



Dust Management Plan Drury Quarry December 2023

Dust Management Plan

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Revision History

Date	Author	Brief Description of change
August 2022	James Milne Environmental Advisor Jo Young Planner	
September 2022	Nathan Gibbons Quarry Manager	Review
September 2022	Andrew Curtis Air Quality Consultant, PDP	Review
December 2023	James Milne and Jo Young	Update following approval of consent, including monitoring map and consent information

1. Introduction

This Dust Management Plan is for Drury Quarry, Quarry Road, Drury. This quarry is owned by Stevenson Aggregates Limited (SAL).

This Dust Management Plan (DMP) sets out details of the dust suppression that will be undertaken across Drury Quarry in all weather conditions and all quarry activities. It will be updated every two years. This DMP is a requirement of conditions 16, 19, 20, 21 and 22 of resource consent DIS60409109 granted by Auckland Council on 16 February 2023.

Condition 16, 19, 20, 21 and 22 are as follows:

- 16. All practicable measures must be undertaken as detailed by the Dust Management Plan, certified in accordance with the conditions of this consent, to minimise the discharge of dust beyond the boundary of the site. These measures must include, but not be limited to:*
 - a) Frequent watering of unsealed surfaces where discharges of dust are likely to arise.*
 - b) Restricting vehicle speeds around the site.*
 - c) Maintaining unsealed surfaces of vehicle routes where discharges of dust are likely to arise through grading and rolling to minimise dust, and stabilisation of exits from unsealed surfaces onto sealed roads.*
 - d) The maintenance of wheel washing facilities at the site exit, utilised by vehicles as required to minimise the tracking of dust-generating material on paved surfaces and public roads.*
 - e) Locating and maintaining stockpiles to minimise potential wind-entrainment.*
 - f) Contouring and re-vegetation of the overburden and managed fill disposal area as soon as practicable.*
- 19. Monitoring of meteorology (wind speed, wind direction, temperature, and rainfall) in the vicinity of the site must be undertaken. The types and location of the meteorological monitoring sites must be in accordance with the certified Dust Management Plan, as required by the conditions of this consent, and must minimise the potential for obstacles to affect the accuracy of the readings. The monitor must record the wind speed, wind direction, temperature, and rainfall continuously in real time so that the readings are immediately retrievable.*
- 20. Monitoring of dust (total suspended particulate and/or PM10) in ambient air in the vicinity of the site must be undertaken. The number, type, and location of the monitoring sites must be in accordance with the certified DMP, as required by the conditions of this consent. These monitors must record ambient dust concentrations continuously in real time so that the readings are immediately retrievable and so that on-site operators are immediately notified of any instance of ambient dust concentrations that exceed the trigger thresholds set by the DMP.*
- 21. The Dust Management Plan dated September 2022 and prepared by Stevenson Aggregates ('the DMP') must be maintained to ensure that the activities undertaken in accordance with the DMP will achieve the objectives of the plan and compliance with the relevant consent conditions. The consent holder must meet the costs of the production, certification, monitoring and review of the DMP. The DMP must incorporate a series of monitoring, management and operational procedures, methodologies and contingency plans, and together must accurately record all information required to comply with the conditions of this consent. The DMP must include the following:*
 - a) Identification of all fugitive and point sources for discharges of contaminants into air, including a map showing the location of each source;*

- b) *Procedures to minimise discharges of contaminants into air, including details of the inspection, maintenance, monitoring and contingency procedures in place for all emissions control equipment at the Site;*
 - c) *Procedures for the operation, maintenance, and calibration of the meteorological monitor required by Condition 19;*
 - d) *Procedures for the operation, maintenance, and calibration of the ambient dust monitors as required by Condition 20;*
 - e) *Details of management and monitoring practices in place to minimise discharges of dust; including but not limited to:*
 - i. *The use of water carts and irrigation systems to dampen dusty surfaces and all other dust mitigation measures required by Condition 16.*
 - ii. *Stopping all work on areas of the site that are sources of excessive dust, other than dust control activities.*
 - iii. *The inclusion of two alert levels of dust generation that trigger firstly additional dust mitigation measures and secondly cessation of certain dust generating activities on site until dust concentrations no longer constitute a significant adverse effect beyond the boundary of the Site. The determination of a significant adverse dust effect beyond the boundary of the consent holder's property must be carried out using the guidance included in the Ministry for the Environment's Good Practice Guide for Assessing and Managing Dust and in consultation between the consent holder and Council.*
 - iv. *Contingency measures to investigate the causes of any exceedances of the dust alert levels and to minimise dust discharges in the event that the investigation identifies on-site dust cause as the cause of an exceedance.*
 - f) *The identification of staff responsibilities.*
 - g) *The procedures for the receipt, recording, and handling of air quality complaints received or exceedances of the dust alert levels, including notification to council.*
22. *The DMP must be reviewed on an annual basis and any subsequent changes to the certified DMP must be submitted to the council for certification prior to implementation. The council will advise the Consent Holder in writing if any aspects of the DMP are considered to be inconsistent with achieving the provisions of this consent.*

The DMP is used as a working document and as such, information included is regularly reviewed and revised as quarry activities develop.

2. Resource consent

The discharges to air resulting from the operation of the site are subject to the conditions included in resource consent DIS60409109 granted by Auckland Council. A full set of the consent conditions are listed at **Appendix 1**.

3. Purpose of DMP

The purpose of the DMP is to meet the requirements of the resource consent and ensure that any adverse dust effects from operations at Drury Quarry are avoided, remedied or mitigated. It will promote proactive solutions to the control of dust from the site.

