- sealing both of these storage sheds;
- sealing roadways to make it easier to clean-up spilt product that could be resuspended by the wind;
- cones fitted to the end of the load-out chutes to improve the degree of containment as the product free falls into the trucks.

The manufacturing plant has been progressively stripped as part of decommissioning. The decommissioning is contributing to the continued remediation of dust emissions to the atmosphere caused by the storage, blending, packing and dispatch of fertiliser.

Figure 8 Ravensdown Fertiliser Co-operative Ltd site and deposition gauge locations

5.2 Results

5.2.1 Inspections

The site was inspected on a single occasion on 27 November 2018 during the 2018-2019 monitoring year in relation to air discharge matters.

27 November 2018

A final inspection was undertaken in fine weather with moderate wind conditions. There was minimal activity onsite, and all existing product was being contained and managed well during the transition. The final day of operation for the site was scheduled for the 29 November 2018.

5.2.2 Results of receiving environment monitoring

During the year under review six deposition gauges were deployed at sample sites in the vicinity of the Ravensdown premises on two occasions. The first deployment began in January 2019 and lasted 21 days. The second deployment began in February 2019 and lasted 22 days. All of the sites are shown in Figure 1, and those in closer proximity to the site are also shown in Figure 8. Their locations are described in Table 12. The material from these gauges was analysed for solid particulates. The deposition survey results for the year under review are presented in Table 13. The prevailing wind directions during the surveys are shown in Appendix II.

Table 12 Description of Ravensdown deposition gauge sample sites

Site Code	Location description
AIR006221	On the banks of the Waiwhakaiho River, north of Harvey Normans
AIR006222	On Devon Road opposite Ravensdown's site entrance

Site Code	Location description
AIR006227*	On the north side of the railway and the east side of Smart Road
AIR006224	Property between Queens Road and Alberta Road, approximately 100 metres from the roadside
AIR006225	Vacant section on Craig Place off Hurlstone Drive
AIR006226	Site on the verge of roadway at the front of Toops carpark

Key: * (replaced AIR006223)

Table 13 Deposition gauge results from around the Ravensdown site

Site ID	Run 1 from 08/01/2019 to 29/01/2019	Run 2 from 05/02/2019 to 27/02/2019
	Dust deposition rate ($g/m^2/day$)	Dust deposition rate ($g/m^2/day$)
AIR006221	0.07	0.03
AIR006222	0.03	0.07
AIR006224	0.02	0.05
AIR006225	0.07	0.10
AIR006226	0.07	0.08
AIR006227	0.05	0.05
Guideline value:	0.13 $g/m^2/day$	0.13 $g/m^2/day$

Key: results in bold exceed recommended guideline value

* total deposited phosphorus is a sum of dissolve reactive phosphorus and particulate phosphorus

January 2019 survey

All six gauges returned results within the consent limits for the January survey.

February 2019 survey

All the gauges returned results within the consent limits for the February survey.

5.2.3 Investigations, interventions, and incidents

In the 2018-2019 period, the Council was not required to undertake significant additional investigations and interventions, or record incidents, in association with Ravensdown's conditions in their air discharge consent or provisions in the Regional Air Quality Plan.

5.3 Discussion

5.3.1 Discussion of site performance

During inspections it was found that the site was well managed in regards to air emissions. There was no tracking of product on the yard, likely related to lower volumes of material being stored on the site and the move to the new premises.

5.3.2 Environmental effects of exercise of consents

No adverse environmental impacts were discovered as a result of activities undertaken on the Ravensdown site. No emissions of dust or odour were observed beyond the site boundary during either inspection.

Deposition gauging was conducted for the 53rd and 54th time during the 2018-2019 monitoring year around the Ravensdown site. The results obtained from these surveys are illustrated in Figure 9. During the sampling runs, all gauges were within the consent limit.

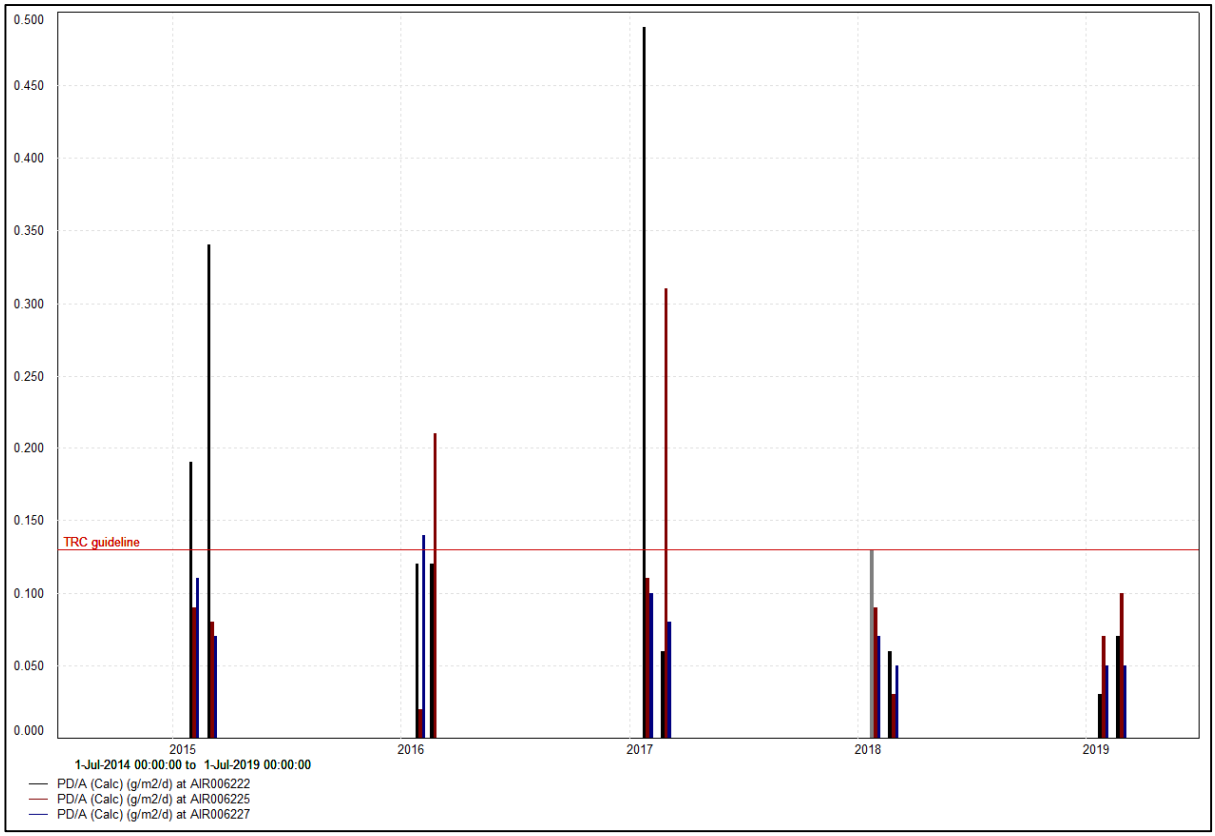


Figure 9 Deposition gauge results for the three Ravensdown monitoring sites from July 2014 to July 2019

5.3.3 Evaluation of performance

A tabular summary of Ravensdown's compliance record for the year under review is set out in Table 14.

Table 14 Summary of performance for Consent 4024-3, Ravensdown Fertiliser Co-operative Ltd discharge of emissions to air

Purpose: ***To discharge emissions to air from the storage, blending and distribution of fertiliser***		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
1. Adoption of action likely to minimise adverse effects on the environment	Inspection and liaison with consent holder	Yes
2. Take account of wind direction to minimise off site emissions	Inspection and liaison with consent holder. No complaints received	Yes
3. Suspended and deposited particulate limits	Suspended particulate monitoring at inspection and deposition gauging	Yes

Purpose: *To discharge emissions to air from the storage, blending and distribution of fertiliser*		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
4. No objectionable, offensive of toxic dust or odour beyond boundary	Inspection and liaison with consent holder. No complaints received	Yes
5. Fertiliser spills to be cleaned up as soon as practicable but in any case by the end of the day	Inspection	Yes
6. Activities to be carried out inside effectively maintained buildings to minimise emissions	Inspection and liaison with consent holder	Yes
7. Record of dust complaints	Inspection and liaison with consent holder	Yes
8. Notification of changes	Review of the Council records. Inspection and liaison with consent holder. No significant changes notified or found	N/A
9. Odour management plan to be prepared if change involves odorous materials	No changes	N/A
10. Provision for review	Next opportunity for review June 2020	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**

During the year, Ravensdown Fertiliser Co-operative Ltd demonstrated an overall high level of environmental and high level of administrative compliance with their air discharge consent, as defined in Section 1.1.5. No complaints concerning dust emissions were received.

5.3.4 Recommendations from the 2017-2018 Annual Report

In the 2017-2018 Annual Report, it was recommended:

1. THAT monitoring of consented activities at Ravensdown Fertiliser Co-operative Ltd in the 2018-2019 year continues at the same level as in 2017-2018.

