

# Lower Waiwhakaiho Airshed

Monitoring Programme  
Annual Report  
2023/24  
Technical Report 2024-63





# Lower Waiwhakaiho Airshed Monitoring Programme Annual Report 2023/24 Technical Report 2024-63

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## Executive summary

The Waiwhakaiho industrial area of New Plymouth accommodates a wide range of industrial activities and has been designated the Lower Waiwhakaiho Airshed for the purposes of monitoring. Three sites involve activities with discharges to air that are authorised by resource consents and are monitored under this programme. These are Downer EDI Works (asphalt plant), Dialog Fitzroy Ltd and Katere Surface Coatings Ltd (abrasive blasting). This report for the period July 2023 to June 2024 details the monitoring programme implemented by Taranaki Regional Council (the Council) to assess the companies' compliance with consent conditions and environmental effects of the companies' activities in relation to air quality.

**Overall, the companies assessed in this Lower Waiwhakaiho Air Discharge Compliance Monitoring Programme demonstrated a high level of environmental and administrative performance during this monitoring period.**

Collectively the companies hold three resource consents for discharges to air from onsite activities, while Dialog Fitzroy Ltd and Katere Surface Coatings Ltd also have consents for discharges from mobile abrasive blasting around the region. All of the consents include a set of conditions which impose 'bottom-line' requirements that minimise adverse environmental effects from the discharges. Through the monitoring programme the Council assess compliance with these conditions and environmental effects arising from the discharges.

During the monitoring year the Council conducted two deposition gauge surveys to quantify the rate of dust deposition beyond the site boundaries to determine if the dust caused significant amenity effects to neighbouring properties. The results of the survey were close to, and in some cases exceeded, the consent limits. However, further analysis of the deposited dust that the dust was not likely to be from abrasive blasting or asphalt manufacturing processes. Deposited dust levels likely represent normal levels for an industrial area.

The consents also require that the companies complete various administrative actions including maintaining and updating air quality management plans, and in the case of Downer EDI Ltd conduct testing of emissions from the asphalt plant.

**During the year, Downer EDI Works Ltd demonstrated a high level of environmental and administrative performance with their resource consent.**

**During the year, Dialog Fitzroy Ltd demonstrated a high level of environmental and administrative performance with their resource consent.**

**During the year, Katere Surface Coatings Ltd demonstrated a high level of environmental and administrative performance with their consent.**

For reference, in the 2023/24 year, consent holders were found to achieve a high level of environmental performance and compliance for 864 (89%) of the 967 consents monitored through the Taranaki tailored monitoring programmes, while for another 75 (8%) of the consents a good level of environmental performance and compliance was achieved. A further 26 (3%) of consents monitored required improvement in their performance, while the remaining two (<1%) achieved a rating of poor.

This report recommends that monitoring of these sites in 2024/25 continues at the same level as the 2023/24 programme.

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# 1. Introduction

## 1.1 Compliance monitoring programme reports and the Resource Management Act 1991

### 1.1.1 Introduction

This is the annual report for the period July 2023 to June 2024 by Taranaki Regional Council (the Council) detailing the results of the monitoring programme associated with the air discharge consents held by three industrial sites in the Lower Waiwhakaiho industrial catchment. These are the Downer NZ Ltd asphalt manufacturing plant, Dialog Fitzroy Ltd abrasive blasting operation, and the Katere Surface Coatings Ltd abrasive blasting and surface coating operation.

In accordance with the Resource Management Act 1991 (RMA) environmental management should be integrated across the water air and land domains so that a consent holder's use of these resources can be considered from a single comprehensive environmental perspective. Accordingly, the Council generally implements integrated environmental monitoring programmes and reports the results of the programmes jointly.

Monitoring of industrial air discharges in the Lower Waiwhakaiho airshed by the Council commenced in 1992. This report is the 31<sup>st</sup> Annual Report to be prepared by the Council to report on air discharges and their effects.

### 1.1.2 Structure of this report

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

- consent compliance monitoring under the RMA and the Council's obligations;
- the Council's approach to monitoring sites through annual programmes;
- the resource consents held by the 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.

The monitoring results of each company are reported on separately in sections 2 to 4.

**Subsection 1** provides a process description for each company.

**Subsection 2** presents the results of monitoring of the company's 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 2024/25 monitoring year.

**Section 5** 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.

### 1.1.3 The Resource Management Act 1991 and monitoring

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

- a. the neighbourhood or the wider community around an activity, and may include cultural and social-economic effects;
- b. physical effects on the locality, including landscape, amenity and visual effects;
- c. ecosystems, including effects on plants, animals, or habitats, whether aquatic or terrestrial;
- d. natural and physical resources having special significance (for example recreational, cultural, or aesthetic); and
- e. risks to the neighbourhood or environment.

In drafting and reviewing conditions on discharge permits, and in implementing monitoring programmes, the Council is recognising the comprehensive meaning of 'effects' in as much as is appropriate for each activity. Monitoring programmes are not only based on existing permit conditions, but also on the obligations of the RMA to assess the effects of the exercise of consents. In accordance with Section 35 of the RMA, the Council undertakes compliance monitoring for consents and rules in regional plans, and maintains an overview of the performance of resource users and consent holders. Compliance monitoring, including both activity and effects 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 use, to move closer to achieving sustainable development of the region's resources.

#### 1.1.4 Evaluation of environmental performance

Besides discussing the various details of the performance and extent of compliance by the consent holders, this report also assigns a rating as to each Company's environmental and administrative performance during the period under review. The rating categories are high, good, improvement required and poor for both environmental and administrative performance. The interpretations for these ratings are found in Appendix II.

For reference, in the 2023/24 year, consent holders were found to achieve a high level of environmental performance and compliance for 864 (89%) of the 967 consents monitored through the Taranaki tailored monitoring programmes, while for another 75 (8%) of the consents a good level of environmental performance and compliance was achieved. A further 26 (3%) consents monitored required improvement in their performance and the remaining two (<1%) achieved a rating of poor.

## 1.2 Resource consents

A list of the companies which hold air discharge consents monitored as part of the Lower Waiwhakaiho Airshed Compliance Monitoring Programme is given in Table 1, and their locations are shown in Figure 1.

A summary of the various consent types issued by the Council is included in Appendix I, as are copies of all consents held by the Company during the period under review.

Table 1 Air discharge consents in the Lower Waiwhakaiho monitoring programme

| Consent Holder                | Consent No | Description  | Granted        | Next Review Date | Expiry Date |
|-------------------------------|------------|--|----------------|------------------|-------------|
| <i>Air discharge consents</i> |            |  |                |                  |             |
| Downer NZ Ltd                 | 4060-5     | To discharge emissions into the air from the manufacture of hot mix asphalt paving mixes and associated activities | September 2021 | June 2026        | June 2038   |

| Consent Holder  | Consent No        | Description  | Granted       | Next Review Date | Expiry Date |
|---|-------------------|--|---------------|------------------|-------------|
| Dialog Fitzroy Ltd (formerly Fitzroy Engineering Group Ltd) | 4025-4<br>10869-1 | To discharge emissions into the air from abrasive blasting operations throughout the Taranaki region, except within some part of the Coastal Marine Area   | December 2020 | June 2029        | June 2038   |
| Katere Surface Coatings Ltd                                 | 4475-3<br>10881-1 | 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 Port Taranaki, but excluding the remainder of the Coastal Marine Area | December 2020 | June 2026        | June 2038   |

## 1.3 Monitoring programme

### 1.3.1 Introduction

Section 35 of the RMA imposes obligations on 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 on 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 comprises of three components

### 1.3.2 Programme liaison and management

There can be 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

Site Inspections focus on equipment with actual and potential emission sources, and on-site management processes which minimise discharges of contaminants to air. Where possible inspections are scheduled to coincide with activities which have discharges to air; for example, the operation of the Downer asphalt plant or abrasive blasting at Dialog Fitzroy Ltd or Katere Coatings Ltd. Observations of the receiving environment are made to identify potential effects of odour, dust, noxious or dangerous emissions. Sources of data collected by the consent holder may reviewed or requested. During inspections the receiving environment may be surveyed for evidence of offsite effects of discharges of odour or dust.

### 1.3.4 Dust deposition monitoring

Particulate matter in ambient air can arise from natural sources including pollens, sea spray and crustal matter, and from human sources such as smoke and ash, unsealed surfaces, and manufacturing processes. Fine particles ( $<30\mu\text{m}$ ) can remain suspended in the atmosphere for hundreds of meters, while coarser dust particles usually settles out within tens to a hundred of metres.

The environmental effects of dusts include loss of visibility, loss of the amenity and aesthetic values, breathing difficulties, and soiling of surfaces. It has been found that background rates of dust deposition in rural areas of New Zealand typically range between  $0.1\text{--}1.5\text{g}/\text{m}^2/30$  days, while in urban areas rates are generally higher, in the range of  $0.6\text{--}3.0\text{g}/\text{m}^2/30$  days. Generally, rates above  $3\text{--}4\text{g}/\text{m}^2/30$  days tend to lead to complaints by neighbours about objectionable dust effects when they come from a single source (Good Practice Guide for Assessing and Managing Dust, MfE, 2016, [GPG:Dust](#)). The Regional Air Quality Plan for Taranaki (RAQP) has adopted an average daily deposition rate guideline value of  $0.13\text{g}/\text{m}^2/\text{day}$  which is a pro-rata calculation based on the GPG:Dust guideline value. This daily guideline value has been imposed as a limit on all air discharges arising from the consented activities in this monitoring programme irrespective of the sensitivity of the surrounding environment to dust.