4. Site Description

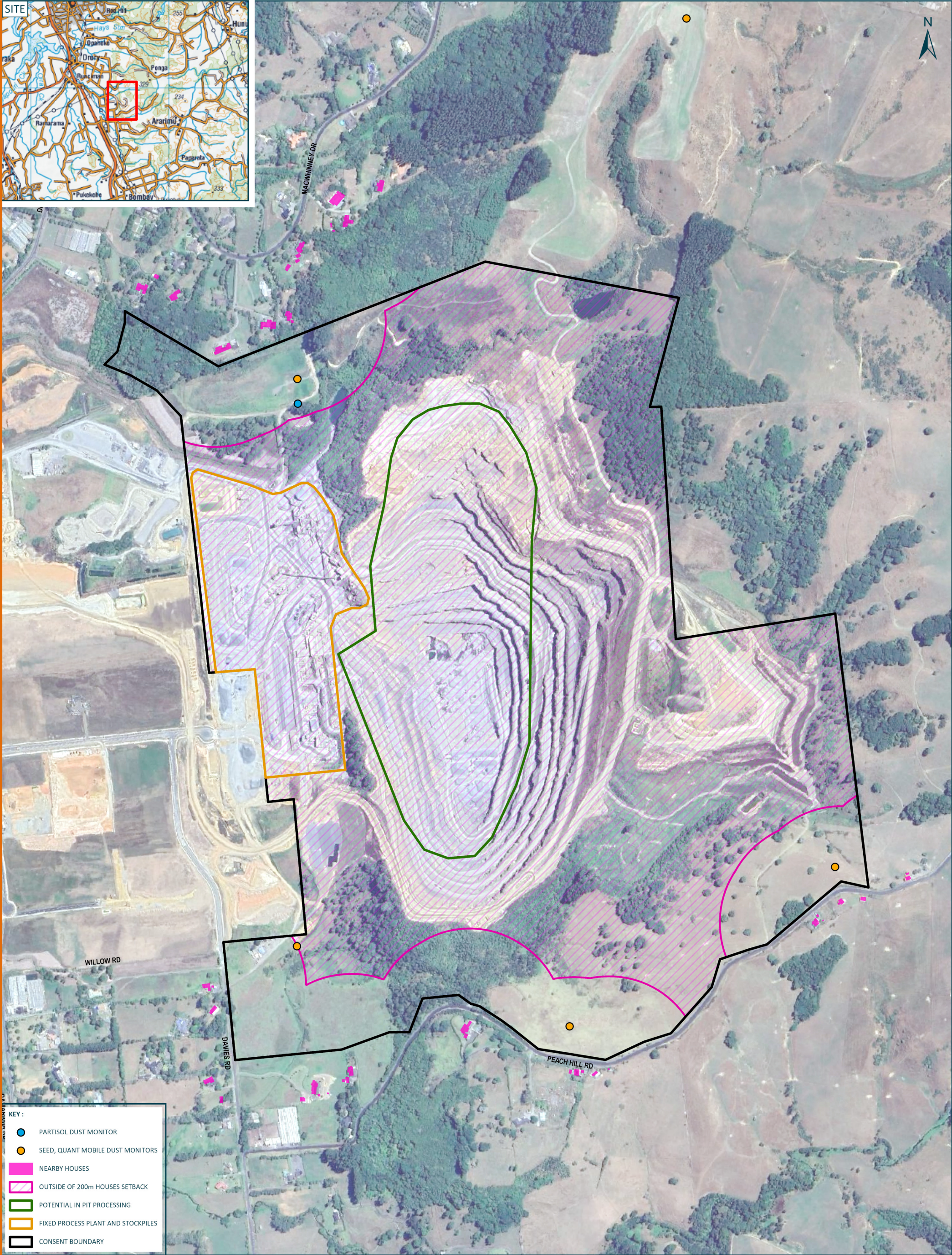
Drury Quarry is located in Drury, Auckland, approximately 5km southeast of Papakura. The SAL Drury Quarry site includes the existing pit, processing plant, managed fill, laboratory,

offices, weigh bridge and other ancillary activities. Surrounding these activities is a working farm and bush covered land.

The land surrounding the quarry is largely rural. The nearest residential properties to the quarry are located approximately 330m to the north and 1,500m to the southwest of the quarry site and a range of steep bush to the south-east.

The topography of the area is dominated by steep hills that are covered in bush. The quarry is located in a natural depression and is surrounded by steep hills.

Below is a map showing the topography of the area, the quarry boundaries and the locations of the nearest houses.



KEY :

- PARTISOL DUST MONITOR
- SEED, QUANT MOBILE DUST MONITORS
- NEARBY HOUSES
- OUTSIDE OF 200m HOUSES SETBACK
- POTENTIAL IN PIT PROCESSING
- FIXED PROCESS PLANT AND STOCKPILES
- CONSENT BOUNDARY

0 100 200
METRES
SCALE : 1:7,500 (A3)

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B	FINAL	NOV 23	TK
A	ISSUED FOR REVIEW	JUL 22	TK
NO. REVISION		DATE	BY

SOURCE:
1. AERIAL IMAGERY (FLOWN 2022) DERIVED FROM GOOGLE EARTH PRO (MAY NOT BE SPATIALLY ACCURATE).

CLIENT

FIGURE

FIG 2: CONSENT BOUNDARY AND CLOSEST PROPERTIES

PROJECT

DRURY QUARRY ANNUAL GROUNDWATER/SURFACE WATER MONITORING REPORT

5. Quarry Activities

Aggregate from Drury Quarry is used to supply rock for roading and construction projects in the Auckland area. The current operation at the Drury Quarry consists of the following typical mineral extraction activities and operations:

- Removal of overburden;
- Blasting rock;
- Extraction of rock from the pit;
- Transportation of the rock from the pit to a crushing and screening plant;
- Crushing and screening of rock;
- Stockpiling and loading out.

6. Dust Sources and Generation

6.1. Potential Dust Sources

The activities that can take place at Drury Quarry that have the potential to generate dust include the following:

- Removal of overburden;
- Blasting rock;
- Extraction of rock from the pit;
- Transportation of the rock from the quarry pit to a crushing and screening plant;
- Crushing and screening of rock;
- Stockpiling;
- Transportation of finished products off site; and
- Exposed surfaces.

6.2. Factors Influencing Dust Generation

Five major factors influence the potential for dust to be generated from the site. These are:

- Wind speed across the surface;
- Percentage of fine particles in the material on the surface;
- Moisture content of the material;
- The area of exposed surface; and
- Disturbances such as traffic, excavation, loading and unloading of materials, blasting.

The dust prevention methods detailed below are the methods that have been found to be effective across the site. They have been used alone or in combination depending on the circumstances.

6.3. Dust Mitigation Measures and Procedures

The following measures and procedures have been implemented onsite as necessary.

6.3.1. Earthworks

Action	Trigger
Keep exposed surface areas to a minimum.	Standard operating procedure
Avoid undertaking potentially dusty activities (such as the stripping and spreading of topsoil) on days when conditions are dry and winds are strong and blowing towards sensitive receptors.	Standard operating procedure - Review of activities and weather undertaken as part of the daily log by Quarry Manager.

Regularly maintain haul roads by grading and laying of fresh rock/gravel.	Standard operating procedure. Ongoing maintenance across the site. Reviewed on a daily basis.
Maintain low truck speed	Standard operating procedure. Signage up around the quarry.
Minimise drop heights when diggers are loading trucks	Standard operating procedure. Operator education.

6.3.2. Roads – External and within the quarry and managed fill

Action	Trigger
Limit vehicle speeds	Standard operating procedure. Signage up around the quarry.
Minimise haul distances as far as practical.	Standard operating procedure.
Keep roads and construction surfaces visually damp with water carts and/or fixed sprinklers when required.	Review of activities and weather undertaken as part of the daily log by Quarry Manager. Ongoing assessment during the day.
Regularly maintain haul roads by grading and laying of fresh rock/gravel.	Standard operating procedure. Ongoing maintenance across the site. Reviewed on a daily basis.
Require vehicles entering and leaving the site that are carrying dusty materials to have their loads covered or dampened down.	Standard operating procedure. Operator education.
Keep paved roads and yard areas clean using either washing or vacuum sweepers.	Standard operating procedure. Two sweeper trucks work on a daily basis.
Regularly maintain the wheel wash and ensure it is utilised by all trucks.	Standard operating procedure.