This recommendation was implemented.

5.3.5 Alterations to monitoring programmes for 2019-2020

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 2019-2020 the monitoring of the Ravensdown site be discontinued following the surrender of consent 4024-3 in April 2019.

It should be noted that the proposed programme represents a reasonable and risk-based level of monitoring for the site in question. The Council reserves the right to subsequently adjust the programme from that initially prepared, should the need arise if potential or actual non-compliance is determined at any time during 2019-2020.

5.3.6 Recommendation

1. THAT monitoring of consented activities at Ravensdown Fertiliser Co-operative Ltd in the 2019-2020 year be discontinued following surrender of the resource consent.
2. THAT should there be issues with environmental or administrative performance in 2019-2020, monitoring may be resumed to reflect any additional investigation or intervention as found necessary.

6 Intergroup Ltd

6.1 Introduction

6.1.1 Process description

Intergroup operates a small abrasive blasting and surface coating business at Colson Road, Waiwhakaiho (Figure 10). The emissions from the abrasive blasting operations include sand, grit, dust, silicates, and rust including various metal compounds such as zinc, iron, and lead. Emissions from the surface coatings process also include odours and spray drift on occasion.

Blasting takes place to the right hand side of the building within an enclosed area. Blasting emissions are passed through a scrubber system before being discharged to the atmosphere (Photo 3).

Photo 3 Site photos from Intergroup Ltd showing the blasting shed and key process equipment

Painting also takes place to the left side of the main building within a separate enclosed area. Emissions produced during the painting process are passed through an extractor fan system which is filtered before discharge to air.

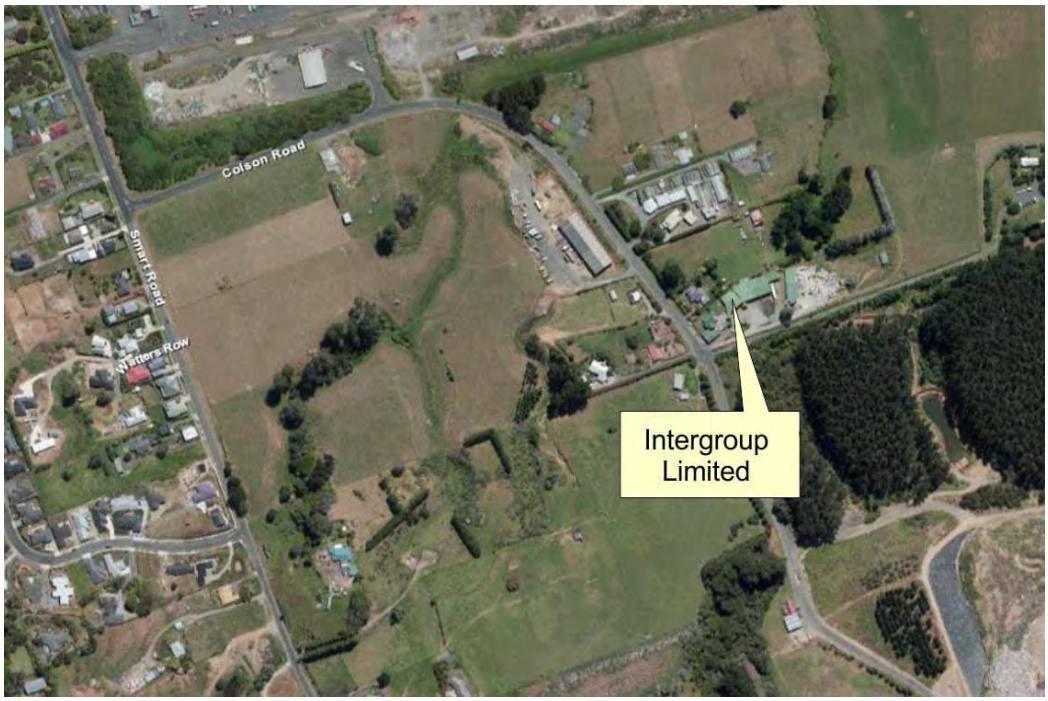


Figure 10 Location of Intergroup Ltd blasting facilities at Colson Road

6.2 Results

6.2.1 Inspections

The site was inspected on 4 and 30 October 2018 in relation to air discharge matters.

4 October 2018 (and 30 October 2018 reinspection)

An inspection was carried out in wet weather with light north westerly wind conditions. On arrival, the inspecting officer found that blasting had just been completed and the front doors of the blasting shed had been opened. This had resulted in a sustained dust plume discharging to air and beyond the boundary into neighbouring properties. Inspection of the site found evidence of an accumulation of blasting media beyond the boundary of the site. It appeared that the air scrubber system is not operating effectively, and a large amount of accumulated blasting media was observed on the ground in and around the scrubber. The site was deemed to be non-complaint with resource consent conditions and abatement notice EAC-22216 and infringement notice EAC-22401 were issued. A re-inspection was conducted on 30 October 2018, and it was found that both the abatement notice and resource consent were being complied with.

6.2.2 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 Intergroup's activities during the 2018-2019 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 table

Date	Details	Compliant (Y/N)	Enforcement Action Taken?	Outcome
4 October 2018	Objectionable dust effects beyond the property boundary.	N	Infringement and Abatement Notices issued	The issues were resolved by the consent holder who was in the process of moving to another location. No long term significant effect on the surrounding environment.

6.3 Discussion

6.3.1 Discussion of site performance

During the year under review, one inspection was carried out and no complaints were received. One non-compliant dust event discharging beyond the boundary of the property was recorded.

6.3.2 Environmental effects of exercise of consent

Particulate emissions can arise from a number of sources, both natural and from human activity for example vegetation pollens, smoke and ash, sea spray, dust from soils and paved surfaces, and manufacturing processes. While extremely fine particles may remain floating in the atmosphere for weeks or months, coarser dusts may settle out within timeframes ranging from a few seconds to minutes.

The potential neighbourhood effects from the activities undertaken on the site in relation air quality also include odours and spray drift on occasion.

Objectionable adverse environmental effects were recorded as a result if Intergroup Ltd's activities at this site on one occasion. These effects were temporary and resolved within the monitoring period and no ongoing effect on the environment are likely.

6.3.3 Evaluation of performance

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

Table 16 Summary of performance for consent 7468-1, Intergroup Ltd's discharge of emissions to air

Purpose: ***To discharge emissions to air from mobile blasting operations throughout the Taranaki region (excluding the Coastal Marine Area) and at a permanent facility.***		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
1. Specifies which special conditions apply to which activities	N/A	N/A
All Activities		
2. Adoption of best practicable option to minimise effects on the environment	Inspection and discussion with consent holder	No – discharge beyond boundary
3. No offensive, objectionable or toxic odour or dust beyond boundary	Inspection and observation when inspecting officer is in the vicinity of the site on other business	No – one non-compliance of dust recorded

Purpose: *To discharge emissions to air from mobile blasting operations throughout the Taranaki region (excluding the Coastal Marine Area) and at a permanent facility.*		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
4. Clearance of blasting material	Inspection	No – accumulation of blasting material
5. Blasting media has low dust and free silica	Suspended particulate monitoring at inspection	Yes
6. Limits on suspended particulate matter concentration and deposition	Suspended particulate monitoring at inspection	Yes
7. Compliance of operators with conditions	Inspection	Yes
8. Optional review provision re environmental effects	No further opportunities for review	N/A
Within the permanent facility		
9. All blasting must be in enclosed facility	Inspection and discussion with consent holder	Yes
10. Treatment of emissions prior to discharge. Limit on emissions from enclosure of 125 mg/m^3	Inspection and point source suspended particulate monitoring	Yes
11. Consent holder to submit Operation, Management and Maintenance Plan within three months of consent being granted	Plan on file	Yes
12. Availability of information collected for condition 11	Inspection and liaison with consent holder, and accessing information recorded by consent holder	Yes
Mobile operations		
13. Email notification to the Council prior to blasting in close proximity to watercourse	No notification of mobile blasting received	N/A
14. Records of blasting activities	Review of consent holder records. No mobile blasting notification received	N/A
15. Records as per S.C. 14 made available to Council on request	No mobile blasting notification received	N/A
16. Minimise off-site emissions	No mobile blasting notification received	N/A
17. Mobile blasting on unmoveable items only	No mobile blasting notification received	N/A
18. All items to be appropriate screened during blasting	No mobile blasting notification received	N/A
19. Notification to affected parties prior to blasting close to boundaries	No mobile blasting notification received	N/A

Purpose: *To discharge emissions to air from mobile blasting operations throughout the Taranaki region (excluding the Coastal Marine Area) and at a permanent facility.*		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
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**

During the year, Intergroup Ltd demonstrated an overall good level of environmental and an overall high level of administrative performance and compliance with the resource consent, as defined in Section 1.1.5. The environmental rating is a reflection of their performance onsite for the year, and the non-compliance that was recorded in regards to their activity. There was no evidence of any consented activity having adverse environmental effects. Intergroup have since moved their site to another location, outside of the Lower Waiwhakaiho Catchment area, and are now operating permanently at the new site.