The primary method of measuring dust deposition rates uses deposition gauges. This method of monitoring is used for quantifying the amount of dust settling near the three operations subject to this report. From past results of deposition gauging, it is likely that factors including seasonal weather variations, on site activities, and offsite sources can have some effect on the results.

Deposition gauges are buckets fixed to a stand about 1.6m high (photo 1) and contain a solution 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  $150\mu\text{m}$  filter. Deposition gauge dust monitoring is used by Council as a simple and affordable method to monitor long-term dust trends but has certain limitations. It is unsuitable for active dust management because of the lag-time in getting results, and the source of the dust cannot be conclusively determined without source apportionment analysis (GPG:Dust).



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

Deposition gauges were deployed on two occasions during the monitoring period for a period of 21 days each. The first deployment began on 16 January 2024 and lasted 21 days. The second deployment began on 8 February 2024 and also lasted 21 days. Three of the gauges were corrupted during the second survey so these were deployed again for another 21 days until 30 April.



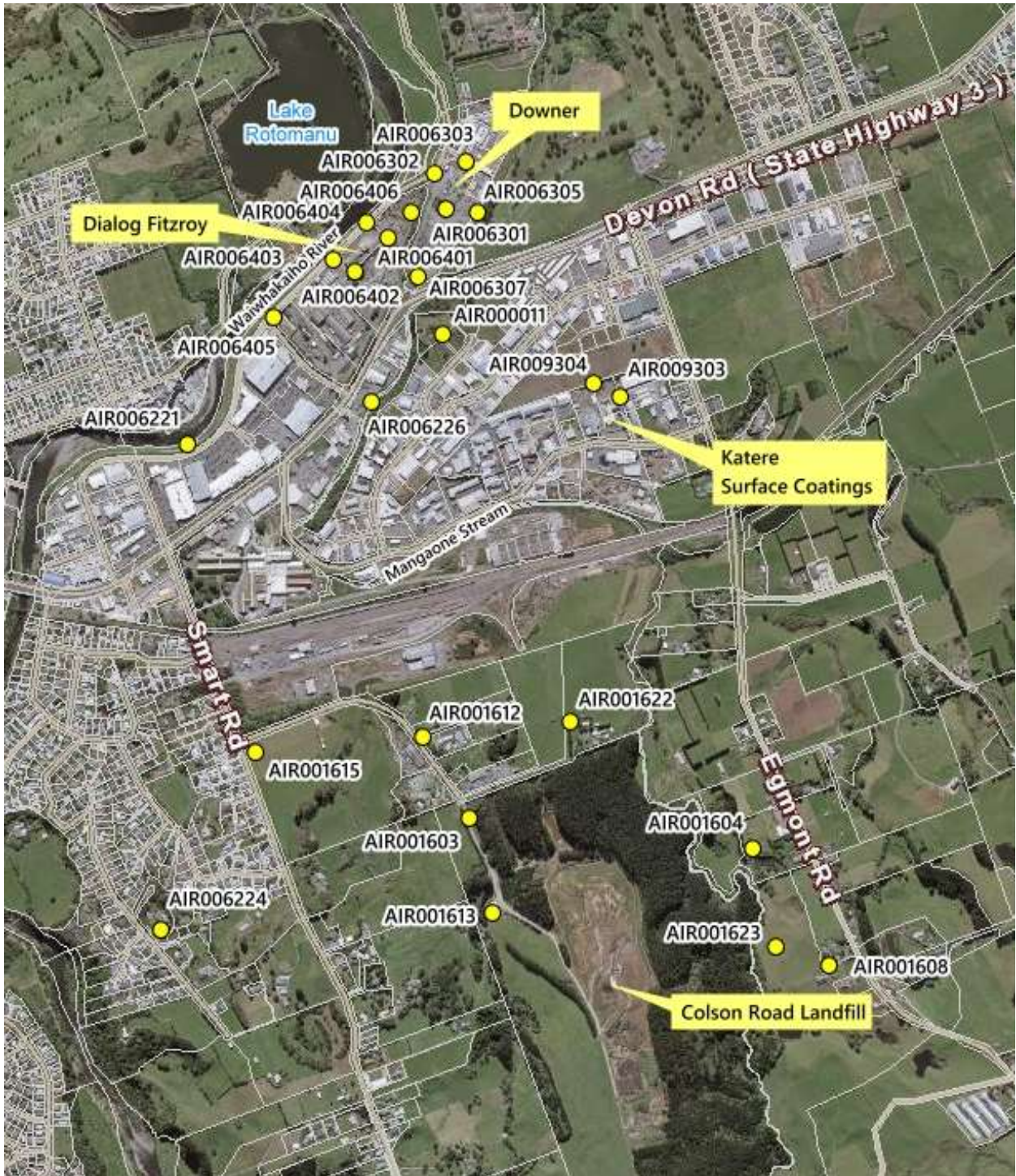


Figure 1 Locations of the industries in this monitoring programme, closed landfill, and all monitoring sites within the Lower Waiwhakaiho area

The rate of dust deposition is calculated by dividing the weight of insoluble material (grams) collected on the filter by the cross-sectional area of the gauge ( $m^2$ ) and the number of days over which the sample was deployed. The unit of measurement is  $g/m^2/day$ .

Wind direction and speed conditions during the deployments are presented in Figure 2 and Figure 3 below.

During the first deployment approximately 50% of wind was from the southwest quarter. Approximately 17% of wind from this quarter exceeded 20km/h which is sufficient to entrain dust particles for several metres to kilometres away, depending on the particle size.

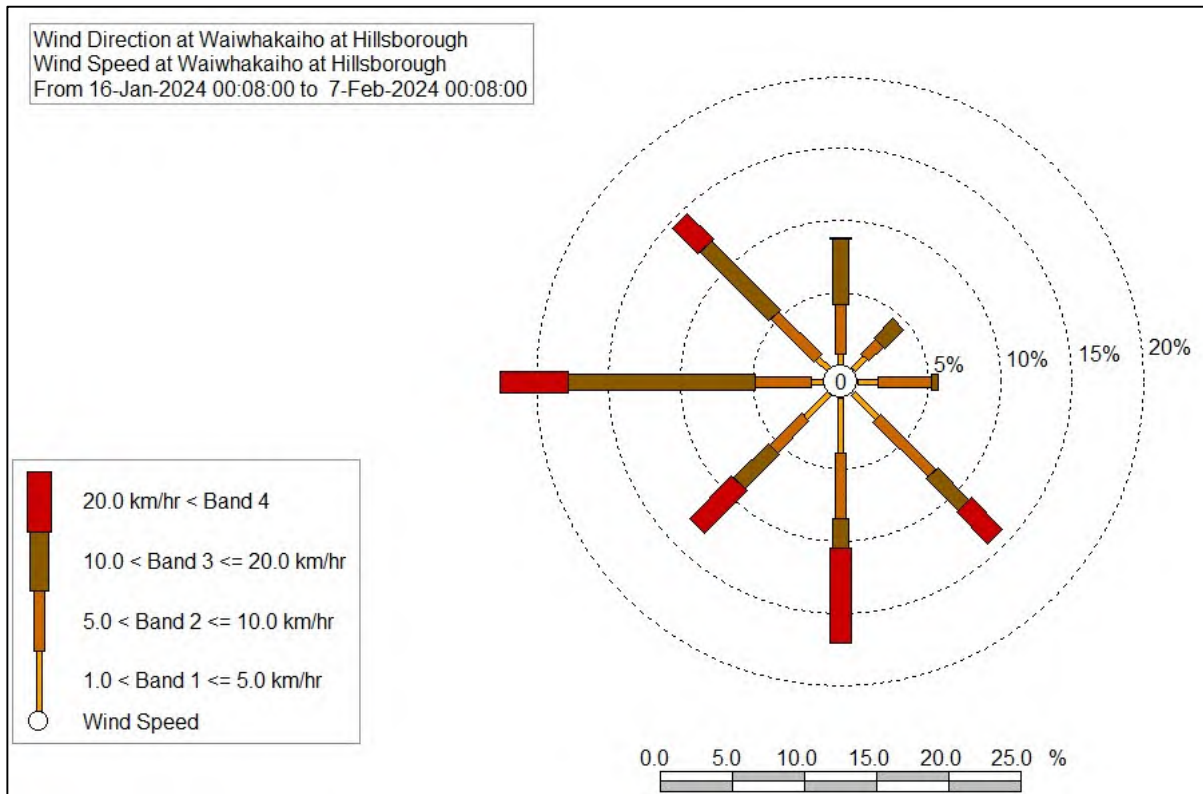


Figure 2 Wind speed and direction during the first survey

During the second survey the wind was far more variable, coming primarily from the northwest, west and south. Wind speeds were lower during the survey, with the majority of speeds being between 5 and 10km/h. Wind speeds exceeding 20km/h occurred only 5% of the time.