6.3.3. Loading and unloading

Action	Trigger
Minimise drop heights when loading and unloading trucks.	Standard operating procedure. Operator education.

6.3.4. Exposed surfaces

Action	Trigger
Revegetate exposed soil with appropriate vegetation as soon as practical.	As soon as works are complete.
Minimise the area of surfaces covered with fine materials.	Standard operating procedure.

Minimise undertaking potentially dusty activities (such as the stripping and spreading of topsoil) on days when conditions are dry and winds are strong and blowing towards sensitive receptors.	Standard operating procedure - Review of activities and weather undertaken as part of the daily log by Quarry Manager. Ongoing assessment during the day.
Locate stockpiles within the pit below ground level and as far as practicable minimise the height of stockpiles.	Standard operating procedure.
Keep exposed surfaces damp with water carts and/or fixed sprinklers when required.	Standard operating procedure - Review of activities and weather undertaken as part of the daily log by Quarry Manager. Ongoing assessment during the day.

6.3.5. Crushing and screening

Action	Trigger
Fit the crushing and screening plants with water sprays at all the principal dust sources such as the screens, crushers and conveyor transfer points to control the moisture content of materials;	All mobile and fixed equipment is connected to water source which continually releases water via spray bar.
Minimise drop heights from the loading of raw materials into the feed hopper and from stacking of stockpiles.	Standard operating procedure. Operator education.
Locate the mobile crushing and screening plants within the pit and below the ground level of nearby terrain.	Standard operating procedure.
Portable water tanks wet the feed coming into plant.	Standard operating procedure. Spray bars in operation.

6.3.6. Blasting

Action	Trigger
Remove topsoil and loose material covering rock prior to blasting.	Standard operating procedure.

6.3.7. Malfunctions and breakdowns of dust suppression equipment

Action	Trigger
Quarry Manager to ensure the two other back up water carts are deployed.	Main water cart has broken down.
Equipment will be shut down until the workshop can undertake repairs.	Dust suppression equipment fails on parts of the processing plant.

7. Dust monitoring methodology

The following table outlines the dust monitoring methodology that is currently implemented at Drury quarry.

Monitoring Activities	Frequency	Responsibility
Daily check including: - Weather forecasts; - Weather station data; - Air quality monitoring data.	Daily	Environmental Advisor
Daily Log including: - Equipment malfunctions; - Visible dust; - Inspection of exposed surfaces for dampness; - Remedial action taken; - Use of water cart; - Weather conditions.	Daily	Quarry Manager
Observe weather conditions, wind via observations	- Daily - As conditions change throughout the day	Environmental Advisor Quarry Supervisor
Visible dust seen on site.	- Daily - As new activities are commenced.	Environmental Advisor Quarry Supervisor
Text message / email alert from air quality sensors when these detect air quality limits are close to being breached.	Irregular	Environmental Advisor Quarry Supervisor Quarry Manager
New equipment or upgrade of existing equipment. Inspection of sprays and water carts to ensure equipment is maintained and functioning well.	Weekly basis	Environmental Advisor Workshop General Manager - Aggregates

The dust monitoring equipment across the Drury Quarry site includes:

- 5 x Seeed Studio SenseCAP ONE S900 9-in-1 Compact Weather and Air Sensor
- 1 x Quant AQ Air Quality sensors.

The location of this equipment is shown on the plan below. There is also a “roving dust monitor” that will move depending on need. All of these dust monitors were installed in September 2022 and may be moved over the coming months as operational staff figure out how they are best utilised.

8. Alert Trigger Levels

The new air monitors will be able to measure and send data in 'real time'. Dust will be controlled using the following triggers for the air monitors that are located close to the property boundary:

Trigger Level 1 - (120 µg/m³ as a 1 hour average)

Identifies that dust concentrations have reached a point where dust nuisance is likely to occur if action is not taken to implement mitigation measures. It would not be expected that dust concentrations would reach this level unless there are adverse weather conditions in conjunction with a failure of mitigation.

Action:

Quarry Manager to direct that additional water carts and other dust mitigation measures are deployed. Usually one water cart manages dust suppression across the site in average conditions, but there are two others available in extreme conditions when necessary.

Trigger Level 2 – (150 µg/m³ as a 1 hour average) -

If this trigger level is exceeded it indicates that dust concentrations have reached a level which is unacceptable, and dust nuisance will occur. All activities that have the potential to generate dust on site, apart from dust mitigation, must cease until such time as dust concentrations drop below Trigger Level 1.

Action:

Stopping all work on areas of the site that are sources of excessive dust, other than dust control activities.

If an investigation identifies that site activities are not responsible for the high dust concentrations, site activities may resume prior to concentrations dropping to below Trigger Level 1.

9. Responsibilities

SAL is the holder of the consent for Drury Quarry and has the ultimate responsibility to ensure that all statutory requirements and conditions of consent are complied with and quarry activities are carried out in accordance with the DMP.

9.1. Key personnel onsite

Name	Role	Contact details
Nathan Gibbons	Quarry Manager	Mob : 0292903360 Email: Nathan.gibbons@stevenson.co.nz
Ashton Cogdale	Assistant Quarry Manager	Mob: 021 271 6636 Email: ashton.cogdale@stevenson.co.nz
Anne-Marie Petersen	Stakeholder and Engagement Manager	Mob: 027 299 0695 Email: Annemarie.petersen@stevenson.co.nz
James Milne	Environmental Advisor	Mob: 021 516 741 Email: james.milne@stevenson.co.nz

10. Training and Induction

It is the responsibility of the Quarry Manager and Assistant Quarry Manager to implement an on-going training and induction program for all contractors and staff. The purpose of this program is to make all personnel working on site aware of and understand the purpose and requirements of the DMP, air discharge resource consent conditions and the ramifications of a failure to comply with these requirements. The training program for all contractors and staff will include at least the following aspects:

- The responsibilities of all staff and contractors for carrying out the work on site in a manner that does not result in adverse effects on the environment and local residents and in accordance with resource consent conditions;
- The potential legal ramifications of adverse environmental effects occurring because of the project and non-compliance with resource consent conditions;
- The minimum requirements for dust control for all activities on site;
- The requirement for staff to monitor weather and visually inspect the site for dust discharges, assess the adequacy of dust control methods and implement additional dust control methods when required;
- The actions to be taken in an extreme dust and weather event;
- The actions to be taken if a complaint is received from the public or consent authority.

11. Complaints Process

All complaints will be dealt with in accordance with condition 25 of resource consent DIS60409109. This states the following:

Condition 25

All air quality complaints that are received must be recorded. The complaint details must include:

- a. The date, time, location and nature of the complaint;*
- b. The name, phone number and address of the complainant, unless the complainant elects not to supply these details;*
- c. Weather conditions, including approximate wind speed and direction, at time of the complaint;*
- d. Any remedial actions undertaken.*

Details of any complaints received must be provided to the council within one working day of the complaint.

All complaints are managed and resolved by the stakeholder and engagement manager.

12. Photos



Photo 1: Example of a dusty road



Photo 2: Example of a damp road



Photo 3: Water cart spraying haul roads.