6.3.4 Recommendations from the 2017-2018 Annual Report

In the 2017-2018 Annual Report, it was recommended:

1. THAT monitoring of consented activities at Intergroup Ltd in the 2018-2019 year continues at the same level as in 2017-2018.

This recommendation was implemented.

6.3.5 Alterations to monitoring programmes for 2019-2020

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 2019-2020 the monitoring programme for Intergroup Ltd be removed from the Lower Waiwhakaiho Catchment programme, and will instead be covered elsewhere following the shift in site address.

It should be noted that the proposed programme represents a reasonable and risk-based level of monitoring for the site in question. The Council reserves the right to subsequently adjust the programme from that initially prepared, should the need arise if potential or actual non-compliance is determined at any time during 2019-2020.

6.4 Recommendation

1. THAT monitoring of consented activities at Intergroup Ltd in the 2019-2020 year be discontinued following a change of address for the business. Monitoring from 2019-2020 onwards will be included in another catchment programme.

7 Lower Waiwhakaiho area performance

7.1 Air related incidents

During the year under review there was one incident recorded in relation to one of the area's air discharge consent holder, Intergroup Ltd, and their site management practices. Abatement notice EAC-22216 and Infringement notice EAC-22401 were issued following the incident investigation. The environmental performance of all the consent holders in the area varied from good to high.

7.2 Deposition gauging

With the transient nature of effects upon air quality a combined monitoring approach in the industrial area in question is a good way of assessing consent holder performance. This approach was continued in this monitoring period as adopted following the recommendations in the 2000-2001 annual reports for dischargers in the area.

The deposition gauges were put in place and retrieved at all sites at the same time, including the Council's state of the environment monitoring (SEM) sites. The gauges for the near-by Colson Road landfill site were also deployed for the same period. The wind direction and speed for each of the sampling periods are shown in Appendix II. These were recorded at the Hillsborough Weather Station, which is in the same area.

7.2.1 Results of deposition gauging

There were 14 exceedances of the Council's guideline limit out of 32 total gauge deployments assessing the four consent holders covered by this report. The results of the deposition gauging undertaken in the Lower Waiwhakaiho area for the year under review are summarised in Figure 11.

Ravensdown deposition gauges AIR006221, AIR006224 and AIR006226 are also used as the Council's SEM gauges. Accordingly, results from these gauges have been included in the TRC SEM table in Figure 11.

Deposition gauge results from the Colson Road landfill monitoring programme have also been included in Figure 11 to provide context of air quality in the wider Waiwhakaiho area. There were no exceedances of the 12 total gauge deployments for the Colson Road landfill programme in the year under review. Colson Road landfill deposition gauges AIR001612 and AIR001615 are also used as SEM gauges. Accordingly, results from these gauges have been included in the TRC SEM table in Figure 11.

Results from the SEM gauges deployed in the Lower Waiwhakaiho area have been included in Figure 11 to provide context of air quality in the wider Waiwhakaiho area. None of the 12 total SEM gauges exceeded the Council's guideline limit in the period under review.

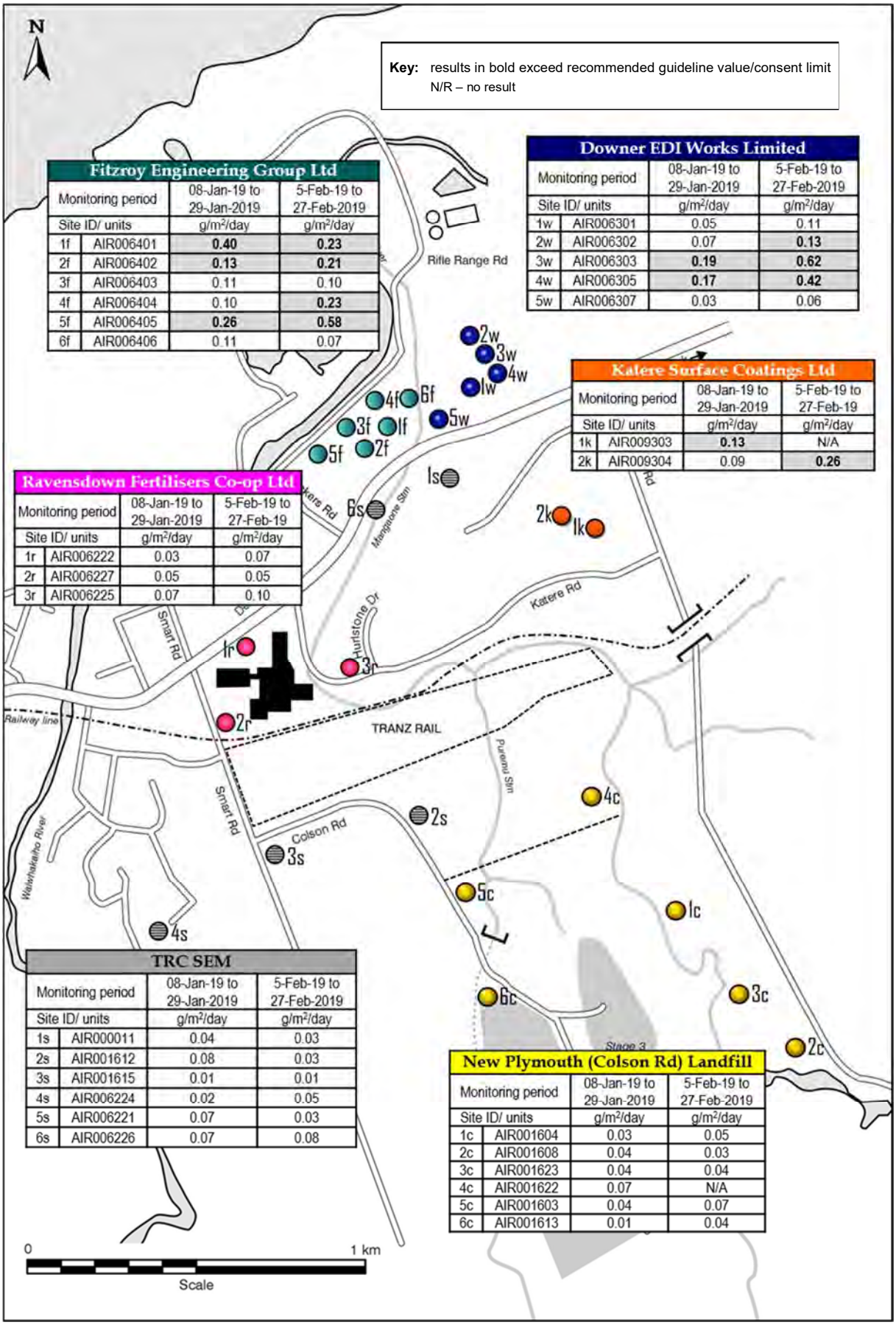


Figure 11 Dust deposition for the Lower Waiwhakaiho area in the 2018-2019 monitoring period

7.3 Discussion

7.3.1 Environmental effects of exercise of air discharge permits

Ambient air quality (at SEM sites) in the Lower Waiwhakaiho area during the year under review was good.

The overall air quality in the Lower Waiwhakaiho area, including deposition survey results for the five consent holders covered in this report, was generally good during both the January and February gauging periods.

January 2019 deposition gauge survey

In the case of the January survey, six of 16 (38%) of the gauges analysed were in excess of the guideline value. As with previous years, the higher particulate deposition rates were again found to be at monitoring locations in close proximity to industrial sites. The highest results were found at monitoring locations near the Fitzroy Engineering, Downer EDI, and Katere Surface Coatings sites, however the results at the last two sites were at or just above the guideline value. Wind direction was variable during the gauging period, with winds predominantly from the south west for 40% of the time, and from the west for 20% of the time. The strongest winds were from the south west.

February 2019 deposition gauge survey

In the case of the February survey, eight of 16 (50%) of the gauges returned results that were in excess of the guideline value. On this occasion the exceedance was again predominantly at monitoring sites located close to the industrial sites, in the vicinity of the Fitzroy Engineering and Downer EDI sites. The prevailing wind directions observed during this gauging period were from the south west (30% of the time) and the south east (20% of the time), with the strongest winds again from the south west.