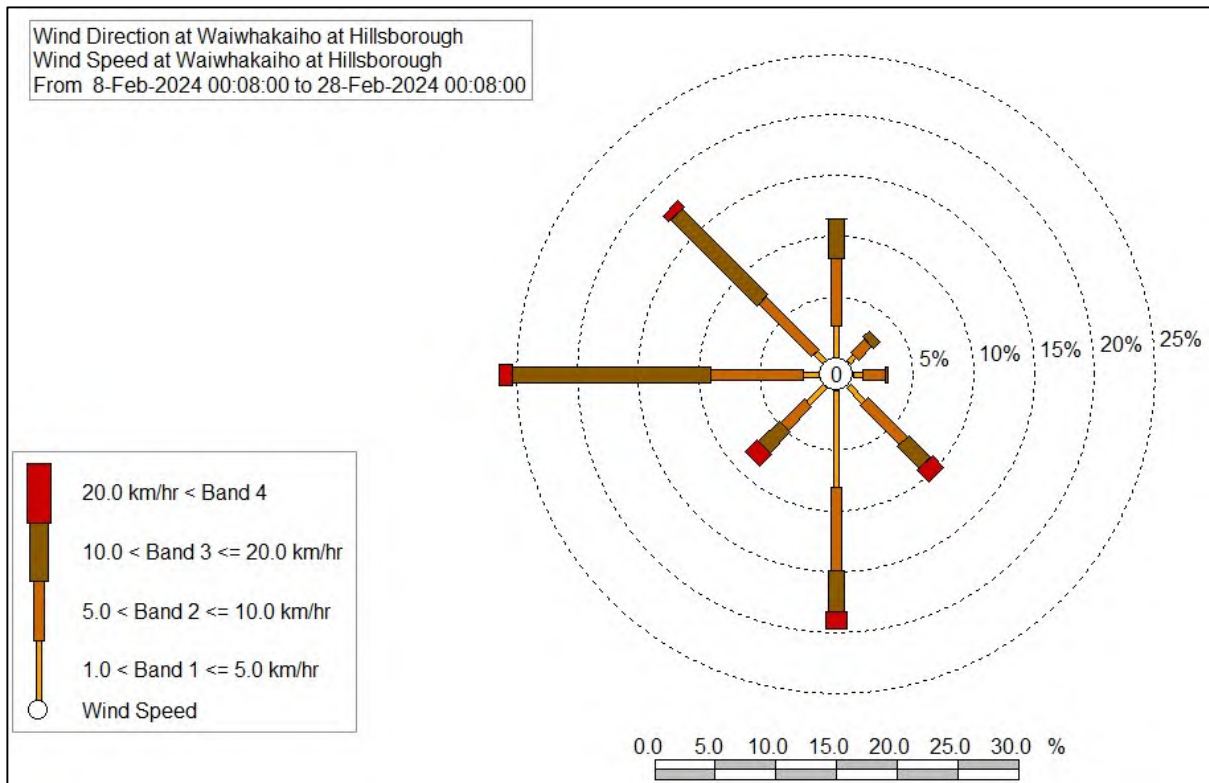


Figure 3 Wind speed and direction during the second survey

## 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 which includes events where the individual or organisation concerned has notified the Council. Details of any investigation and corrective action taken are recorded for non-compliant events.

Where complaints may be associated with a particular site, and if there is potential for legal liability on the part of Council the Council must be able to prove by investigation that the individual/organisation is the source of the incident (or that the complaint cannot be validated).

There were no air quality related complaints received by the Council during this monitoring year for any of the sites. No investigations or interventions were conducted by the Council in relation to any of the sites.

## 2. Downer NZ Ltd

### 2.1 Introduction

#### 2.1.1 Process description

Downer EDI Works Ltd (Downer) operates an asphalt manufacturing plant which produces asphalt for use on roads and other drive-on surfaces. Discharges of contaminants to air are authorised by air discharge consent 4060-5.

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 halfway 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 17m stack.

Road patching mix can be manufactured in a pug mill 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 is equipped with dual fuel capability. The plant is able to operate on diesel oil. The burner has a rated capacity of 12MW gross, but the plant requires only 7MW gross on average at the plant's maximum production rate of 80 tonnes per hour.

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 contaminants associated with the discharges to air from the site are particulates, volatile organic compounds (VOC), carbon monoxide, nitrogen oxides and sulphur dioxide.



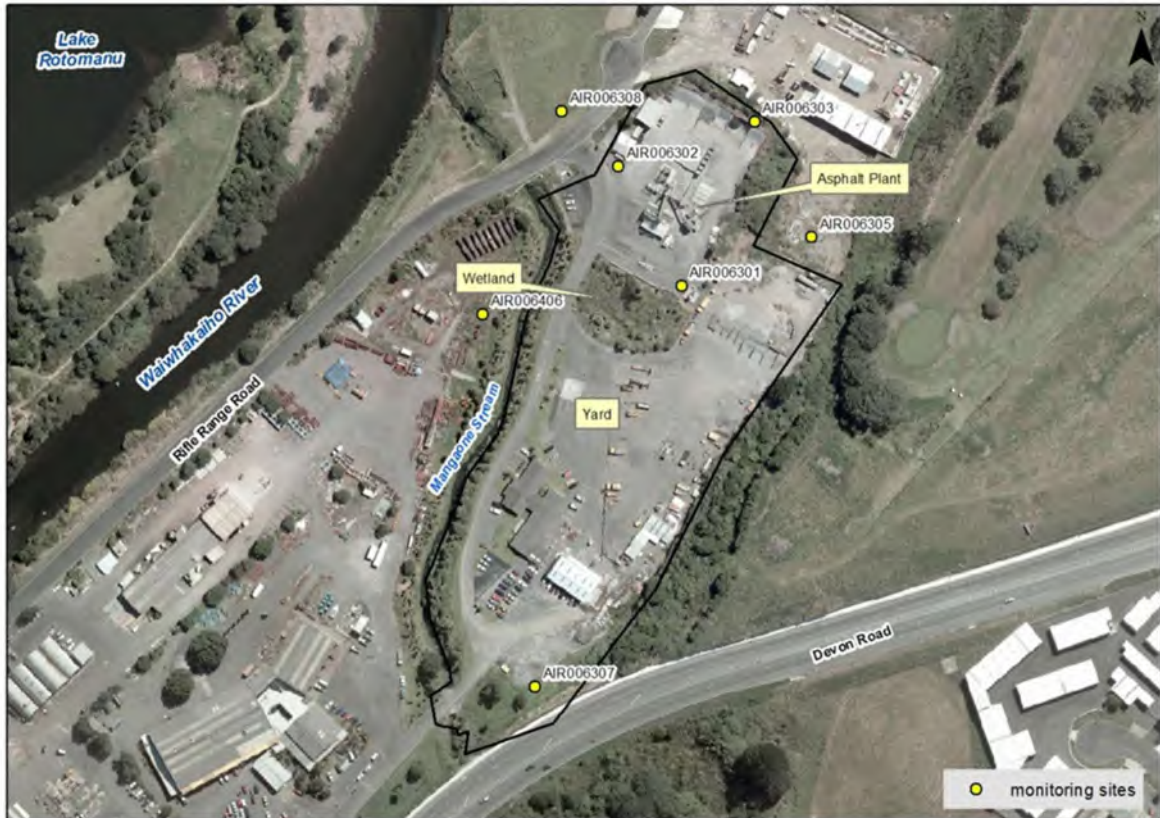


Figure 4 Locations of Downer EDI Works Ltd (black outline) and deposition gauge sites

In addition to the discharges from the asphalt plant during normal operation, the other sources of 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.

Some of the VOC emissions can produce an 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.

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. Atmospheric dispersion modelling of the plant emissions during the consent application stage predicted that the maximum ground-level concentrations of contaminants were less than the relevant human health-based assessment criteria.

## 2.2 Results

### 2.2.1 Inspections

During this monitoring year the site was inspected on two occasions, 6 December 2023 and 9 April 2024. On both occasions the site was generally tidy with no accumulations of aggregate or significant deposited dust on the site or beyond the boundary.

During the December inspection the plant began manufacturing a batch of asphalt. The discharge from the stack was whitish in colour for a short time but was generally clear soon after. There was a general bitumen odour around the site, which was not unpleasant, and would not be considered offensive at any location. There was no visible airborne dust observed during any inspection. Overall, the site was considered to be compliant with the conditions of the consent at the time of both inspections.

### 2.2.2 Provision of company data

In accordance with condition 7 of air discharge consent 4060-5 the Company is required to conduct testing of emissions from the asphalt plant stack to ensure that emissions comply with a limit on total particulate matter (TPM) to 125mg/m<sup>3</sup>. The testing is required to be conducted annually for the duration of the consent. The testing was not undertaken this monitoring year due to the unavailability of a consultant technician at the same time as a high volume batch production. The emissions testing requires three sampling runs of at least 45 minutes to ensure robust results. The Company relies on delivering a high volume order at a time when the technician (based outside the region) is available to do the testing. On this basis it was agreed that the testing could be deferred to the next monitoring year.

The Company provided a reviewed and updated Zero Harm Asphalt Management Plan in July 2023.

### 2.2.3 Receiving environment monitoring

#### 2.2.3.1 Deposition gauge monitoring

A site map marking the location of the gauges around the Downer site is shown in Figure 4, with the monitoring site locations also described in Table 2. The only monitoring location outside the boundary of the site is AIR006305.

Material collected from the gauges was weighed for solid particulates and the results are shown in Table 3.

Table 2 Downer EDI Works Ltd monitoring location details

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

During the first survey wind was primarily from southwest quarter which places air monitoring sites AIR006303 and AIR006305 downwind of site emissions. Approximately 17% of wind from the southwest quarter exceeded 20km/h which is sufficient to entrain dust particles for several metres to kilometres away, depending on the particle size. This is reflected in the results where the second and third highest results are from those monitoring locations (Table 3).