Photo 4: Water truck spraying stockpiles



Photo 6: Mobile crushing plant which has the potential to generate dust.

Appendix 1 – Consent conditions

Decision on an application for resource consent under the Resource Management Act 1991



Controlled activities

Application description

Application number:	BUN60409108 (Council Reference) LUC60409170 (s9 land use consent) DIS60409109 (s15 discharge permit – Air)
Applicant:	Stevensons Aggregates Limited
Site address:	475 Quarry Road, Drury
Legal description:	475 Quarry Road: LOT 109 DP 540628, LOT 6 DP 509893 Land at Quarry Road: PT ALLOT 152 SETT OF MAKETU SUB SEC 2 PSH OPAHEKE, Lot 2 DP 41441, ALLOT 168 Sbrn Sec 2 Parish of Opaheke, Lot 1 DP 46285, ALLOT 175 Sbrn Sec 2 Parish of Opaheke, Lot 2 DP 19546, Lot 1 DP 19546, Lot 1 DP 32801, ALLOT 211 SUB SEC 2 Parish OF OPAHEKE, PT A 121 MacWhinney Drive: LOT 4 DP 509893, LOT 5 DP 509893, Lot 1 DP 126627

Auckland Unitary Plan (Operative in part)

Zoning and precinct:	475 Quarry Road: Special Purpose - Quarry Zone Business - Light Industry Zone Business - Heavy Industry Zone Land at Quarry Road: Special Purpose - Quarry Zone Rural - Rural Production Zone 121 MacWhinney Drive: Rural - Mixed Rural Zone Special Purpose - Quarry Zone
Overlays, controls, special features, designations, etc:	475 Quarry Road: Drury South Industrial sub-precinct E, Sub-precinct Drury South Industrial sub-precinct A, Sub-precinct Natural Resources: Significant Ecological Areas Overlay - SEA_T_5346, Terrestrial

Natural Resources: High-Use Aquifer Management Areas Overlay [rp] - Bombay Drury Kaawa Aquifer

Infrastructure: Quarry Buffer Area Overlay

Controls: Macroinvertebrate Community Index - Exotic

Controls: Macroinvertebrate Community Index - Native

Controls: Macroinvertebrate Community Index – Rural

Plan Changes, Private Plan Change 46 - Drury South, Zone, Notified, 30/07/2020

Land at Quarry Road:

Natural Resources: Significant Ecological Areas Overlay - SEA_T_5349, Terrestrial

Natural Resources: Significant Ecological Areas Overlay - SEA_T_5346, Terrestrial

Natural Resources: High-Use Aquifer Management Areas Overlay [rp] - Drury Sand Aquifer

Natural Resources: High-Use Aquifer Management Areas Overlay [rp] - Bombay Drury Kaawa Aquifer

Natural Resources: Quality-Sensitive Aquifer Management Areas Overlay [rp] - Drury Sand Aquifer

Historic Heritage and Special Character: Historic Heritage Overlay Extent of Place [rcp/dp] - 693, Ballards Cone pa site R12_278

Infrastructure: Quarry Buffer Area Overlay

Controls: Macroinvertebrate Community Index - Exotic

Controls: Macroinvertebrate Community Index - Native

Controls: Macroinvertebrate Community Index - Rural

121 MacWhinney Drive:

Natural Resources: Significant Ecological Areas Overlay - SEA_T_5349, Terrestrial

Natural Resources: High-Use Aquifer Management Areas Overlay [rp] - Drury Sand Aquifer

Natural Resources: High-Use Aquifer Management Areas Overlay [rp] - Bombay Drury Kaawa Aquifer

Natural Resources: Quality-Sensitive Aquifer Management Areas Overlay [rp] - Drury Sand

	Aquifer
	Historic Heritage and Special Character: Historic Heritage Overlay Extent of Place [rcp/dp] - 693, Pa site (Ballards Cone) R12_278 Pa site with terrace/s, pit/s, stonework and burial/s; wahi tapu
	Infrastructure: Quarry Buffer Area Overlay
	Controls: Macroinvertebrate Community Index - Exotic
	Controls: Macroinvertebrate Community Index - Native
	Controls: Macroinvertebrate Community Index - Rural
Proposed plan change(s):	Plan Change 78 Intensification – applies to part of 121 MacWhinney Drive Note: does not apply to 475 Quarry Road or Land at Quarry Road as outside of the Urban Environment
Zoning:	- Special Purpose - Quarry Zone - Business - Heavy Industry Zone - Business - Light Industry Zone.
Overlays	N/A
Controls	
Qualifying Matters:	- Precinct

Locality Plans

Figure 1: Zoning Plan (Source: Auckland Council GIS)

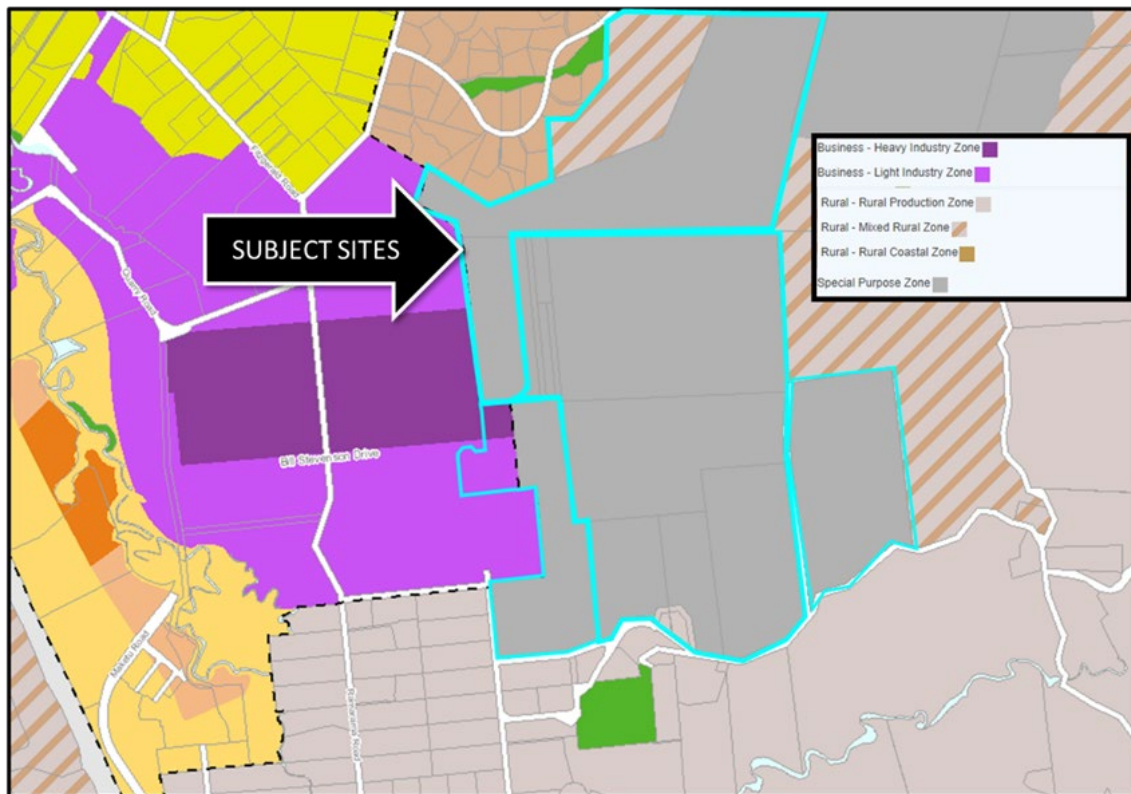


Figure 2: Aerial (Source: Auckland Council GIS)



Proposal, site and locality description

The applicant, Stevensons Aggregates Limited, seeks the necessary resource consents to replace the existing discharge to air permit that applies to mineral extraction activities at Drury Quarry.