8 Summary of recommendations

1. THAT monitoring of consented activities at the Downer EDI Works Ltd site in the 2019-2020 year continues at the same level as in 2018-2019.
2. THAT monitoring of consented activities at the Fitzroy Engineering Group Ltd site in the 2019-2020 year continues at the same level as in 2018-2019.
3. THAT the 2019-2020 report be updated to include changes to the Fitzroy Engineering consent holder name.
4. THAT monitoring of consented activities of Katere Surface Coatings Ltd in the 2019-2020 year continues at the same level as in 2018-2019.
5. THAT monitoring of consented activities at Ravensdown Fertiliser Co-operative Ltd in the 2019-2020 year be discontinued following surrender of the resource consent.
6. THAT monitoring of consented activities at Intergroup Ltd in the 2019-2020 year be discontinued following a change of address for the business.
7. THAT should there be issues with environmental or administrative performance in 2019-2020, 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:

Conductivity	Conductivity, an indication of the level of dissolved salts in a sample, usually measured at 25°C and expressed in in µS/cm.
DRP	Dissolved reactive phosphorus.
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.
Incident register	The incident register contains a list of events recorded by the Council on the basis that they may have the potential or actual environmental consequences that may represent a breach of a consent or provision in a Regional Plan.
Investigation	Action taken by the Council to establish what were the circumstances/events surrounding an incident including any allegations of an incident.
L/s	Litres per second.
µS/cm	Microsiemens per centimetre.
NOx	Oxides of nitrogen.
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).
QPR	Quality Pavement Repair - a high performance permanent repair material for repairing potholes, filling utility cuts and repairing damaged asphalt.
Resource consent	Refer Section 87 of the RMA. Resource consents include land use consents (refer Sections 9 and 13 of the RMA), coastal permits (Sections 12, 14 and 15), water permits (Section 14) and discharge permits (Section 15).
RMA	*Resource Management Act* 1991 and including all subsequent amendments.
Temp	Temperature, measured in °C (degrees Celsius).

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

Bibliography and references

Taranaki Regional Council (2018): *Lower Waiwhakaiho Air Discharges Compliance Monitoring Programme Annual Report 2017-2018*. Technical Report 2018-87.

Taranaki Regional Council (2017): *Lower Waiwhakaiho Air Discharges Compliance Monitoring Programme Annual Report 2016-2017*. Technical Report 2017-87.

Taranaki Regional Council (2016): *Lower Waiwhakaiho Air Discharges Compliance Monitoring Programme Annual Report 2015-2016*. Technical Report 2016-12.

Taranaki Regional Council (2015): *Lower Waiwhakaiho Air Discharges Compliance Monitoring Programme Annual Report 2014-2015*. Technical Report 2015–120.

Taranaki Regional Council (2014): *Waiwhakaiho Airshed area Monitoring Programme Annual Report 2013-2014*. Technical Report 2014–55.

Taranaki Regional Council (2013): *Waiwhakaiho Airshed area Monitoring Programme Annual Report 2012-2013*. Technical Report 2013–69.

Taranaki Regional Council (2012): *Waiwhakaiho Airshed area Monitoring Programme Annual Report 2011-2012*. Technical Report 2012–13.

Taranaki Regional Council (2012): *Waiwhakaiho Airshed area Monitoring Programme Annual Report 2010-2011*. Technical Report 2011–88.

Taranaki Regional Council (2010): *Waiwhakaiho Airshed area Monitoring Programme Annual Report 2009-2010*. Technical Report 2010–25.

Taranaki Regional Council (2009): *Waiwhakaiho Airshed area Monitoring Programme Annual Report 2008-2009*. Technical Report 2009–80.

Taranaki Regional Council (2008): *Waiwhakaiho Airshed area Monitoring Programme Annual Report 2007-2008*. Technical Report 2008–63.

Taranaki Regional Council (2008*): Waiwhakaiho Airshed area Monitoring Programme Annual Report 2006-2007*. Technical Report 2007–109.

Taranaki Regional Council (2006): *Waiwhakaiho Airshed area Monitoring Programme Annual Report 2005-2006*. Technical Report 2006–107.

Taranaki Regional Council (2005): *Waiwhakaiho Airshed area Monitoring Programme Annual Report 2004-2005*. Technical Report 2005–46.

Taranaki Regional Council (2004): *Waiwhakaiho Airshed area Monitoring Programme Annual Report 2003-2004*. Technical Report 2004–46.

Taranaki Regional Council (2003): *Waiwhakaiho Airshed area Monitoring Programme Annual Report 2002-2003*. Technical Report 2003–47.

Taranaki Regional Council (2002): *Waiwhakaiho Air Monitoring Programmes (Fitzroy Engineering Group Ltd, PCL Industries Ltd, Ravensdown Fertiliser Co-operative Ltd, Works Infrastructure Ltd, Clelands Timber Ltd, and Vinsen GM Ltd) Annual Report 2001-2002*. Technical report 2002-56.

Taranaki Regional Council (2001): *Waiwhakaiho Air Monitoring Programmes (Fitzroy Engineering Group Ltd, PCL Ltd, Ravensdown Fertiliser Co-op Ltd, and Works Infrastructure Ltd) Annual Report 2000-2001*. Technical report 2001-30.

Taranaki Regional Council (2000): *Works Civil Construction Air Monitoring Programme Annual Report 1999-2000*. Technical Report 99-53.

Taranaki Regional Council (2000): *Ravensdown Fertiliser Ltd Air Monitoring Programme Annual Report 1999–2000*. Technical Report 2000-61.

Taranaki Regional Council (2000): *Poultrymen's Co-operative Ltd Monitoring Programme Annual Report 1999-2000*. Technical Report 2000-47.

Taranaki Regional Council (2000): *G M Vinsen Ltd Monitoring Programme Annual Report 2000-2001*. Technical report 2001-74.

Taranaki Regional Council (2000): *Fitzroy Engineering Group Ltd Air Monitoring Programme Annual Report 1999-2000*. Technical report 2000-74.

Taranaki Regional Council (1999): *Works Civil Construction Air Monitoring Programme Annual Report 1998-99*. Technical Report 99-71.

Taranaki Regional Council (1999): *Ravensdown Fertiliser Ltd Air Monitoring Programme Annual Report 1998–99*. Technical Report 99–73.

Taranaki Regional Council (1999): *Poultrymen's Co-operative Ltd Monitoring Programme Annual Report 1998-99*. Technical Report 99-27.

Taranaki Regional Council (1999): *Fitzroy Engineering Group Ltd Air Monitoring Programme Annual Report 1998-99*. Technical report 99-93.

Taranaki Regional Council (1998): *Technic Taranaki Air Monitoring Programme Annual Report 1997-98*. Technical Report 98-31.

Taranaki Regional Council (1998): *Ravensdown Fertiliser Ltd Air Monitoring Programme Annual Report 1997–98*. Technical Report 98–96.

Taranaki Regional Council (1998): *Poultrymen's Co-operative Ltd Air Monitoring Programme Annual Report 1997-98*. Technical Report 98-71.

Taranaki Regional Council (1998): *Fitzroy Engineering Group Ltd Air Monitoring Programme Annual Report 1997-98. T*echnical report 98-91.

Taranaki Regional Council (1997): Regional Air Quality Plan.

Taranaki Regional Council (1997): *Technic Taranaki Air Monitoring Programme Annual Report 1996-97*. Technical Report 97-66.

Taranaki Regional Council (1997): *Poultrymen's Co-operative Ltd Air Monitoring Programme Annual Report 1996-97*. Technical Report 97-31.

Taranaki Regional Council (1997): *Fitzroy Engineering Group Ltd Air Monitoring Programme Annual Report 1996-97.*Technical report 97-60.

Taranaki Regional Council (1997): *Farmer Fertiliser Ltd Air Monitoring Programme Annual Report 1996–97*. Technical Report 97–49.

Taranaki Regional Council (1996): *Technic Industries Ltd Air Monitoring Programme Annual Report 1995-96*. Technical Report 96-24.

Taranaki Regional Council (1996): *Poultrymen's Co-operative Ltd Air Monitoring Programme Annual Report 1995-96*. Technical Report 96-47.

Taranaki Regional Council (1996): *Fitzroy Engineering Group Ltd Air Monitoring Programme Annual Report 1995-96*. Technical report 96-53.

Taranaki Regional Council (1996): *Farmer Fertiliser Ltd Air Monitoring Programme Annual Report 1995–96*. Technical Report 96–29.

Taranaki Regional Council (1995): *Technic Industries Ltd Air Monitoring Programme Annual Report 1994-95*. Technical Report 95-56.

Taranaki Regional Council (1995): *Poultrymen's Co-operative Ltd 1994-95 Annual Report 1994-95*. Technical Report 95-40.

Taranaki Regional Council (1995): *Fitzroy Engineering Group Ltd Air Monitoring Programme Annual Report 1994-95*. Technical report 95-59.

Taranaki Regional Council (1995): *Farmers Fertiliser Ltd Air Monitoring Programme Annual Report 1994-95*. Technical Report 95–32.

Taranaki Regional Council (1994): *Technic Industries Ltd Air Monitoring Programme Annual Report 1993-94*. Technical Report 94-33.

Taranaki Regional Council (1994): *Poultrymen's Co-operative Ltd Air Monitoring Programme Annual Report 1993-94*. Technical Report 94-21.