During the second survey the wind was primarily from the northwest, west and south. Wind speeds were lower during the survey, with the majority of speeds being between 5 and 10km/h. Wind speeds exceeding

20km/h occurred only 5% of the time. Overall, the deposition rates from this survey were lower than the first.

As can be seen from Table 3 the results from seven of the ten samples collected during the survey were less than the consent limit of <0.13g/m<sup>2</sup>/day. These results ranged from 0.02 to 0.11g/m<sup>2</sup>/day.

Three samples reported deposition rates which were higher than the consent limit, ranging from 0.15 to 0.21g/m<sup>2</sup>/day. One of these locations was monitoring site AIR006305 which is the only site beyond the boundary of the Downer property and is located in an unsealed yard and adjacent to the New Plymouth golf course. Given its location the gauge was downwind of the site for much of the second survey and exposed to site emissions. The monitoring site reported a deposition rate of 0.15g/m<sup>2</sup>/day which is 0.02g/m<sup>2</sup>/day higher than the consent limit, and 0.04g/m<sup>2</sup>/day higher than the January result.

Table 3 Deposition gauge results from around the Downer NZ Ltd site

| Monitoring site | Dust deposition rate (g/m <sup>2</sup> /day) |                |
|-----------------|--|----------------|
|                 | January                                      | February/April |
| AIR006301       | 0.21   | 0.02           |
| AIR006302       | 0.04   | 0.09           |
| AIR006303       | 0.15   | 0.05           |
| AIR006305       | 0.11   | 0.15           |
| AIR006307       | 0.02   | 0.10           |
| Consent limit:  | <0.13g/m <sup>2</sup> /day                   |                |

Note: higher than consent limit in **bold**

## 2.3 Discussion

### 2.3.1 Site performance and environmental effects

As discussed in section 2.2.2 above an annual stack emissions test was unable to be completed this year. The last emissions testing report was received in February 2023. The average TPM concentration result was 124mg/m<sup>3</sup> which is marginally lower than the consent limit of 125mg/m<sup>3</sup>. In May 2022 the testing reported an average concentration of 122mg/m<sup>3</sup>. Atmospheric dispersion modelling of the emissions for the consent application determined that, under worst case conditions, contaminants discharged from the asphalt plant would not result in pollution which posed a significant risk to human health. On this basis emissions from the plant this year are unlikely to have significantly degraded air quality in the area.

The results of the deposition gauge monitoring indicate that, at times, dust deposition beyond the boundary of the site exceeds the consent limit and the guideline threshold recommended by the GPG:Dust (MfE, 2016). For an industry such as this, relatively high deposition rates are expected due to handling and processing of aggregate material and heavy vehicle movements. Given the industrial nature of the wider area the deposited dust is likely to be from multiple off site sources as well as the authorised discharge. Additionally, workers and visitors to industrial areas are more tolerant of dust than in more sensitive environments such as commercial and residential settings. There were no dust complaints received from neighbours of the site.

During the manufacture of a batch of asphalt there can be a visible plume from the scrubber stack. The discharge is mostly steam and is generally whitish in colour which is not considered to be objectionable. The plume may become discoloured for a short time, particularly on start up, but will return to a whitish colour within minutes.

Inspections found that the site was compliant with the site management and best practices conditions.

### 2.3.2 Evaluation of performance

A summary of Downer EDI Works Ltd.'s compliance record for the year under review is set out in Table 4.

Table 4 Summary of performance for Consent 4060-5 discharge of contaminants 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. Approval prior to alterations to plant or processes  | Inspection and liaison with consent holder      | N/A                                |
| 3. Prohibition of recycled asphalt processing   | Inspection and liaison with consent holder      | Yes                                |
| 4. Operation using waste oil not permitted  | Inspection and liaison with consent holder      | Yes                                |
| 5. Sulphur content of fuel  | Inspection                                      | Yes                                |
| 6. Concentration of total particulate matter less than 125mg/m <sup>3</sup>   | Stack testing                                   | No                                 |
| 7. Stack emissions testing due before 1 June 2022 and every 12 months after   | Review of documentation provided to the Council | Yes                                |
| 8. Definition of methodology to be used for stack emissions testing   | Review of documentation provided to the Council | Yes                                |
| 9. The dust deposition rate beyond the property boundary arising from the discharge shall be less than 4.0g/m <sup>2</sup> /30 days or 0.13g/m <sup>2</sup> /day. | Deposition gauge monitoring                     | Yes (sources other than discharge) |
| 10. Objectionable odour or level of dust not permitted at site boundary   | Inspection and complaints record                | Yes<br>No complaints received      |
| 11. Control of ground levels of carbon monoxide, nitrogen dioxide, fine particles (PM10), and sulphur dioxide   | Not assessed during current monitoring period   | N/A                                |
| 12. No hazardous, noxious, dangerous, offensive or objectionable emissions at site boundary   | Inspection and complaints record                | Yes<br>No complaints received      |
| 13. Requirements of Operations and Maintenance Management Plan  | Review of plan                                  | Yes                                |
| 14. Reporting requirements of OMMP  | Plan received                                   | Yes                                |
| 15. Option for review of consent  | Next opportunity for review June 2026           | N/A                                |
| Overall assessment of consent compliance and environmental performance in respect of this consent   |   | <b>High</b>                        |
| Overall assessment of administrative performance in respect of this consent   |   | <b>High</b>                        |

N/A = not applicable

During the year, the Downer NZ Ltd demonstrated a high level of environmental performance and administration performance and compliance with their resource consent, as defined in Appendix II.

### **2.3.3 Recommendations from the 2022/23 Annual Report**

In the 2022/23 Annual Report, it was recommended:

1. THAT monitoring of consented activities at the Downer EDI Works Ltd site in the 2023/24 year shall continue at the same level as in 2022/23.
2. THAT should there be issues with environmental or administrative performance in 2023/24, monitoring may be adjusted to reflect any additional investigation or intervention as found necessary.

These recommendations were implemented.

### **2.3.4 Alterations to monitoring programmes for 2024/25**

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 consent, and the need to maintain a sound understanding of industrial processes within Taranaki exercising resource consents.

It is proposed that for the 2024/25 year the programme continues at the same level as in 2023/24.

It should be noted that the proposed programme represents a reasonable and risk-based level of monitoring for the site(s) 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 2024/25.

## **2.4 Recommendations**

1. THAT monitoring of consented activities at the Downer EDI Works Ltd site in the 2024/25 year shall continue at the same level as in 2023/24.
2. THAT should there be issues with environmental or administrative performance in 2023/24, monitoring may be adjusted to reflect any additional investigation or intervention as found necessary.

## 3. Dialog Fitzroy Ltd

### 3.1 Introduction

#### 3.1.1 Process description

Dialog Fitzroy Ltd 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. The company holds air discharge consent 4025-4 which authorises discharges of contaminants to air from onsite and mobile operations.

Emissions from abrasive blasting operations have the potential to cause nuisance and possible health effects, especially when conducted near populated areas. The Dialog Fitzroy 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 Dialog Fitzroy'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 Dialog Fitzroy 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 *Guidelines for the Management of Lead-Based Paint* (Ministry of Health, revised 2013). Dialog Fitzroy has also informed Council that the blasting of chromium items is not undertaken.

Dialog Fitzroy 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 Dialog Fitzroy 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.

In 2015, a new 'Blastquip' fabric filter air treatment system was installed at the garnet shed (Photo 2). This new system is considered to be the best practicable option for air treatment and a significant improvement from the wet scrubber system. 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 Dialog Fitzroy

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  $0.1\text{mg}/\text{m}^3$ ; well below the guideline level of  $125\text{mg}/\text{m}^3$ . 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 2002/03 monitoring period.