A description of the proposal is provided in section 1.2 of the submitted A.E.E (as amended by the further information responses) and in summary, the applicant proposes to:

- Replace existing discharge to air permit R/REG/2013/5151/1, to enable the increase in processing capacity on the site through the provision of additional fixed and mobile processing equipment. The existing permit limits the total processing capacity to 2,515 tonnes per hour and total storage of aggregate to 7,500 tonnes, and as part of the proposal the applicant seeks the removal of these capacity limits to have no restriction on the total processing capacity and total storage of aggregate.
- Comprehensive management of dust through the implementation of a Dust Mitigation is proposed for the activity.
- No changes are proposed to the current quarry footprint or other quarry infrastructure, which will continue to be operated in accordance with BUN60325729.

Site and surrounding environment description

A description of the site and surrounding environment is provided in Section 1.0 of the submitted A.E.E. Having visited the site on a number of occasions as part of the processing of resource consent applications, I can confirm that this assessment is accurate.

A background to the operation of Drury Quarry and existing consents held for the site is provided in sections 1.2 -1 .6 of the submitted A.E.E.

Specialist Input

The information has been reviewed and assessed by the following specialists:

- Rachel Terlinden - Senior Specialist – Contamination, Air & Noise
- Andrew Gordon – Specialist – Contamination, Air & Noise
- Maria Baring – Project Engineer – Regulatory Engineering (South)

Reasons for the application

Resource consent is required for the following reasons:

Land use consent (s9) – LUC60409170

Auckland Unitary Plan (Operative in part)

District land use (operative plan provisions)

Chapter H28 Special Purpose – Quarry Zone

- Mineral extraction activities are a **controlled activity** under rule H28.4.1(A7).

Discharge of contaminants (s15) – DIS60409109

Auckland Unitary Plan – Operative in Part (AUP OP)

Regional Land Use

Chapter E14 - Air quality

- Mineral extraction activities at a rate exceeding 200 tonnes/ hour from any one quarrying process within the Low air quality – dust and odour area (Quarry) requires consent as a **controlled activity** under Rule E14.4.1 (A91).

The reasons for consent are considered together as a controlled activity overall.

Decision

I have read the application, supporting documents, and the recommendation on the application for resource consent. I am satisfied that I have sufficient information to consider the matters required by the Resource Management Act 1991 (RMA) and make a decision under delegated authority on the application.

Acting under delegated authority, and for the reasons set out below, under sections 95A and 95C to 95D, and 95B and 95E to 95G of the RMA this application shall be processed **non-notified**.

Acting under delegated authority, under sections 104, 104A and Part 2 of the RMA the resource consent is **GRANTED**.

Reasons

The reasons for this decision are:

1. In accordance with an assessment following the steps set out in sections 95A and 95C to 95D the application need not be publicly notified because:
 - a. Under step 1, public notification is not mandatory as the applicant has not requested it, there are no outstanding or refused requests for further information, and the application does not involve any exchange of recreation reserve land under s15AA of the Reserves Act 1977.
 - b. Under step 2, public notification is precluded as the application is exclusively for controlled activity resource consent.
 - c. Step 3 is not applicable given public notification being precluded by step 2.
 - d. Under step 4, there are no special circumstances to warrant public notification because there is nothing exceptional or unusual about the application, and that the proposal has nothing out of the ordinary run of things to suggest that public notification should occur.
2. In accordance with an assessment following the steps set out in sections 95B and 95E to 95G the application need not be limited notified because:
 - a. Under step 1, limited notification is not mandatory as there are no protected customary rights groups or customary marine title groups affected by the proposed activity, nor any affected person to whom a statutory acknowledgement is made under schedule 11.
 - b. Under step 2, limited notification is precluded by notification rule H25.5 (1) and E14.5 (1) in the Auckland Unitary Plan (Operative in Part).
 - c. Step 3 is not applicable given limited notification is precluded by step 2.
 - d. Under step 4, there are no special circumstances that warrant the application being limited notified to any other persons because there is nothing exceptional or unusual about the application, and that the proposal has nothing out of the ordinary run of things to suggest that notification to any other persons should occur.
3. The application is for controlled activity resource consent, and as such under s104A only those matters over which council has reserved its control have been considered. Those matters are:
 - E14.7.1 Air Quality – Matters of Control
 - 2) *For discharge of contaminants into air from dust generating processes:*
 - (a) *location of activity and distance from activities sensitive to air discharges.*
 - (b) *dust mitigation measures.*
 - (c) *dust management plan; and*
 - (d) *duration of consent.*
 - H28.7.1 Special Purpose Quarry Zone – Matters of Control
 - (1) *mineral extraction activities:*

(a) traffic and access.

(b) visual amenity; and

(c) site rehabilitation.

4. In accordance with an assessment under s104(1)(a) and (ab) of the RMA the actual and potential effects from the proposal will be acceptable because:
- a. In the context of the receiving environment (and in particular the existing quarry activities), the proposed mineral extraction activity and discharge to air (dust) are considered to be of a nature and scale that is consistent with the underlying zoning and existing activities, and any adverse effects on the character and/or amenity of the surrounding environment are considered to be less than minor.
 - b. Council's Contamination Air and Noise Specialist Ms Rachel Terlinden has reviewed the proposal including Air Quality Report (AQR) and draft Dust Management Plan (DMP) (and further information responses) with respect to the discharge to air effects associated with the mineral extraction activities.

Ms Terlinden agrees with these assessments that the most likely effects of the mineral extraction activities are discharges of coarse dust during the extraction and crushing processes, along with vehicle movements across the extraction area and internal haul roads.

In the context of the nature of the activity and management in accordance with the DMP, and in the context of the surrounding environment and separation distance from sensitive receptors, Ms Terlinden concludes that the proposal is not likely to cause significant adverse air quality effects beyond the boundary of the site. In particular, given the location of the dust generating activities, and in managing the activity in accordance with the DMP, any adverse effects associated with increasing the processing rate (which can increase dust generation) and storage capacity for aggregate on site are considered to be less than minor.

Ms Terlinden has recommended conditions of consent to ensure that activity operates in accordance with the AQR and draft DMP along with standard air quality management conditions which have been accepted by the applicant and now form part of the proposal.