Taranaki Regional Council (1994): *Fitzroy Engineering Group Ltd Air Monitoring Programme Annual Report 1993-94*. Technical report 94-24.

Taranaki Regional Council (1994): *Farmers Fertiliser Ltd Air Monitoring Programme Annual Report 1993–94*. Technical Report 94–62.

Taranaki Regional Council (1993): *Technic Industries Ltd Air Monitoring Programme Annual Report 1992-93*. Technical Report 93-36.

Taranaki Regional Council (1993): *Poultrymen's Co-operative Ltd Air Monitoring Programme Annual Report 1992-93*. Technical Report 93-38.

Taranaki Regional Council (1993): *Farmers Fertiliser Ltd Air Monitoring Programme Annual Report 1992–93*. Technical Report 93–42.

Appendix I

Resource consents for discharges to air held by industries in the Lower Waiwhakaiho area (alphabetical order)

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

Consent No	Description	Granted	Next Review Date	Expiry Date
4060-4	To discharge emissions into the air from the manufacture of hot mix asphalt paving mixes and associated activities	March 2005	-	June 2020
4025-3	To discharge emissions into the air from abrasive blasting operations and associated activities at the Fitzroy Engineering Group Ltd factory site and from yard blasting operations and from mobile abrasive blasting at various locations throughout the Taranaki region	November 2006	-	June 2020
7468-1	To discharge emissions to air from mobile blasting operations throughout the Taranaki region (excluding the Coastal Marine Area) and at a permanent facility	May 2009	June 2018	June 2020
4475-2	To discharge emissions to air from abrasive blasting and surface coating activities at a permanent site located at Katere Road, New Plymouth and from mobile operations throughout the Taranaki region including within the Coastal Marine Area at Port Taranaki	February 2009	June 2014	June 2020
4024-3	To discharge emissions into the air from the storage, blending and distribution of fertiliser	December 2008	June 2020	June 2026

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.

Discharge Permit

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

Name of Consent Holder:	Ravensdown Limited PO Box 1049 Christchurch 8140
Decision Date:	4 December 2008
Commencement Date:	4 December 2008

Conditions of Consent

Consent Granted:	To discharge emissions into the air from the storage, blending and distribution of fertiliser
Expiry Date:	1 June 2026
Review Date(s):	June 2020 and/or within six months of receiving notification in relation to condition 8
Site Location:	Smart Road, New Plymouth
Legal Description:	Lot 2 DP 339878 Sec 18 Pt Secs 142, 143, 166 & 175 Pt Sbdn of Sec 162 Hua Dist Blk VI Paritutu SD
Grid Reference (NZTM)	1696333E-5677008N

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

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. Not withstanding any other condition, 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. All activities permitted by this consent are to be conducted taking into account wind direction and wind strength, such that off-site emissions are kept to a practicable minimum.

3. The suspended particulate matter shall not exceed 3 mg/m^3 [measured under ambient conditions], and the deposition of dust shall not exceed 0.13 g/m^2/ day or 4.0 g/m^2/30 days beyond the property boundary.

4. Notwithstanding condition 3, 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.

5. To avoid re-suspension of dust and stormwater contamination, any fertiliser spilt outside the buildings shall be cleaned up as soon as is practicable and in any case, by the end of each working day.

6. As far as is practicable, all intake, blending and dispatch of fertiliser shall be carried out within buildings that are maintained to prevent or minimise any discharges to the environment from the exercise of this consent.

7. The consent holder shall keep, and make available to the Chief Executive, Taranaki Regional Council, upon request, a record of the time, duration and cause of all dust incidents having actual or potential off-site impacts.

8. The consent holder shall notify the Chief Executive, Taranaki Regional Council, prior to making any changes to the activities at the site, which could adversely 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. Notification by fax or post is acceptable if the consent holder does not have access to email.

9. If potentially odorous products are to be received at the site that were not specified in application 5015, then the consent holder shall notify the Chief Executive, Taranaki Regional Council in accordance with condition 8 and shall in addition provide an odour management plan to the satisfaction of Chief Executive, Taranaki Regional Council, detailing how the product will be handled at the site.

10. The Taranaki Regional Council may review any or all of the conditions of this consent by giving notice of review during the month of June 2014 and/or June 2020 and/or within 6 months of receiving notification in relation to condition 8 for the purpose of:

    a) adding, amending or deleting any limit on discharge or ambient concentrations of any contaminant or contaminants; and/or
    b) requiring the consent holder to adopt the best practicable option to remove or reduce any adverse effect on the environment caused by any discharge to the environment; and/or
    c) ensuring that the conditions are adequate to deal with any adverse effects of the discharge on the environment arising from the exercise of this consent which were 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 2 December 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:	Dialog Fitzroy Limited Private Bag 2053 New Plymouth 4342
Decision Date (Change):	23 June 2016
Commencement Date (Change):	23 June 2016 (Granted Date: 21 November 2006)

Conditions of Consent

Consent Granted:	To discharge emissions into the air from abrasive blasting operations and associated activities at the Fitzroy Engineering Group Limited factory site and from yard blasting operations and at mobile abrasive blasting at various locations throughout the Taranaki region
Expiry Date:	1 June 2020
Site Location:	Rifle Range Road, New Plymouth (Permanent site) & Various locations throughout the Taranaki region (Mobile)
Grid Reference (NZTM)	16966302E-5677760N (Permanent site) Various locations throughout the Taranaki region (Mobile)

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

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

All operations

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.

2. The exercise of this consent shall be undertaken in general accordance with the information provided in support of the original application for this consent and with any subsequent application to change consent conditions, particularly, the '*Feasibility of Emissions Testing*' assessment report prepared by *JCL Air and Environment Limited,* and dated *5 October 2015*.

   In the case of any contradiction between applications the later application shall prevail, and where there is conflict between an application and the conditions of this consent, the conditions of this consent shall prevail.

3. Sand used for dry blasting must contain less than 5% by dry weight free silica, and less than 2% by dry weight dust able to pass a 0.15 mm sieve.

4. 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 on which the abrasive blasting or associated activity is occurring, and in the case of blasting undertaken at the Rifle Range Road site, suspended particulate matter shall not exceed 3 mg/m^3 (measured under ambient conditions) beyond the boundary of the site.

5. All abrasive blasting is to be conducted with taking into account wind direction and wind strength, such that off-site emissions are kept to a practicable minimum.

6. As far as is practicable, work areas and surrounding areas shall be cleared of accumulations of sand and any other blasting material at the end of each blasting session and by the end of each working day.

7. Dry sand blasting shall be used only when specified by a client. High pressure water blasting, wet sand blasting, garnet blasting, vacuum blasting or an equivalent alternative process must be used when practicable.

8. The discharge of particulate material from the site shall not raise the particulate deposition rate at or beyond the boundary of the leased site of the permanent facility at Rifle Range Road, New Plymouth, above a mean daily rate of 0.13 $g/m^2/day$ collected over a minimum of 21 days.

9. The consent holder shall ensure that all operators of abrasive blasting equipment understand and comply with the all the conditions of this consent prior to the commencement of any work for which this consent is required.

Operations conducted within permanent facilities

10. As far as is practicable, all abrasive blasting on the consent holder's permanent site at Rifle Range Road, New Plymouth, shall be carried out in an enclosed booth or shed.

11. All emissions from abrasive blasting, surface preparation or surface coating operations and all other associated emissions from abrasive blasting at the permanent site at Rifle Range Road, New Plymouth, shall be contained and treated, as far as is practicable, prior to discharge from any operations enclosure.

12. Within a month of the granting of this consent, the consent holder shall updated and thereafter maintain, to the satisfaction of the Chief Executive, Taranaki Regional Council, an Operation, Management and Maintenance Plan (OMMP) detailing the Company's procedures, including but not limited to staff training, general housekeeping and yard maintenance, blasting operations, monitoring and maintenance of the blasting buildings and air discharge treatment systems, the recording of training, monitoring and maintenance undertaken, the recording of complaints made directly to the Company, and the frequency of review of the plan. This reviewed OMMP shall include particular reference to the new garnet blasting plant fabric treatment system installed at the site.

13. The consent will be exercised in accordance with the procedures set out in the operation and management plan, and the consent holder shall subsequently adhere to and comply with the procedures, requirements, obligations and all other matters specified in the operation and management plan, except by specific agreement of the Chief Executive, Taranaki Regional Council. In the case of any contradiction between the operation and management plan and the conditions of this resource consent, the conditions of this resource consent shall prevail.

14. The monitoring, maintenance and complaints records required by special condition 12 shall be made available to the Chief Executive, Taranaki Regional Council upon request.

15. If the management practices for the control of windblown dust from the yard areas is not implemented within one month of the approval of the management plan, or is not effective at controlling windblown dust such that compliance with special conditions 4 and 8 is achieved, then special condition 16 shall apply.