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

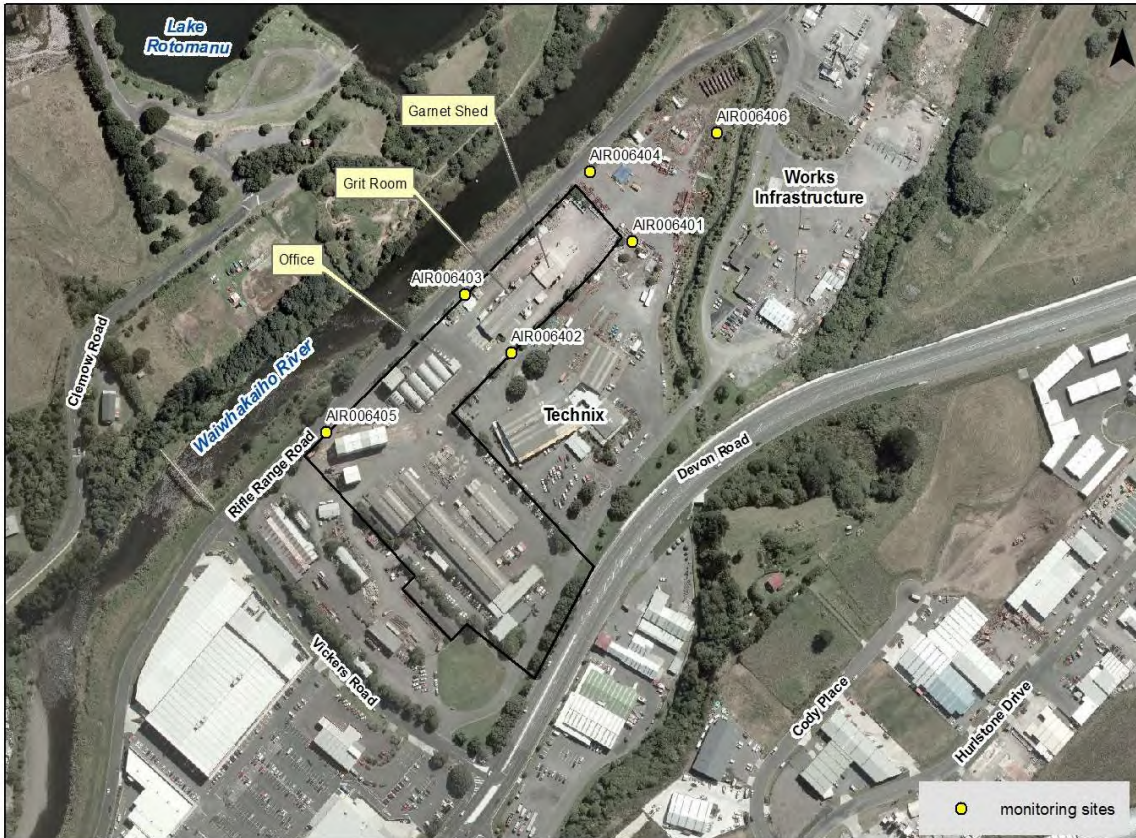


Figure 5 Locations of the Dialog Fitzroy Ltd (black outline) and deposition gauge sites

## 3.2 Results

### 3.2.1 Inspections

The Dialog site was not inspected during this monitoring year. Three attempts were made to arrange an inspection but calls or emails were not returned. According to records mobile blasting was not undertaken during the 2023/24 year.

### 3.2.2 Provision of company data

#### 3.2.2.1 Operation, Management and Maintenance Plan

Condition 7 the air discharge consent, Dialog Fitzroy is required to update and maintain an Air Discharge Management Plan (ADMP, formerly known as the OMMP) which details their procedures. This includes:

- Staff training
- General housekeeping, site clean-up, and yard maintenance, including record keeping
- Blasting operations
- Screening/containment of both off-and onsite blasting that occurs outside of an enclosed environment
- Monitoring and maintenance of the blasting buildings and air discharge treatment systems
- Handling of potentially hazardous substances
- Provision of blasting information to interested parties



The most up-to-date version of this plan was received from Dialog Fitzroy on 16 September 2021, and has been subsequently implemented into the monitoring programme. Adherence to this plan is assessed during compliance monitoring inspection visits.

### 3.2.3 Receiving environment monitoring

#### 3.2.3.1 Deposition gauge monitoring

A site map marking the location of the gauges around the Dialog Fitzroy Ltd site is shown in Figure 5 and details of the monitoring locations can be found in Table 5. Both locations are on or just inside the boundary. The results of the 2023/24 deposition gauging surveys are presented in Table 6.

Table 5 Dialog Fitzroy Ltd monitoring location details

| Site code | Location description          | At or beyond site boundary |
|-----------|-------------------------------|----------------------------|
| AIR006401 | 30m SE of sandblasting shed   | Outside boundary           |
| AIR006402 | Opposite loading ramp         | Inside boundary            |
| AIR006403 | Right hand side of entrance   | Inside boundary            |
| AIR006505 | 1st gate on SE of site        | Inside boundary            |
| AIR006406 | Between Fitz. Eng. and Downer | Outside boundary           |

During the first deployment wind was primarily from southwest quarter which places monitoring sites AIR006401 and AIR006404 downwind of the Dialog site for the majority of the survey. This is reflected in the results with the highest rate, 0.18g/m<sup>2</sup>/day, reported from AIR006401 (Table 6). This result exceeds the consent limit of 0.13g/m<sup>2</sup>/day. Monitoring site AIR006405 reported the second highest deposition rate of 0.1g/m<sup>2</sup>/day and is located upwind of the Dialog site. The dust in this gauge was likely the result of other dust emissions in the area such as vehicle movements and unsealed yards which contribute to a generally dusty environment.

Table 6 Deposition gauge results from the Dialog Fitzroy Ltd site

| Site ID          | Dust deposition rate (g/m <sup>2</sup> /day) |          |
|------------------|--|----------|
|                  | January                                      | February |
| AIR006401        | <b>0.18</b>                                  | 0.02     |
| AIR006402        | 0.10   | 0.01     |
| AIR006403        | 0.04   | Error    |
| AIR006404        | 0.07   | 0.04     |
| AIR006405        | 0.10   | Error    |
| AIR006406        | 0.03   | 0.05     |
| Guideline value: | <0.13g/m <sup>2</sup> /day                   |          |

Note: higher than consent in **bold**

During the second survey the wind direction was considerably more variable, primarily from the northwest, west and south. Wind speeds were lower during the survey, with the majority of speeds being between 5 and 10km/h. Wind speeds exceeding 20km/h occurred only 5% of the time. Under these conditions monitoring locations AIR006401, AIR006402 and AIR006404 are downwind of the site emissions. Overall, dust deposition rates were lower than the January survey.

During the February survey the results ranged between 0.01 and 0.05g/m<sup>2</sup>/day, all substantially below the consent limit. Monitoring location AIR006406 reported the highest deposition rate of 0.05g/m<sup>2</sup>/day and is exposed to site emissions in a southwest wind direction. The location is outside the site boundary, but in an unsealed yard.

### 3.3 Discussion

#### 3.3.1 Site performance and environmental effects

The results of the deposition gauge monitoring indicate that, at times, dust deposition beyond the boundary of the site exceeds the consent limit. Given the absence of blasting media in the samples the dust is likely to be from multiple on and off site sources given the industrial nature of the surrounding properties. Workers and visitors to industrial areas are more tolerant of dust than in more sensitive environments such as commercial and residential settings. It is noted that the Council did not receive any air quality related complaints in relation to this site during the monitoring period.

#### 3.3.2 Evaluation of performance

A summary of Dialog Fitzroy's compliance record for the year under review is set out in Table 7 below.

Table 7 Summary of performance for Consent 4025-4 and 10869-1.1 discharge of contaminants to air

| <b>Purpose: To discharge emissions into the air from abrasive blasting operations throughout the Taranaki Region, except within some parts of the Coastal Marine Area</b> |   |  |
|---|---|--|
| <b>Condition requirement</b>  | <b>Means of monitoring during period under review</b> | <b>Compliance achieved?</b>                              |
| 1. Specifies which special conditions apply to which activities   | N/A   | N/A  |
| <b>All operations</b>   |   |  |
| 2. Definition of area that discharges to air are authorised to occur in   | Inspection and liaison with consent holder            | Yes  |
| 3. Exercise consent in manner consistent with consent application   | Inspection and liaison with consent holder            | Yes  |
| 4. No offensive, objectionable or toxic odour or dust beyond boundary   | Inspection and complaints record                      | Yes<br>No complaints received                            |
| 5. Clearance of blasting material   | Inspection  | N/A  |
| 6. Blasting media has low free silica and dust content  | Garnet used   | Yes  |
| 7. Provision and maintenance of Air Discharge Management Plan   | Plan on file  | Yes  |
| <b>Operations within permanent facilities</b>   |   |  |
| 8. Enclosed blasting at permanent site  | Inspections   | N/A  |
| 9. Screening at yard blasting to contain dust emissions   | Inspections   | N/A  |
| 10. All emissions contained and treated as far as practicable   | Inspection.   | N/A  |
| 11. Particulate deposition rate limit of 0.13g/m <sup>2</sup> /day beyond the boundary  | Deposition gauge monitoring                           | Yes<br>Dust likely from other industrial sources as well |

| Purpose: To discharge emissions into the air from abrasive blasting operations throughout the Taranaki Region, except within some parts of the Coastal Marine Area |  |                      |
|--|--|----------------------|
| Condition requirement  | Means of monitoring during period under review | Compliance achieved? |
| <b>Operations at any other site</b>  |  |                      |
| 12. Screening at mobile blasting to contain emissions  | Liaison with consent holder                    | N/A                  |
| 13. Notification 48 hours before blasting near watercourses  | Liaison with consent holder                    | N/A                  |
| 14. Discharges prohibited within 150m of sites of significance to Maori  | Liaison with consent holder                    | N/A                  |
| 15. Limits on suspended particulate matter and dust deposition   | Liaison with consent holder                    | N/A                  |
| 16. Wind direction and strength accounted for during blasting  | Liaison with consent holder                    | N/A                  |
| 17. Requirements for record keeping of blasting activities   | Liaison with consent holder                    | N/A                  |
| 18. Noise to be managed and controlled during works within the CMA   | Liaison with consent holder                    | N/A                  |
| <b>Review and Lapse</b>  |  |                      |
| 19. Provision for lapse of consent if not exercised  | Consent exercised                              | N/A                  |
| 20. Optional review provision re environmental effects   | Next opportunity for review June 2026          | N/A                  |
| Overall assessment of consent compliance and environmental performance in respect of this consent  |  | <b>High</b>          |
| Overall assessment of administrative performance in respect of this consent  |  | <b>High</b>          |

N/A = not applicable

During the year, Dialog Fitzroy Ltd demonstrated a high level of environmental and a high level of administrative performance as defined in Appendix II.