Having considered Ms Terlinden's assessment, the relevant matters of control in the AUP (OP), and the application material, it is considered that that any adverse effects on the environment can be managed so that they are less than minor. In particular that in the context of the surrounding environment, any adverse effects can be effectively and appropriately mitigated through the operation of the activity in accordance with the DMP, and are appropriately mitigated by the separation distance between the location of the potential discharges to dust and sensitive receptors.

- c. An Acoustic Assessment prepared by Marshall Day Acoustics has been submitted with the application which models the predicted noise levels of the development. This assessment concludes that subject to the installation of an acoustic fence along the boundary with the light industrial land, that the proposal will meet the permitted noise standards of in the AUP(OP) with respect to Noise and Vibration E25.6.5 and the controlled activity standards with respect to the Special Purpose – Quarry Zone H28.6.2.1.

Council's Specialist, Contamination, Air & Noise Team, Mr Andrew Gordon has reviewed the Noise Assessment by Marshall Day and has confirmed that he agrees with the assessment, methodology and conclusions of the MDA report, and that subject to conditions relating to the implementation of the acoustic fence and the monitoring and measurement of noise following completion, that the proposal will meet the permitted activity standards with respect to E25.6.5 Noise and Vibration and the controlled activity standards with respect to H28.6.2.1 of the Special Purpose – Quarry Zone;

- d. Council's Project Engineer Ms Maria Baring has reviewed the proposal and raised no concerns from an engineering perspective.
- e. Any adverse traffic effects are considered to be of a scale and nature that they in keeping with the existing quarry activities and upgraded front of house (including new entry/exit point for the quarry).
- f. In terms of positive effects, the proposal contributes to the efficient use of the land in association with the existing quarry activities, which are considered to be an appropriate and efficient use of the land resource from a resource management perspective; and
- g. There are no specific offsetting or environmental compensation measures within the matters of control proposed or agreed to by the applicant.

Overall, it is considered on balance that any actual or potential effects generated by the proposal are acceptable within the context and character of the surrounding environment.

- 5. In accordance with an assessment under s104(1)(b) of the RMA the proposal is consistent with the relevant statutory documents, being the Auckland Unitary Plan (Operative in Part). In particular:
 - a. In the context of the site and surrounding environment, the mineral extraction activities are considered to be of a nature and scale that will not cause any exceedance of the Ambient Air Quality Standards, and therefore the National Environmental Standard: Air Quality does not restrict the granting of consent.
 - b. The application has demonstrated that it complies with controlled activity standards in E14.6.2. as the crushing of minerals and aggregates associated with a mineral extraction activity is located at least 200m from any dwelling located outside the site zoned Special Purpose – Quarry Zone that is not under the control of the quarry operator.
 - c. The application has also demonstrated that it complies with the controlled activity standards listed in H28.6.2. Of particular relevance is that the activity can be managed to ensure that it complies with the noise standard in the AUP: OP and will enable the existing activities of the quarry that are relied upon to continue to operate in accordance with the conditions of the existing consent.
 - d. The proposed mineral extraction activities and associated air discharge are considered to be generally consistent with the direction of the Auckland Unitary Plan (Operative in Part) and are acceptable in the context of the anticipated outcomes of the Plan for the Special Purpose Quarry zone and the management of discharges to air. In particular, it has been demonstrated that any adverse effects associated with the activity can be managed effectively in accordance with a Dust Mitigation Plan and operational procedures of the

existing quarry to ensure that they are acceptable from a resource management and appropriate in the context of the site and surrounding environment.

6. As a controlled activity, the other matters that can be considered under s104(1)(c) of the RMA must relate to the matters reserved for control under the plan. In this case, there are no other relevant matters.
7. With respect to s123 the applicant has requested a 35-year duration for the discharge to air permit DIS60409109. This duration is supported for the following reasons:
 - a. Over the course of the term of the consent it is unlikely that surrounding receiving environment will change significantly or become more sensitive to the proposed air discharges.
 - b. The dust management and mitigation proposed is considered to be robust and able to respond to any identified dust issues that may arise.
 - c. It is unlikely that significant changes in the air discharge control technologies will become available.
8. Having considered the nature and scale of the effects associated with the proposed discharges of contaminants to land and air, the discharges are considered appropriate with respect to s105 and in particular:
 - a. The applicant has given regard to the nature of potential discharges and sensitive areas of the receiving environment, and provided sufficient detail to confirm that the adverse effects can be managed so that they are acceptable;
 - b. The applicant has proposed best practice contamination land management to ensure that effects of contaminants are managed in the most efficient and effective way for the environment;
 - c. Given the nature of the proposal, no alternatives are practical.
9. There are no reasons with respect to the provisions of s107 that restrict the granting of consent.
10. The relevant statutory documents above were prepared having regard to Part 2 of the RMA and capture all relevant planning considerations and contain a coherent set of policies designed to achieve clear environmental outcomes. They provide a clear framework for assessing all relevant potential effects from the proposal, and thus there is no need to go beyond these provisions and look to Part 2 in making this decision, as an assessment against Part 2 would not add anything to the evaluative exercise.
11. Overall, the proposal is considered to be consistent with the relevant matters of the AUP:OP, and in particular the outcomes anticipated for the Special Purpose Quarry Zones and management of discharges to air across the region. Any actual or potential adverse effects are assessed to be acceptable in the context of the receiving environment and management techniques that form part of the application.

Furthermore, the application is considered to meet the relevant tests of the RMA, and can be considered to support an efficient use of an existing land resource. For these reasons, the proposal is considered to be acceptable from a resource management perspective.

Conditions

Under sections 108 and 108AA of the RMA, this consent is subject to the following conditions:

1. This resource consent must be carried out in accordance with the documents and drawings and all supporting additional information submitted with the application, detailed below, and all referenced by the council as resource consent number LUC604091070 and DIS60409109 (BUN60409108).

- Application Form, and Assessment of Environmental Effects prepared by Osbornehay, dated September 2022.

Report title and reference	Author	Rev	Dated
Drury Quarry – Air Quality Assessment	PDP	-	September 2022
Dust Management Plan Drury Quarry	Stevensons	-	September 2022
Noise prediction for air discharge consent	Marshall Day	-	14 September 2022

Drawing title and reference	Author	Rev	Dated
FIG 1: Location of existing and proposed crushing and processing plant	PDP	B	Sep 22
FIG 2: Consent boundary and closest properties	PDP	B	Sep 22
FIG 3 Elevations of all equipment	PDP	B	Sept 22
FIG 4: Stockpile Locations	PDP	B	Sept 22
FIG 5: Monitoring Locations	PDP	B	Sep 22
FIG 6: Monitoring Locations	PDP	A	Jul 22

Other additional information	Author	Rev	Dated
Further Information Response	Compiled by Osbornehay	-	10.11.2022

2. Under section 125 of the RMA, this consent lapses five years after the date it is granted unless:
 - a. The consent is given effect to; or
 - b. The council extends the period after which the consent lapses.
3. The consent holder must pay the council an initial consent compliance monitoring charge of \$1,044.00 (inclusive of GST), plus any further monitoring charge or charges to recover the actual and reasonable costs that have been incurred to ensure compliance with the conditions attached to these consents.