16. Subject to special condition 15, the yard and any roadways in the yard shall be sealed, maintained and cleaned to minimise windblown dust to the satisfaction of the Chief Executive, Taranaki Regional Council.

17. The consent holder shall notify the Chief Executive, Taranaki Regional Council, not less than 24 hours and not more than 7 days prior to using more than three blasting nozzles simultaneously in the "garnet shed".

18. The consent holder shall notify the Chief Executive, Taranaki Regional Council in writing at least 24 hours and not more than 7 days prior to operation of the grit room.

19. The final discharge after any pre-treatment at the permanent site at Rifle Range Road, New Plymouth, shall not contain lead (Pb) or Pb components at a concentration greater than 0.7 milligrams per cubic metre as Pb, chromium (Cr) or Cr compounds at a concentration of 1.5 milligrams per cubic metre as Cr, or zinc (Zn) or Zn compounds at a concentration of 15 milligrams per cubic metre as Zn (discharge corrected to 0 degrees Celsius and dry gas), at any time.

Yard operations

20. From time to time the consent holder may receive for abrasive blasting or other surface treatment, an item that because of its bulk, weight, or other factor, cannot be treated inside the appropriate enclosed facility. Such yard operations shall not be permitted on a frequent or continual basis, other than with the written approval of the Chief Executive, Taranaki Regional Council.

21. All items which cannot be treated within properly enclosed facilities shall be screened by means of covers, tarpaulins, cladding or other means, as completely as practicable, to contain dust emissions and depositions and to restrict the spread of all blasting debris.

Mobile operations

22. All items or premises to be blasted from a mobile blasting unit shall be screened by means of covers, tarpaulins, cladding, or other means, as completely as practicable, to contain dust emissions and depositions and to restrict the spread of all blasting debris and materials to the satisfaction of the Chief Executive, Taranaki Regional Council.

23. Where abrasive blasting or surface coating from a mobile blasting unit is to take place within 100 metres of a watercourse, the consent holder shall notify the Chief Executive, Taranaki Regional Council, not more than 7 days and not less than 48 hours prior to any operation commencing. The Chief Executive, Taranaki Regional Council, may require additional measures to prevent, minimise or mitigate any potential for adverse environmental effects. The consent holder shall ascertain such measures prior to commencing an abrasive blasting operation, and comply with any and all such measures at all times.

24. The discharge shall not give rise to any of the following effects in any surface watercourse:

    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;
    f) an increase in suspended solids of more than 10 grams per cubic metre;
    g) turbidity above 4 nephelometric turbidity units (NTU), except that if the turbidity within the water body is above 3.2 NTU, no more than 25% increase in NTU;
    h) any increase in the concentration of zinc, lead, arsenic, chromium or thorium-based products.

25. Dry abrasive blasting from a mobile blasting unit shall not be conducted within 200 metres of any dwelling place or property boundary until either public notice or individual notice to the owners or occupiers of those dwellings or properties has been given.

26. The suspended particulate matter shall not exceed 3 mg/m^3 (measured under ambient conditions), and the deposition of dust shall not exceed a mean daily rate of 0.13 $g/m^2/day$ beyond the property boundary or beyond 50 metres of the discharge when sited on public amenity areas, whichever is less.

Transferred at Stratford on 30 August 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:	Downer NZ Limited PO Box 272 New Plymouth 4340	
Decision Date (Change):	22 June 2016	
Commencement Date (Change):	22 June 2016	(Granted Date: 29 March 2005)

Conditions of Consent

Consent Granted:	To discharge emissions into the air from the manufacture of hot mix asphalt paving mixes and associated activities
Expiry Date:	1 June 2020
Site Location:	Rifle Range Road, Waiwhakaiho
Grid Reference (NZTM)	1696850E-5677930N

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

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. This consent shall be exercised generally in accordance with the information submitted in support of application 3225 and to ensure the conditions of this consent are maintained. Where there is any conflict between the information supplied in support of application 3225 and the conditions of this consent, the conditions of this consent shall prevail.

2. The consent holder shall 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 effects on the environment arising from the exercise of this consent.

3. Prior to undertaking any alterations to the plant, processes or operations, which in the opinion of the Chief Executive, Taranaki Regional Council, may significantly change the nature or quantity of contaminants emitted from the site, the consent holder shall gain the approval of the Chief Executive, Taranaki Regional Council, and shall obtain any necessary approvals under the Resource Management Act, 1991.

4. Recycled asphalt shall not be processed at the site. This does not prohibit the consent holder from seeking approval for this purpose at a later date as described in special condition 3.

5. The drum burner shall be maintained by a trained service person at least every six months to optimise combustion efficiency and to reduce noxious emissions to air.

6. The consent holder shall not operate the asphalt plant using waste oil. This does not prohibit the consent holder from seeking approval for this purpose at a later date as described in special condition 3.

7. The asphalt plant shall not be operated on any fuel containing more than 0.3% sulphur (weight/weight basis).

8. All gas streams ventilated or otherwise discharged from the asphalt plant shall be treated to reduce the concentration of total particulate matter to less than 125 milligrams per cubic metre, normal temperature and pressure, at any time.

9. The consent holder shall have an emission test conducted on discharges from the asphalt plant stack to demonstrate compliance with special condition 8. This test shall;

   a) be undertaken on one occasion between 1 June 2016 and 1 June 2020, and

   b) comprise not less than three separate samples taken during production conditions that give rise to maximum emissions from the asphalt plant stack, and

   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 operating parameters including pressure drop over the scrubber and the production rate over the period of each test, all the raw data and all the calculations"

10. The emissions tests shall be carried out in accordance with Australian Standard 4323.2-1995, or any other equivalent method subject to the written approval of the Chief Executive, Taranaki Regional Council, and these tests shall be performed to the satisfaction of the Chief Executive, Taranaki Regional Council.

11. The discharge of particulate material from the site shall not raise the particulate deposition rate at or beyond the site boundary, above 4 grams per square metre per 30 days or 0.13 grams per square metre per day.

12. Any discharge to air from the exercise of this consent shall not give rise to any offensive or objectionable odour at or beyond the boundary of the property.

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 discharge of suspended particulate matter from the site shall not increase the ambient concentration of suspended particulate matter by more than 3 milligrams per cubic metre (measured under ambient conditions), determined by measurements at the upwind and downwind boundaries of the property.

15. The discharge must not result in noxious, toxic levels, or dangerous levels of airborne contaminants at or beyond the boundary of the property, including but not limited to any risk of fire or explosion.

16. The consent holder shall control all emissions to the atmosphere from the site, so as to ensure that the maximum ground level concentration of nitrogen dioxide measured under ambient conditions does not exceed 200 micrograms per cubic metre (one-hour average) with 99.9 percentile compliance across all monitoring data, up to a maximum limit of 300 micrograms per cubic metre (one-hour average), or 100 micrograms per cubic metre (twenty-four hour average), at or beyond the boundary of the site.

17. The consent holder shall control all emissions to the atmosphere from the site, so as to ensure that the maximum ground level concentration of sulphur dioxide measured under ambient conditions does not exceed 350 micrograms per cubic metre (one-hour average) with 99.9 percentile compliance across all monitoring data, up to a maximum limit of 570 micrograms per cubic metre (one-hour average), or 120 micrograms per cubic metre (twenty-four hour average), at or beyond the boundary of the site.

18. Stockpiles of aggregate and crusher dust liable to produce windblown dust shall be treated, or shielded to minimise dust emissions to the satisfaction of the Chief Executive, Taranaki Regional Council.

19. The yard and any roadways in the yard shall be sealed, maintained, and cleaned to minimise windblown dust to the satisfaction of the Chief Executive, Taranaki Regional Council.

20. Any smoke discharged from the site shall not occur for longer than a total of three minutes in any sixty minute period.

21. All equipment used to avoid, remedy, or mitigate any effect on the environment from the discharge of emissions into the air shall be maintained in optimum condition and shall be operated within optimum design parameters at all times the plant is in operation, to the satisfaction of the Chief Executive, Taranaki Regional Council.

22. The consent holder shall visually inspect the water scrubber and settling pond at least once per month, and maintain as necessary to avoid, remedy or mitigate discharges to air.

23. The consent holder shall maintain a log, recording:

    a) dates when the scrubber was inspected and any maintenance undertaken;
    b) dates when the settling pond was inspected and any maintenance undertaken;
    c) dates of burner maintenance; and
    d) complaints received including name and address of complainants, date received and any remedial action in response to the complaint.

24. The log required in terms of special condition 23 shall be made available to the Chief Executive, Taranaki Regional Council upon request.

25. Air temperatures in the hot mix drum shall not exceed 200 degrees Celsius. The drum shall have an audible temperature alarm which shall sound if at any time the drum temperature exceeds 200 degrees Celsius and corrective action shall be taken. All incidents of temperature exceedance must be recorded in the log required in terms of special condition 23.