### 3.3.3 Recommendations from the 2022/23 Annual Report

In the 2022/23 Annual Report, it was recommended:

1. THAT monitoring of consented activities at the Dialog Fitzroy Ltd site in the 2023/24 year continues at the same level as in 2022/23.
2. THAT should there be issues with environmental or administrative performance in 2023/24, monitoring may be adjusted to reflect any additional investigation or intervention as found necessary.

These recommendations were implemented during the 2023/24 monitoring year.

### 3.3.4 Alterations to monitoring programmes for 2024/25

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 consents, and the need to maintain a sound understanding of industrial processes within Taranaki exercising resource consents.

It is proposed that the monitoring programme for 2024/25 year continues at the same level as in 2023/24.

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 2024/25.

### **3.4 Recommendations**

1. THAT monitoring of consented activities at the Dialog Fitzroy Ltd site for the 2023/24 year shall continue at the same level as in 2023/24.
2. THAT should there be issues with environmental or administrative performance in 2024/25 the 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 permanent facility on Katere Road, New Plymouth, and also conducts mobile abrasive blasting services around the region. A map showing the location of the permanent facility 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.

Discharges of dust from the site are restricted by several consent conditions.

- The concentration of total particulate matter from the baghouse filter system must not exceed  $125\text{mg}/\text{m}^3$
- Deposited dust must be less than  $0.13\text{g}/\text{m}^2/\text{day}$  beyond the boundary of the site.
- During mobile blasting the total suspended particulate must not be greater than  $3\text{mg}/\text{m}^3$ , and deposited dust must be less than  $0.13\text{g}/\text{m}^2/\text{day}$ .

Blasting takes place within an enclosed building and emissions are extracted through a baghouse filtration system before being discharged to the atmosphere. Some items are too large to process in the building so they are treated outside the building. All outside work requires effective screening measures such as tarpaulins and similar covers to contain emissions within the site boundary. Screening requirements also apply to operations carried out by the mobile unit. Weather conditions must be considered before any outside work is carried out.



Figure 6 Locations of Katere Surface Coatings Ltd (black outline) and the deposition gauge sites

## 4.2 Results

### 4.2.1 Site inspections

The Company's site was inspected on two occasions this monitoring year, on 6 December 2023 and on 9 April 2024. On both occasions there was abrasive blasting in process, and during the April inspection there was also surface coating underway in the adjacent building.

During the second inspection there was a slight solvent odour from the surface coating building, but no visible overspray. There was no visible dust outside the blasting building, but dust could be seen circulating inside the building through the gaps in the cladding. Presumably the extraction system was creating enough negative pressure to contain the coarse particulate within the building.

There was no visible dust from the outlet of the baghouse filter system, and the highest instantaneous result recorded by a Dusttrak handheld particulate monitor was  $1.3\text{mg}/\text{m}^3$ , less than the Council's guideline value of  $3\text{mg}/\text{m}^3$ .

The Company advised that they had undertaken mobile blasting at Cheal Production Station and the Lepperton swimming pool during the monitoring year.

## 4.2.2 Receiving environment monitoring

### 4.2.2.1 Deposition gauge monitoring

A site map marking the location of the gauges around the Katere Surface Coatings Ltd site is shown in Figure 6 and details of the monitoring locations can be found in Table 8. Both locations are on or just inside the boundary. The results of the 2023/24 deposition gauging surveys are presented in Table 9.

Table 8 Katere Surface Coatings monitoring location details

| Site code | Location description          | On or beyond site boundary |
|-----------|-------------------------------|----------------------------|
| AIR009303 | Eastern boundary of the site  | On boundary                |
| AIR009304 | North-West corner of the site | On boundary                |

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

| Site ID              | Dust deposition rate (g/m <sup>2</sup> /day) |          |
|----------------------|--|----------|
|                      | January                                      | February |
| AIR009303            | 0.13   | 0.04     |
| AIR009304            | 0.05   | 0.16     |
| <b>Consent limit</b> | <b>&lt;0.13 g/m<sup>2</sup>/day</b>          |          |

Note: higher than limit in **bold**

During the first survey the deposition rate reported from AIR009303 was 0.13g/m<sup>2</sup>/day which marginally higher than the consent limit of <0.13g/m<sup>2</sup>/day. The condition applies to dust levels beyond the boundary whereas the deposition gauge was located on or just inside the eastern boundary. During the survey the location was downwind of the prevailing westerly wind direction, noting that wind speeds were often sufficient to entrain dust during that period. AIR009304 reported very low dust deposition of 0.05g/m<sup>2</sup>/day.

A high deposition rate was also reported during the second survey. The dust deposition rate at AIR009304 was 0.16g/m<sup>2</sup>/day, 0.04g/m<sup>2</sup>/day higher than the limit. The gauge was on the northern boundary which downwind of the second most frequent wind direction during the survey.

## 4.3 Discussion

### 4.3.1 Site performance and environmental effects

Two of the four deposition gauge results were higher than the particulate deposition rate limit during the January and February 2024 surveys. The reported levels of dust would likely cause a nuisance effect in areas more sensitive to dust such as residential and commercial zones. However, the properties adjacent to the monitoring locations include another industrial lot and a grassed reserve which are considered to have low to moderate sensitivity to air quality. Industrial areas generally have higher levels of dust and therefore workers and visitors tend to be more tolerant. There were no dust-related complaints received from adjacent properties.

Due to the age of the building some dust leaks through the door seals and in time the building should be upgraded to further minimise these fugitive emissions.

The results of the 2023/24 monitoring indicate that there were elevated dust levels as a result of site activities, but no significant adverse environmental effects that occurred as a result of Katere Surface Coatings' activities.

### 4.3.2 Evaluation of performance

A summary of Katere Surface Coating's compliance record for the year under review is set out in Table 10.

Table 10 Summary of performance for Consent 4475-3 discharge of contaminants 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 Port Taranaki, but excluding the remainder of the Coastal Marine Area |  |  |
|--|--|--|
| Condition requirement  | Means of monitoring during period under review   | Compliance achieved?                             |
| 1. Specifies which special conditions apply to which activities  | N/A  | N/A  |
| <b>All operations</b>  |  |  |
| 2. Exercise consent in manner consistent with consent application  | Inspection and liaison with consent holder   | Yes  |
| 3. No offensive, objectionable or toxic odour or dust beyond boundary  | Inspection and complaints record   | Yes<br>No complaints received                    |
| 4. Clearance of blasting material  | Inspection   | Yes  |
| 5. Blasting media has low free silica and dust content   | Garnet used  | Yes  |
| 6. Provision and maintenance of Air Discharge Management Plan  | Plan submitted April 2022  | Yes  |
| <b>Operations within the permanent facility</b>  |  |  |
| 7. Blasting to be carried out in enclosed facility   | Inspection and liaison with consent holder   | Yes  |
| 8. Treatment of emissions prior to discharge. Limit on emissions from enclosure of 125mg/m <sup>3</sup>  | Design criteria  | Yes  |
| 9. Items too large for enclosed facility to be screened for blasting   | Inspection   | N/A  |
| 10. Particulate deposition rate limit of 0.13g/m <sup>2</sup> /day   | Deposition gauging   | Yes<br>Dust likely from other industrial sources |
| <b>Operations at any other site</b>  |  |  |
| 11. Screening to contain emissions   | Inspection   | N/A  |
| 12. Email notification to the Council 48hrs prior to blasting in close proximity to watercourse  | Discussion with consent holder, and review of the Council records. No notifications received | N/A  |
| 13. Discharges prohibited within 150m of sites of significance to Maori  | Notification   | N/A  |
| 14. Suspended and deposited particulate limits 3mg/m <sup>3</sup> and 0.13g/m <sup>2</sup> /day respectively   | Inspection   | N/A  |
| 15. Consideration of wind conditions to minimise off-site emissions  | Inspection   | N/A  |
| 16. Requirements for record keeping of blasting activities   | Information request  | N/A  |



| 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 Port Taranaki, but excluding the remainder of the Coastal Marine Area |  |                      |
|--|--|----------------------|
| Condition requirement  | Means of monitoring during period under review                           | Compliance achieved? |
| 17. Noise to be managed and controlled during works within the CMA   | Inspection   | N/A                  |
| 18. Occupation of coastal space limited to 48 hr period  | Inspection   | N/A                  |
| 19. Discharges within CMA limited to defined Port Area   | Notification   | N/A                  |
| <b>Review</b>  |  |                      |
| 20. Optional review provision re environmental effects   | Option for review in June 2026, recommendation attached in Section 4.3.6 | N/A                  |
| Overall assessment of consent compliance and environmental performance in respect of this consent  |  | <b>High</b>          |
| Overall assessment of administrative performance in respect of this consent  |  | <b>High</b>          |

During the year, Katere Surface Coatings demonstrated a high level of environmental and administrative performance as defined in Appendix II.

### 4.3.3 Recommendations from the 2022/23 Annual Report

In the 2022/23 Annual Report, it was recommended:

1. THAT monitoring of consented activities of Katere Surface Coatings Ltd in the 2023/24 year shall continue at the same level as in 2022/23.
2. THAT should there be issues with environmental or administrative performance in 2022/23, monitoring may be adjusted to reflect any additional investigation or intervention as found necessary.

These recommendations were implemented.

### 4.3.4 Alterations to monitoring programmes for 2024/25

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 consents, and the need to maintain a sound understanding of industrial processes within Taranaki exercising resource consents.

It should be noted that the proposed programme represents a reasonable and risk-based level of monitoring for the site(s) 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 2024/25.