Advice note:

The initial monitoring deposit is to cover the cost of inspecting the site, carrying out tests, reviewing conditions, updating files, etc., all being work to ensure compliance with the resource consent. In order to recover actual and reasonable costs, monitoring of conditions, in excess of those covered by the deposit, must be charged at the relevant hourly rate applicable at the time. The consent holder will be advised of the further monitoring charge.

Only after all conditions of the resource consent have been met, will the council issue a letter confirming compliance on request of the consent holder.

Specific Conditions – LUC60409170

Update of Quarry Management Plan

4. Prior to the operation of new processing equipment and stockpiling activities on site authorised by this consent the Consent Holder must submit an updated Quarry Management Plan to Council for certification. The updated Quarry Management Plan must incorporate amendments to demonstrate how the controlled activity standards for mineral extraction activities are met or are proposed to be met, and how the air discharge consent conditions of DIS60409109 are proposed to be met.

Operational noise

5. Noise arising from operation of the quarry activity and associated truck movements on the site shall be measured in accordance with the provisions of NZS 6801:2008 Acoustics – Measurement of environmental sound and shall be assessed in accordance with NZS 6802:2008 Acoustics – Environmental noise and must not exceed the noise levels in: -
 - a. Table H28.6.2.1.1 when measured at a notional boundary from any dwelling that existed at 1 January 2001 outside the Special Purpose – Quarry Zone; and
 - b. Table E25.6.5 when measured within the boundary of any site zoned Business – Heavy Industry or Business – Light Industry.

Advice Note:

The consent holder is reminded of their general obligation under section 16 of the Resource Management Act 1991 to adopt the best practicable option to ensure that the emission of noise does not exceed a reasonable level.

Compliance noise monitoring

6. One-off noise measurements must be undertaken by a suitably qualified and experienced acoustic professional within four (4) weeks of the activity commencing full operation and after completion of the acoustic fencing (subject to BUN60359817) to confirm compliance with the operational noise limits in the conditions of this consent. A compliance report must be prepared and submitted to the Council within two (2) weeks of measurements being completed.
7. In the event that compliance is not demonstrated, the report is to identify sources of noise leading to the non-compliance, recommended further investigation and actions, and a proposed timeframe for completing the investigation and implementing the actions which must be less than four (4) weeks unless an alternative timeframe is agreed with the Council or other steps are taken to comply with the noise limits in the intervening period.

Specific Conditions – DIS60409109 Discharge to Air

Duration

8. Air discharge consent number DIS60409109 must expire 35 years from the date of granting unless it has lapsed, been surrendered or been cancelled at an earlier date pursuant to the RMA.

Surrender of existing consent.

9. Within one month of giving effect to this consent, the existing air discharge consent (R/VCC/2013/5151/1 – NRSI application number 46591) must be surrendered.

Access to site

10. Access to the relevant parts of the property must be maintained and be available at all reasonable times to enable the servants or agents of the council to carry out inspections, surveys, investigations, tests, measurements or take samples whilst adhering to the consent holder's health and safety policy.

Limit Conditions

11. All processes must be operated, maintained, supervised, monitored and controlled, including by adhering to the Dust Management Plan certified in accordance with the conditions of this consent, to ensure that all emissions authorised by this consent are maintained at the minimum practicable level.

Advice Note: Dust and odour effects

Compliance with this condition is to be assessed by suitably trained council enforcement officers in accordance with the procedures outlined in the Good Practice Guides for Odour and Dust (Ministry for the Environment, 2016), including consideration of the FIDOL factors (frequency, intensity, duration, offensiveness and location).

12. Beyond the boundary of the Site, there must be no dust and/or odour caused by discharges from the Site, which in the opinion of the Council, is the cause of a noxious, dangerous, offensive or objectionable effect.
13. Discharges from any activity on site must not give rise to visible emissions, other than water vapour or heat haze, to an extent which, in the opinion of the council, is the cause of a noxious, dangerous, offensive or objectionable effect.
14. Beyond the boundary of the Site, there must be no hazardous air pollutant, caused by discharges from the Site, which is present at a concentration that causes, or is likely to cause adverse effects to human health, ecosystems or property.

Process Conditions

15. The crushers must not be operated without the associated water sprayers being fully operational and functioning correctly. All dust control equipment on the Site must be maintained in good condition.
16. All practicable measures must be undertaken as detailed by the Dust Management Plan, certified in accordance with the conditions of this consent, to minimise the discharge of dust beyond the boundary of the site. These measures must include, but not be limited to:
 - a. Frequent watering of unsealed surfaces where discharges of dust are likely to arise.
 - b. Restricting vehicle speeds around the site.
 - c. Maintaining unsealed surfaces of vehicle routes where discharges of dust are likely to arise through grading and rolling to minimise dust, and stabilisation of exits from unsealed surfaces onto sealed roads.

- d. The maintenance of wheel washing facilities at the site exit, utilised by vehicles as required to minimise the tracking of dust-generating material on paved surfaces and public roads.
 - e. Locating and maintaining stockpiles to minimise potential wind-entrainment.
 - f. Contouring and re-vegetation of the overburden and managed fill disposal area as soon as practicable.
17. Water supplies must be maintained at such capacity that application of water as a dust control measure is not limited. A log must be kept of pond and dam maintenance and of weekly checks on sediment and water levels in ponds.
18. No material must be disposed of by open burning on site.

Monitoring and Reporting Conditions

19. Monitoring of meteorology (wind speed, wind direction, temperature, and rainfall) in the vicinity of the site must be undertaken. The types and location of the meteorological monitoring sites must be in accordance with the certified Dust Management Plan, as required by the conditions of this consent, and must minimise the potential for obstacles to affect the accuracy of the readings. The monitor must record the wind speed, wind direction, temperature, and rainfall continuously in real time so that the readings are immediately retrievable.
20. Monitoring of dust (total suspended particulate and/or PM₁₀) in ambient air in the vicinity of the site must be undertaken. The number, type, and location of the monitoring sites must be in accordance with the certified DMP, as required by the conditions of this consent. These monitors must record ambient dust concentrations continuously in real time so that the readings are immediately retrievable and so that on-site operators are immediately notified of any instance of ambient dust concentrations that exceed the trigger thresholds set by the DMP.
21. The Dust Management Plan dated September 2022 and prepared by Stevenson Aggregates ('the DMP') must be maintained to ensure that the activities undertaken in accordance with the DMP will achieve the objectives of the plan and compliance with the relevant consent conditions. The consent holder must meet the costs of the production, certification, monitoring and review of the DMP. The DMP must incorporate a series of monitoring, management and operational procedures, methodologies and contingency plans, and together must accurately record all information required to comply with the conditions of this consent. The DMP must include the following:
- a. Identification of all fugitive and point sources for discharges of contaminants into air, including a map showing the location of each source;
 - b. Procedures to minimise discharges of contaminants into air, including details of the inspection, maintenance, monitoring and contingency procedures in place for all emissions control equipment at the Site;
 - c. Procedures for the operation, maintenance, and calibration of the meteorological monitor required by Condition 19;
 - d. Procedures for the operation, maintenance, and calibration of the ambient dust monitors as required by Condition 20;