Signed at Stratford on 22 June 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:	Katere Surface Coatings Limited P O Box 3258 Fitzroy NEW PLYMOUTH
Consent Granted Date:	18 February 2009

Conditions of Consent

Consent Granted:	To discharge emissions to air from abrasive blasting and surface coating activities at a permanent site located at Katere Road, New Plymouth at or about (NZTM) 1697260E-5677411N and from mobile operations throughout the Taranaki region including within the Coastal Marine Area at Port Taranaki
Expiry Date:	1 June 2020
Review Date(s):	June 2014
Site Location:	Katere Road, New Plymouth & Various locations throughout the Taranaki region
Legal Description:	Lot 2 DP 16705 & Various locations throughout the Taranaki region

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

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 conditions of this consent shall apply to the various operations of the consent holder as follows;

- Special Conditions 2-8, 20, and 21 apply to all operations.
- Special Conditions 9-11 apply to operations conducted within the permanent facility at Katere Road, New Plymouth.
- Special Conditions 12-14 apply to yard operations conducted at the permanent facility at Katere Road, New Plymouth.
- Special Conditions 15-19 apply to operations conducted at any site other than the permanent facility at Katere Road, New Plymouth.

All operations

2. 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.

3. 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 on which the abrasive blasting or associated activity is occurring.

4. All abrasive blasting is to be conducted taking into account wind direction and wind strength, such that off-site emissions are kept to a practicable minimum.

5. 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.

6. Sand used for dry abrasive blasting shall contain:

   (i) less than 5% by dry weight free silica; and
   (ii) less than 2% by dry weight dust able to pass through a 0.15 micron sieve.

7. Dry sand blasting shall only be used only when it is the only method suitable for the job.

8. The consent holder shall ensure that all operators of abrasive blasting equipment understand and comply with the all the conditions of this consent prior to the commencement of any work for which this consent is required.

Operations conducted within the permanent facility located at Katere Road, New Plymouth

9. Except as provided for in conditions 12 to 14, all abrasive blasting on the consent holder's permanent site at Katere Road, New Plymouth shall be carried out in an enclosed booth or shed.

10. All emissions from abrasive blasting, surface preparation or surface coating operations and all other associated emissions from abrasive blasting within the permanent site at Katere Road, New Plymouth shall be contained and treated, as far as is practicable, prior to discharge from any operations enclosure. All gas streams ventilated or otherwise emitted from an enclosure shall be treated to a concentration of total particulate matter of less than 125 mg/m^3 [natural temperature & pressure] corrected to dry gas basis, at any time.

11. The dust deposition rate beyond the property boundary of the permanent site at Katere Road, New Plymouth arising from the discharge, shall be less than 4.0 $g/m^2/30$ days.

Yard operations conducted at the permanent facility located at Katere Road, New Plymouth

12. From time to time the consent holder may receive for abrasive blasting or other surface treatment, an item that because of its bulk, weight or other factor cannot be treated inside the appropriate enclosed facility. Subject to conditions 12 to 14 such items may be treated outside the enclosed facility (termed 'yard operations').

13. The consent holder shall specifically notify the Chief Executive, Taranaki Regional Council not more than 7 days and not less than 48 hours prior to commencing any yard operation as described in special condition 12. Notification shall include the consent number and a brief description of the activity consented and be emailed to worknotification@trc.govt.nz. Notification by fax or post is acceptable only if the consent holder does not have access to email.

14. All items which cannot be treated within properly enclosed facilities shall be screened by means of covers, tarpaulins, cladding or other means, as completely as practicable, to contain dust emissions and depositions and to restrict the spread of all blasting debris.

Operations conducted at any site other than the permanent facility at Katere Road, New Plymouth

15. All items to be blasted shall be screened by means of covers, tarpaulins, cladding, or other means to contain dust emissions and deposits to the satisfaction of the Chief Executive, Taranaki Regional Council.

16. Prior to undertaking abrasive blasting within residential areas, the consent holder shall notify the relevant District Council.

17. Where abrasive blasting or surface coating is to take place within 100 metres of a watercourse, the consent holder shall notify the Chief Executive, Taranaki Regional Council, not more than 7 days and not less than 48 hours prior to any operation commencing. Notification shall include the consent number and a brief description of the activity consented and be emailed to worknotification@trc.govt.nz. Notification by fax or post is acceptable only if the consent holder does not have access to email.

18. Dry abrasive blasting that is to be conducted within 200 metres of any dwelling place or property boundary may only take place after either public notice or individual notice to all affected owners or occupiers has been given.

19. The suspended particulate matter shall not exceed 3 mg/m^3 [measured under ambient conditions], and the deposition of dust shall not exceed 0.13 g/m^2/day beyond the boundary of the property on which the activity is occurring or beyond 50 metres of the discharge when sited on public land, whichever is less.

Review

20. This consent shall lapse on 31 March 2014, 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 2014, for the purpose of ensuring that the conditions are adequate to deal with any adverse effects on the environment arising from the exercise of this resource consent, which were either not foreseen at the time the application was considered or which it was not appropriate to deal with at the time.

Signed at Stratford on 18 February 2009

For and on behalf of
Taranaki Regional Council

_____

Chief Executive

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 7076 Fitzroy New Plymouth 4341
Decision Date (Change):	28 July 2016
Commencement Date (Change):	28 July 2016 (Granted Date: 6 May 2009)

Conditions of Consent

Consent Granted:	To discharge emissions to air from mobile blasting operations throughout the Taranaki region (excluding the Coastal Marine Area) and at a permanent facility
Expiry Date:	1 June 2020
Review Date(s):	June 2018
Site Location:	Various locations throughout Taranaki and a permanent site at 67 Colson Road, Waiwhakaiho
Grid Reference (NZTM)	1696976E-5676477N (permanent site)

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

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 conditions of this consent shall apply to the various operations of the consent holder as follows:
   - Special conditions 2-8 apply to all operations.
   - Special conditions 9-12 apply to operations conducted within the permanent facility at 67 Colson Road, Waiwhakaiho.
   - Special conditions 13-20 apply to operations conducted at any other site other than the permanent facility at 67 Colson Road, Waiwhakaiho.

All operations

2. 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.

3. 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 on which the abrasive blasting or associated activity 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. The suspended particulate matter shall not exceed 3 mg/m^3 (measured under ambient conditions), and the deposition of dust shall not exceed 0.13 g/m^2/day beyond the property boundary or beyond 50 metres of the discharge when sited on public amenity areas, whichever is less.

7. The consent holder shall ensure that all operators of abrasive blasting equipment understand and comply with the all the conditions of this consent prior to the commencement of any work for which this consent is required.

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

Operations conducted within the permanent facility at 67 Colson Road, Waiwhakaiho

9. All abrasive blasting on the consent holder's permanent site at 67 Colson Road, Waiwhakaiho shall be carried out in an enclosed booth or shed.

10. All emissions from abrasive blasting, surface preparation or surface coating operations and all other associated emissions from abrasive blasting at the permanent site at 67 Colson Road, Waiwhakaiho shall be contained and treated, as far as is practicable, prior to discharge. All emissions from an enclosure shall be treated so that the concentration of total particulate matter does not exceed 125 mg/m^3 (natural temperature & pressure) corrected to dry gas basis.

11. Within three months of the granting of this consent, the consent holder shall prepare and maintain an operation, management and maintenance plan that documents the consent holder procedures within the permanent site at 67 Colson Road, Waiwhakaiho. 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) staff training;
    b) general housekeeping and yard maintenance;
    c) blasting operations;
    d) handling of toxic substances;
    e) monitoring and maintenance of the blasting buildings and air discharge treatment systems;
    f) the recording of training, monitoring and maintenance undertaken;
    g) the recording of complaints made directly to the consent holder, and
    h) the frequency of review of the plan.

12. The monitoring, maintenance and complaints records required by special condition 11 shall be made available to the Chief Executive, Taranaki Regional Council upon request.

Operations conducted at any site other than the permanent facility at 67 Colson Road, Waiwhakaiho

13. Where abrasive blasting or surface coating is to take place within 100 metres of a watercourse, the consent holder shall notify the Chief Executive, Taranaki Regional Council, prior to any operation commencing. The Chief Executive, Taranaki Regional Council, may require additional measures to prevent, minimise or mitigate any potential for adverse environmental effects. It shall be the responsibility of the consent holder to ascertain such measures prior to commencing an abrasive blasting operation, and to comply with any and all such measures at all times.

14. To allow appropriate compliance monitoring at the various locations, the consent holder should keep a record of the places the abrasive blasting operation is undertaken, including, but not limited to the following information:

    i. the type of blasting used;
    ii. date;
    iii. time/duration of work;
    iv. distance from nearest stream;
    v. distance from nearest dwellings; and
    vi. distance from adjacent properties.

15. The record of mobile blasting operation kept by the consent holder under special condition 14 above shall be made available to the Chief Executive, Taranaki Regional Council on request.