## 4.4 Recommendations

1. THAT monitoring of consented activities of Katere Surface Coatings Ltd in the 2024/25 year shall continue at the same level as in 2023/24.
2. THAT should there be issues with environmental or administrative performance in 2024/25, monitoring may be adjusted to reflect any additional investigation or intervention as found necessary.

## 5. Lower Waiwhakaiho air quality

The Lower Waiwhakaiho industrial area is characterised by a range of industrial and commercial activities, In addition to the three consented sites reviewed in his report there are a range of other industrial activities which discharge contaminants such as odour and dust to air. These can be intermittent discharges such as dust from unsealed yards or handling of aggregate. Other operations may discharge odour or hazardous air pollutants at such low levels that they do not require a consent. Industrial areas are set aside for activities which cannot avoid discharging contaminants to air and accordingly elevated levels of dust and odour are tolerated to a greater extent than if these discharges were in areas more sensitive to air quality such as residential housing. An air discharge consent is also held by New Plymouth District Council for discharges to air from the closed landfill on Colson Road. The details of the 2023/24 monitoring year are reported on in *NPDC Colson Road Landfill – 2023/24* annual report.

### 5.1 Air related incidents

Despite the permitted activity status of many discharges in this area, the RAQP imposes limits on discharges of dust and odour to maintain a level air quality and minimise nuisance effects in the area. When this threshold is exceeded by any individual site the Council may undertake enforcement action.

There were no air quality-related incidents in the lower Waiwhakaiho area during this monitoring year.

### 5.2 Deposition gauging

As discussed above the deposition of dust in the lower Waiwhakaiho area was monitored using deposition gauges on two occasions. In addition to the surveys detailed in this report there were two deposition surveys conducted around the Colson Road landfill and the results are reported on in detail in the *NPDC Colson Road Landfill – 2022/23* annual report. In brief, the dust deposition results were less than the consent limit of 0.13g/m<sup>2</sup>/day with the exception of one site which was likely the result of foreign material rather than site activities.

## Glossary of common terms and abbreviations

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

|                  |   |
|------------------|---|
| g/m <sup>3</sup> | Grams per cubic metre, and equivalent to milligrams per litre (mg/L). In water, this is also equivalent to parts per million (ppm), but the same does not apply to gaseous mixtures.  |
| Incident         | An event that is alleged or is found to have occurred that may have actual or potential environmental consequences or may involve non-compliance with a consent or rule in a regional plan. Registration of an incident by the Council does not automatically mean such an outcome had actually occurred. |
| Investigation    | Action taken by the Council to establish what were the circumstances/events surrounding an incident including any allegations of an incident.   |
| L/s              | Litres per second.  |
| PM <sub>10</sub> | Relatively fine airborne particles (less than 10 micrometre diameter).  |
| Resource consent | Refer Section 87 of the RMA. Resource consents include land use consents (refer Sections 9 and 13 of the RMA), coastal permits (Sections 12, 14 and 15), water permits (Section 14) and discharge permits (Section 15).   |
| RMA              | <i>Resource Management Act</i> 1991 and including all subsequent amendments.  |

For further information on analytical methods, contact a manager within the Environment Quality department.

## Bibliography and references

- Ministry for the Environment. 2018. Best Practice Guidelines for Compliance, Monitoring and Enforcement under the Resource Management Act 1991. Wellington: Ministry for the Environment.
- Taranaki Regional Council (2024): *Lower Waiwhakaiho Air Discharges Compliance Monitoring Programme Annual Report 2022-2023*. Technical Report 2023-84.
- Taranaki Regional Council (2022): *Lower Waiwhakaiho Air Discharges Compliance Monitoring Programme Annual Report 2021-2022*. Technical Report 2022-03.
- Taranaki Regional Council (2021): *Lower Waiwhakaiho Air Discharges Compliance Monitoring Programme Annual Report 2020-2021*. Technical Report 2021-45.
- Taranaki Regional Council (2020): *Lower Waiwhakaiho Air Discharges Compliance Monitoring Programme Annual Report 2019-2020*. Technical Report 2020-39.
- Taranaki Regional Council (2019): *Lower Waiwhakaiho Air Discharges Compliance Monitoring Programme Annual Report 2018-2019*. Technical Report 2019-71.
- 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*. Technical 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 held for discharges to air held by industries in the Lower Waiwhakaiho area

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

## **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.

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

Name of  
Consent Holder: Dialog Fitzroy Limited  
Private Bag 2053  
New Plymouth 4340

Decision Date 2 December 2020

Commencement Date 2 December 2020

**Conditions of Consent**

Consent Granted: To discharge emissions into the air from abrasive blasting operations throughout the Taranaki Region, except within some parts of the Coastal Marine Area

Expiry Date: 1 June 2038

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

Site Location: 691 Devon Road, Waiwakaiho & various locations throughout the Taranaki region

Grid Reference (NZTM) 1696630E-5677760N (Permanent Site)

Catchment: Waiwhakaiho  
Tasman Sea  
Various

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

### **General condition**

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

### **Special conditions**

1. The conditions of this consent shall apply to the various operations of the consent as follows:
  - a) Special Conditions 2 – 7 apply to all operations.
  - b) Special Conditions 8 – 11 apply to operations conducted within the blasting enclosure at the permanent facility at 691 Devon Road, Waiwhakaiho.
  - c) Special Conditions 12 – 18 apply to mobile blasting operations.

### **All operations**

2. This consent authorises discharge to air from abrasive blasting throughout the Taranaki Region, excluding the Coastal Marine Area within the rohe of Ngaruahine Iwi.
3. The activity shall be undertaken in general accordance with the information provided in the application documentation. In the case of any contradiction between the application and the conditions of this consent, the conditions of this consent shall prevail.
4. The exercise of this consent shall not give rise to any offensive, objectionable, noxious, hazardous or dangerous levels of dust or odour at or beyond the boundary of the property on which the abrasive blasting is occurring, or within 20 metres of the activity, where the activity occurs on public land or within the Coastal Marine Area.
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. 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.
7. From March 2021 onwards all blasting operations and site management shall be undertaken in accordance with an Air Discharge Management Plan ('the Plan') that has been prepared by the applicant and approved by the Chief Executive, Taranaki Regional Council, acting in a certification capacity. The Plan shall detail procedures and methods that will be used achieve compliance with the conditions of this consent and shall include but not be limited to details of:
  - a) blasting operations;
  - b) screening/containment of offsite blasting or onsite blasting that occurs outside of an enclosed booth or shed;
  - c) monitoring and maintenance of the blasting buildings and air discharge treatment systems;
  - d) handling of potentially hazardous substances;

- e) how advice of blasting will be provided to interested parties
- f) process for ensuring compliance with condition 14
- g) recording of maintenance;
- h) staff training; and
- i) general housekeeping, site cleanup and yard maintenance.

**Discharges within blasting enclosure 691 Devon Road, Waiwhakaiho**

- 8. As far as practical, all abrasive blasting at 691 Devon Road, Waiwhakaiho shall be carried out in an enclosed booth or shed.
- 9. All items to be blasted within the yard of the site shall be screened by means of covers, tarpaulins, cladding, or other means, as completely as practicable, to contain dust emissions and depositions and, as far as practicable, minimise the spread of all blasting debris.
- 10. All emissions at 691 Devon Road Waiwhakaiho shall be contained and treated prior to discharge from the operations enclosure. All exhaust air ventilated or otherwise emitted from an enclosure shall be treated to a concentration of total particulate matter of less than 125 mg/m<sup>3</sup> [natural temperature & pressure] corrected to dry gas basis, at any time.
- 11. The dust deposition rate beyond the property boundary of the site at 691 Devon Road, Waiwhakaiho arising from the discharge, shall be less than 0.13g/m<sup>2</sup>/day.

**Operations conducted at any site other than within the blasting enclosure**

- 12. All items or premises to be blasted shall be screened by means of covers, tarpaulins, cladding, or other means, as completely as practicable, to contain dust emissions and depositions and, as far as practicable, minimise the spread of all blasting debris.
- 13. Where abrasive blasting or surface coating is to take place within 25 metres of a watercourse, the consent holder shall notify the Chief Executive, Taranaki Regional Council, at least two working days before the activity commences. The notice shall include details of: the location, the specific blasting proposed, the screening (required by condition 12 above), dates and times of the discharge. It shall be served by completing and submitting the 'Notification of work' form on the Council's website (<http://bit.ly/TRCWorkNotificationForm>).
- 14. There shall be no discharge within 150 metres of:
  - a) any fenced (or otherwise identified) urupa without the written approval of the relevant Iwi; or
  - b) any marae, unless the written approval of the marae Chair has been obtained to allow the discharge at a closer distance.
  - c) any site of significance to Maori located within the Coastal Marine Area.
- 15. The suspended particulate matter shall not exceed 3 mg/m<sup>3</sup> [measured under ambient conditions], and the deposition of dust shall not exceed 0.13 g/m<sup>2</sup>/day beyond the property boundary or beyond 50 metres of the discharge when sited on land where the public has free access, whichever is less.

## Consent 4025-4.0

16. All abrasive blasting is to be conducted with taking into account wind direction and wind strength, such that off-site effects are kept to a practicable minimum.
17. The consent holder shall keep a record of abrasive blasting, including, but not limited to the following information:
  - a) Location (property address and map reference);
  - b) the type of blasting material used;
  - c) date; and
  - d) time/duration of work.