- e. Details of management and monitoring practices in place to minimise discharges of dust; including but not limited to:
 - i. The use of water carts and irrigation systems to dampen dusty surfaces and all other dust mitigation measures required by Condition 16.
 - ii. Stopping all work on areas of the site that are sources of excessive dust, other than dust control activities.
 - iii. The inclusion of two alert levels of dust generation that trigger firstly additional dust mitigation measures and secondly cessation of certain dust generating activities on site until dust concentrations no longer constitute a significant adverse effect beyond the boundary of the Site. The determination of a significant adverse dust effect beyond the boundary of the consent holder's property must be carried out using the guidance included in the Ministry for the Environment's Good Practice Guide for Assessing and Managing Dust and in consultation between the consent holder and Council.
 - iv. Contingency measures to investigate the causes of any exceedances of the dust alert levels and to minimise dust discharges in the event that the investigation identifies on-site dust cause as the cause of an exceedance.
 - f. The identification of staff responsibilities.
 - g. The procedures for the receipt, recording, and handling of air quality complaints received or exceedances of the dust alert levels, including notification to council.
22. The DMP must be reviewed on an annual basis and any subsequent changes to the certified DMP must be submitted to the council for certification prior to implementation. The council will advise the Consent Holder in writing if any aspects of the DMP are considered to be inconsistent with achieving the provisions of this consent.
23. Details of all inspections, records, and monitoring that are required by the conditions of this consent must be kept for a minimum of two years from the date of each entry and must be provided to the council on request.
24. The council must be notified as soon as practicable in the event of any significant discharge to air, which results or has the potential to result in a breach of air quality conditions or adverse effects on the environment. The following information must be supplied:
- a. Details of the nature of the discharge;
 - b. An explanation of the cause of the incident; and
 - c. Details of remediation action taken.
25. All air quality complaints that are received must be recorded. The complaint details must include:
- a. The date, time, location and nature of the complaint;
 - b. The name, phone number and address of the complainant, unless the complainant elects not to supply these details;
 - c. Weather conditions, including approximate wind speed and direction, at time of the complaint;

- d. Any remedial actions undertaken.

Details of any complaints received must be provided to the council within one working day of the complaint.

Review Condition

26. Under section 128 of the RMA, the conditions of this consent may be reviewed by the Manager Resource Consents at the consent holder's cost in March 2024 and annually thereafter in order to:

- a. Deal with any significant adverse effects on the environment arising from the exercise of the consent which was not foreseen at the time the application was considered and which is appropriate to deal with at the time of the review.
- b. Consider the adequacy of conditions which prevent nuisance and adverse effects beyond the boundary of the Site, particularly if regular or frequent complaints have been received and validated by an enforcement officer.
- c. Consider developments in control technology and management practices that would enable practical reductions in the discharge of contaminants to air.
- d. Alter the monitoring requirements, including requiring further monitoring, or increasing or reducing the frequency of monitoring.
- e. Take into account any Act of Parliament, regulation, national policy statement, regional policy statement or relevant regional plan that relates to limiting, recording or mitigating emissions by this consent.

Or, the consent may be reviewed by the Manager Resource Consents at any time, if it is found that the information made available to the council in the application contained inaccuracies which materially influenced the decision and the effects of the exercise of the consent are such that it is necessary to apply more appropriate conditions.

Advice notes

1. *Any reference to number of days within this decision refers to working days as defined in s2 of the RMA.*
2. *For the purpose of compliance with the conditions of consent, "the council" refers to the council's monitoring officer unless otherwise specified. Please email monitoring@aucklandcouncil.govt.nz to identify your allocated officer.*
3. *For more information on the resource consent process with Auckland Council see the council's website: www.aucklandcouncil.govt.nz. General information on resource consents, including making an application to vary or cancel consent conditions can be found on the Ministry for the Environment's website: www.mfe.govt.nz.*
4. *If you disagree with any of the above conditions, and/or disagree with the additional charges relating to the processing of the application(s), you have a right of objection pursuant to sections 357A and/or 357B of the Resource Management Act 1991. Any objection must be made in writing to the council within 15 working days of your receipt of this decision (for s357A) or receipt of the council invoice (for s357B).*

5. *The consent holder is responsible for obtaining all other necessary consents, permits, and licences, including those under the Building Act 2004, and the Heritage New Zealand Pouhere Taonga Act 2014. This consent does not remove the need to comply with all other applicable Acts (including the Property Law Act 2007 and the Health and Safety at Work Act 2015), regulations, relevant Bylaws, and rules of law. This consent does not constitute building consent approval. Please check whether a building consent is required under the Building Act 2004.*
6. *The council acknowledges that the Dust Management Plan is intended to provide flexibility both for the consent holder and the council for the management of the air discharges. Accordingly, the Dust Management Plan may need to be reviewed over time. Any reviews should be in accordance with the stated objectives of the management plan and limited to the scope of this consent.*
7. *Certification of the Dust Management Plan by the council relates only to those aspects of the management plan that are relevant under the RMA. The certification does not amount to an approval or acceptance of suitability by the council of any elements of the management plan that relate to other legislation, for example, but not limited to, the Building Act 2004 or the Health and Safety at Work Act 2015.*

Decision prepared by:



Colin Hopkins
Consultant Planner DCS
For Resource Consents

Date: 8 February 2023

Delegated decision maker:

Name: Doug Fletcher
Title: Principal Project Lead, Premium
Resource Consents

Signed:



Date: 16 February 2023

Note: In accordance with s133A this decision was corrected to include references to the plans in condition 1 on 22.02.2023

Resource Consent Notice of Works Starting

Please email this form to monitoring@aucklandcouncil.govt.nz at least 5 days prior to work starting on your development or post it to the address at the bottom of the page.

Site address:				
AREA (please tick the box)	Auckland CBD ☐	Auckland Isthmus ☐	Hauraki Gulf Islands ☐	Waitakere ☐
Manukau ☐	Rodney ☐	North Shore ☐	Papakura ☐	Franklin ☐
Resource consent number:			Associated building consent:	
Expected start date of work:			Expected duration of work:	

Primary contact	Name	Mobile / Landline	Address	Email address
Owner				
Project manager				
Builder				
Earthmover				
Arborist				
Other (specify)				

Signature: Owner / Project Manager (indicate which)	Date:
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Once you have been contacted by the Monitoring Officer, all correspondence should be sent directly to them.

SAVE \$\$\$ minimise monitoring costs!

The council will review your property for start of works every three months from the date of issue of the resource consent and charge for the time spent. You can contact your Resource Consent Monitoring Officer on 09 301 0101 or via monitoring@aucklandcouncil.govt.nz to discuss a likely timetable of works before the inspection is carried out and to avoid incurring this cost.