16. All abrasive blasting is to be conducted with taking into account wind direction and wind strength, such that off-site emissions are kept to a practicable minimum.

17. All items blasted in a mobile facility shall be those that cannot be moved to a permanent facility (e.g. bridges).

18. 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 to restrict the spread of all blasting debris and materials to the satisfaction of the Chief Executive, Taranaki Regional Council.

19. Dry abrasive blasting that is to be conducted within 200 metres of any dwelling place or property boundary may only take place after either public notice or individual notice to all affected owners or occupiers has been given.

20. This consent provides for the abrasive blasting of structures on land, and does not include the abrasive blasting in the coastal marine area, as defined in section two and Appendix II of the *Regional Coastal Plan for Taranaki*.

Signed at Stratford on 28 July 2016

For and on behalf of
Taranaki Regional Council

_____

A D McLay
Director - Resource Management

Land use permits

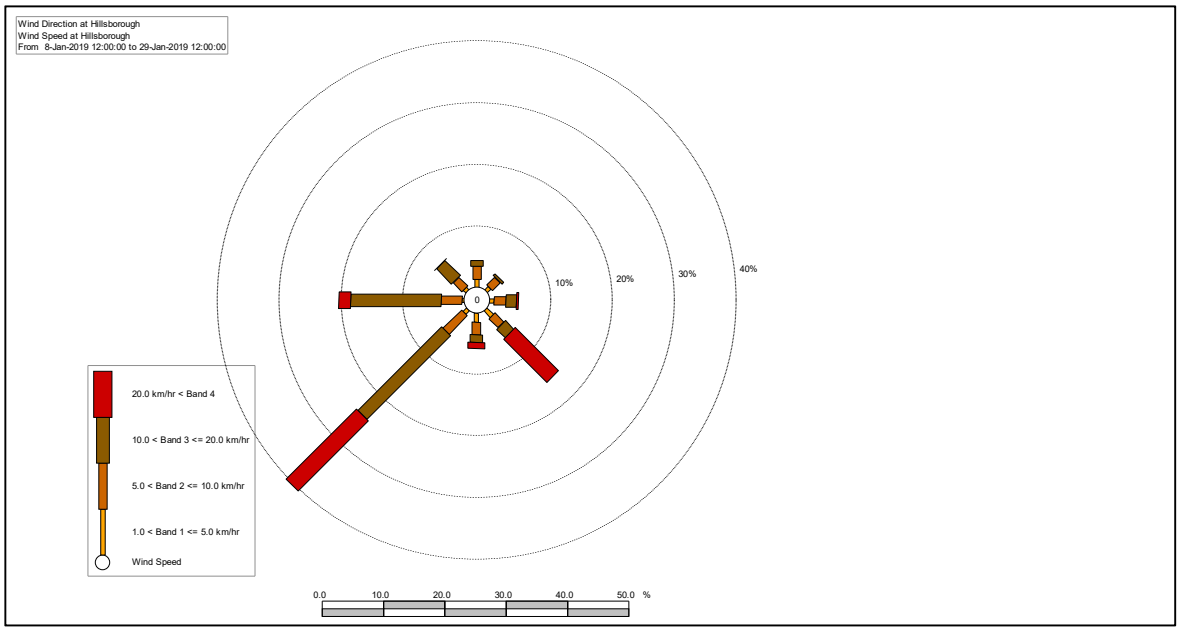
Section 13(1)(a) of the RMA stipulates that no person may in relation to the bed of any lake or river use, erect, reconstruct, place, alter, extend, remove, or demolish any structure or part of any structure in, on, under, or over the bed, unless the activity is expressly allowed for by a resource consent,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

Appendix II

Wind direction information for the New Plymouth area during the deposition gauge monitoring periods



~~~ Hilltop Hydro ~~~ Version 6.65.07 18-Nov-2019

~~~ PLWind ~~~

Source is R:\PROGRAMS\HILLTOP\merged files.dsn

Wind Direction at Hillsborough and Wind Speed at Hillsborough

From 8-Jan-2019 12:00:00 to 29-Jan-2019 12:00:00

Number of data points read : 3024

Number of directions <0.0 or >360.0 deg. : 0

Limits for Wind Speed are 0.0 to 50.0 km/hr

Number of readings outside limits : 0

Number of data points used : 3024

Percentange of time in each band

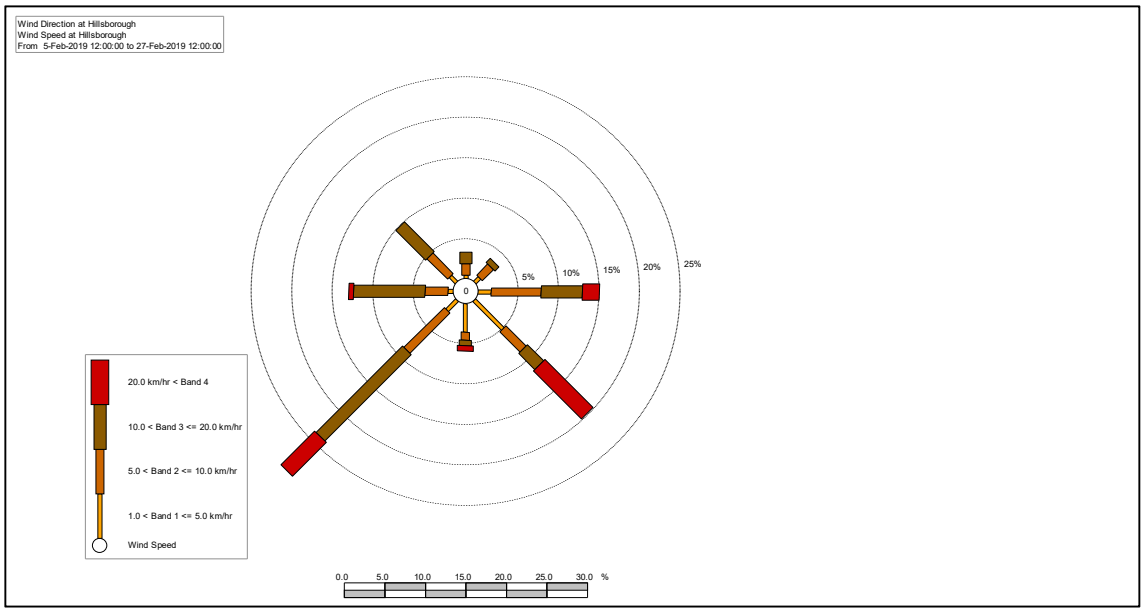
Direction	Band 1	Band 2	Band 3	Band 4	Total
337.5 - 22.4	1.3	2.1	1.0	0.0	4.4
22.5 - 67.4	0.8	1.9	0.4	0.0	3.1
67.5 - 112.4	0.7	2.0	1.7	0.3	4.7
112.5 - 157.4	1.4	2.1	2.0	9.9	15.3
157.5 - 202.4	1.4	2.0	1.3	1.0	5.7
202.5 - 247.4	0.8	4.2	19.2	16.1	40.3
247.5 - 292.4	0.3	3.4	14.7	1.9	20.2
292.5 - 337.4	0.7	2.0	3.5	0.1	6.2
Total	7.5	19.6	43.7	29.2	100.0

Percentage <= 1.0 0.0

Wind Speed bands (km/hr)

1.0 < Band 1 <= 5.0 5.0 < Band 2 <= 10.0

10.0 < Band 3 <= 20.0 Band 4 > 20.0



~~~ Hilltop Hydro ~~~ Version 6.65.07 18-Nov-2019

~~~ PLWind ~~~

Source is R:\PROGRAMS\HILLTOP\merged files.dsn

Wind Direction at Hillsborough and Wind Speed at Hillsborough

From 5-Feb-2019 12:00:00 to 27-Feb-2019 12:00:00

Number of data points read : 3168

Number of directions <0.0 or >360.0 deg. : 0

Limits for Wind Speed are 0.0 to 50.0 km/hr

Number of readings outside limits : 7

Number of data points used : 3161

Percentange of time in each band

Direction	Band 1	Band 2	Band 3	Band 4	Total
337.5 - 22.4	0.5	1.4	1.4	0.0	3.3
22.5 - 67.4	0.9	1.9	0.8	0.0	3.6
67.5 - 112.4	1.6	6.2	5.1	2.0	15.0
112.5 - 157.4	5.0	3.5	2.8	8.5	19.8
157.5 - 202.4	3.4	1.0	0.7	0.7	5.8
202.5 - 247.4	1.7	7.0	15.2	5.9	29.8
247.5 - 292.4	0.6	2.8	8.9	0.6	12.9
292.5 - 337.4	1.2	3.5	5.2	0.0	9.9
Total	14.9	27.4	40.0	17.7	100.0

Percentage <= 1.0 0.0

Wind Speed bands (km/hr)

1.0 < Band 1 <= 5.0 5.0 < Band 2 <= 10.0

10.0 < Band 3 <= 20.0 Band 4 > 20.0