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

18. The noise from any construction, maintenance and demolition activities in the Coastal Marine Area must be measured, assessed, managed and controlled in accordance with the requirements of New Zealand Standard NZ6803:1999 Acoustics – Construction noise.

### **Lapse and Review**

19. This consent lapses 5 years after its date of commencement, 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.
20. In accordance with section 128 and section 129 of the Resource Management Act 1991, the Taranaki Regional Council may serve notice of its intention to review, amend, delete or add to the conditions of this resource consent by giving notice of review during the month of June 2026 and at 3 yearly intervals thereafter, for the purpose of ensuring that the conditions are adequate to deal with any adverse effects on the environment arising from the exercise of this resource consent, which were either not foreseen at the time the application was considered or which it was not appropriate to deal with at the time

Signed at Stratford on 2 December 2020

For and on behalf of  
Taranaki Regional Council



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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

Decision Date: 22 September 2021

Commencement Date: 22 September 2021

**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 2038

Review Date(s): June 2026, June 2032

Site Location: 106 Rifle Range Road, New Plymouth

Grid Reference (NZTM) 1696860E-5677944N

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

**General condition**

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

**Special conditions**

1. The exercise of this consent shall be undertaken in general accordance with the information provided in support of the application for this consent and with any subsequent application to change consent conditions. Where there is conflict between applications the later application shall prevail, and where there is conflict between an application and consent conditions the conditions shall prevail.
2. 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 advise the Chief Executive, Taranaki Regional Council, and shall obtain any necessary approvals under the Resource Management Act, 1991.
3. Recycled asphalt shall not be processed at the site.
4. The consent holder shall not operate the asphalt plant using waste oil.
5. The asphalt plant shall not be operated on any fuel containing more than 0.3% sulphur (weight/weight basis).
6. All exhaust gases ventilated from the drier drum shall be treated to reduce the concentration of total particulate matter to less than 125 milligrams per cubic metre, expressed on a dry gas basis at zero degrees Celsius and 1 atmosphere pressure, at any time.
7. The consent holder shall have an emission test conducted on discharges from the asphalt plant stack to demonstrate compliance with special condition 6. This test shall:
  - a) be undertaken by 1 June 2022 and every 12 months thereafter for the duration of the consent; and
  - b) comprise not less than three separate samples taken during production conditions that give rise to maximum emissions from the asphalt plant stack; andbe 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.



## Consent 4060-5.0

8. 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.
9. The dust deposition rate beyond the property boundary arising from the discharge shall be less than 4.0 g/m<sup>2</sup>/30 days or 0.13 g/m<sup>2</sup>/day.
10. 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.
11. The consent holder shall control all emissions from of carbon monoxide, nitrogen dioxide, fine particles (PM<sub>10</sub>) and sulphur dioxide to the atmosphere from the site, in order that the maximum ground level concentration of any of these contaminants arising from the exercise of this consent measured under ambient conditions does not exceed the relevant ambient air quality standard as set out in the Resource Management (National Environmental Standards for Air Quality Regulations, 2004) at or beyond the boundary of the property.
12. The consent holder shall control all emissions to the atmosphere from the site of contaminants other than those expressly provided for under special condition 11, in order that they do not individually or in combination with other contaminants cause hazardous, noxious, dangerous, offensive or objectionable effects at or beyond the boundary of the property.
13. Within one month of this consent being granted, the site shall be operated in accordance with an 'Operations and Maintenance Management Plan' (OMMP). The OMMP shall be prepared by the consent holder and approved by the Chief Executive, Taranaki Regional Council, acting in a certification capacity. The OMMP shall detail how the site is managed to achieve compliance with the conditions of this consent and shall include, but not be limited to:
  - staff training;
  - general housekeeping and site maintenance;
  - maintenance of air discharge treatment systems;
  - recording of training and maintenance;
  - recording of complaints made directly to the consent holder;
  - review frequency of the OMMP.
14. The OMMP required by condition 13 shall be forwarded to the Chief Executive, Taranaki Regional Council, before 1 August each year.

Consent 4060-5.0

15. In accordance with section 128 and section 129 of the Resource Management Act 1991, the Taranaki Regional Council may serve notice of its intention to review, amend, delete or add to the conditions of this resource consent by giving notice of review during the month of June 2026 and/or June 2032, for the purpose of ensuring that the conditions are adequate to deal with any adverse effects on the environment arising from the exercise of this resource consent, which were either not foreseen at the time the application was considered or which it was not appropriate to deal with at the time.

Signed at Stratford on 22 September 2021

For and on behalf of  
Taranaki Regional Council



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A D McLay  
**Director - Resource Management**

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

Name of  
Consent Holder: Katere Surface Coatings Limited  
PO Box 3258  
Fitzroy  
New Plymouth 4341

Decision Date 21 December 2020

Commencement Date 21 December 2020

**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 and from mobile operations throughout the Taranaki region, including Port Taranaki, but excluding the remainder of the Coastal Marine Area

Expiry Date: 1 June 2038

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

Site Location: 93a Katere Road, New Plymouth and various locations throughout the Taranaki region, including Port Taranaki

Grid Reference (NZTM) 1697260E-5677410N (permanent site)

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



### **General condition**

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

### **Special conditions**

1. The conditions of this consent shall apply to authorised discharges as follows;
  - (a) Special Conditions 2 to 6 apply to discharges from all locations.
  - (b) Special Conditions 7 to 9 apply only to discharges at the permanent facility at Katere Road, Waiwhakaiho.
  - (c) Special Conditions 10 to 14 apply to only to discharges at sites other than the permanent facility.
  - (d) Special Conditions 15 (review) apply to the consent generally.

### **All operations**

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



**Discharges at the permanent facility at 93a Katere Road, Waiwhakaiho**

7. As far as practicable, all abrasive blasting at 93a Katere Road, Waiwhakaiho shall be carried out in an enclosed booth or shed.
8. All emissions from the enclosed booth or shed shall be contained and treated prior to discharge from the operations enclosure. All exhaust air ventilated or otherwise emitted from an enclosure shall be treated to a concentration of total particulate matter of less than 125 mg/m<sup>3</sup> [natural temperature & pressure] corrected to dry gas basis, at any time.
9. Any items to be blasted at 93a Katere Road, Waiwhakaiho that are too large or otherwise not able to be blasted within the enclosed facility shall be screened by means of covers, tarpaulins, cladding, or other means, as completely as practicable, to contain dust emissions and depositions and, as far as practicable, to avoid any discharge beyond the immediate work area.
10. The dust deposition rate beyond the property boundary of the site at 93a Katere Road, Waiwhakaiho arising from the discharge, shall be less than 0.13 g/m<sup>2</sup>/day.

**Operations conducted at any site other than the permanent facility**

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

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

13. There shall be no discharge within 150 metres of:
  - (a) any fenced (or otherwise identified) urupa without the written approval of the relevant Iwi; or
  - (b) any marae, unless the written approval of the marae Chair has been obtained to allow the discharge at a closer distance.
  - (c) any site of significance to Maori as defined in the *Proposed Regional Coastal Plan for Taranaki* (as modified by Council decisions, October 2019) or any Operative Coastal Plan unless prior approval is obtained from the relevant iwi.
14. The suspended particulate matter shall not exceed 3 mg/m<sup>3</sup> [measured under ambient conditions], and the deposition of dust shall not exceed 0.13 g/m<sup>2</sup>/day beyond the property boundary or beyond 50 metres of the discharge when sited on land where the public has free access, whichever is less.



Consents 4475-3.0 & 10881-1.0

15. All abrasive blasting is to be conducted with taking into account wind direction and wind strength, such that off-site effects are kept to a practicable minimum.
16. The consent holder shall keep a record of abrasive blasting, including, but not limited to the following information:
- (a) location (property address and map reference);
  - (b) the type of blasting material used;
  - (c) date; and
  - (d) time/duration of work.

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

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

| Time (any day) | Limit                            |
|----------------|----------------------------------|
| 7am - 7pm      | 50 dB L <sub>Aeq</sub> (15 mins) |
| 7pm - 10pm     | 45 dB L <sub>Aeq</sub> (15 mins) |
| 10pm - 7am     | 40 dB L <sub>Aeq</sub> (15 mins) |
| 10pm to 7am    | 70 dB L <sub>Amax</sub>          |

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

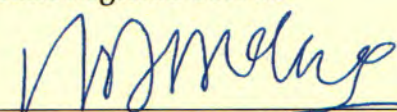
18. Any exclusive occupation of the coastal space within 1 km of MHWS shall not occur for a period of more than 48 hours.
19. Any discharge within the coastal marine area authorised by this consent shall occur only within the "Port" Coastal Management Area as defined in the *Proposed Regional Coastal Plan for Taranaki* (as modified by Council decisions, October 2019).

**Review**

20. In accordance with section 128 and section 129 of the Resource Management Act 1991, the Taranaki Regional Council may serve notice of its intention to review, amend, delete or add to the conditions of this resource consent by giving notice of review during the month of June 2023 and at 3-yearly intervals thereafter, for the purpose of ensuring that the conditions are adequate to deal with any adverse effects on the environment arising from the exercise of this resource consent, which were either not foreseen at the time the application was considered or which it was not appropriate to deal with at the time.

Signed at Stratford on 21 December 2020

For and on behalf of  
Taranaki Regional Council

  
\_\_\_\_\_  
A D McLay  
Director - Resource Management

## Appendix II

Categories used to evaluate environmental and administrative performance

## Categories used to evaluate 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.