BEFORE THE COMMISSIONERS APPOINTED ON BEHALF OF CENTRAL OTAGO DISTRICT COUNCIL

Under	The Resource Management Act 1991 (the **Act**)
In the Matter	of Resource Consent Application RC250077 for the purpose of mining at Sandy Point, Queensberry
Between	**AWA KOURA MINING LIMITED** **Applicant**
And	**CENTRAL OTAGO DISTRICT COUNCIL** **Territorial Authority**

BRIEF OF EVIDENCE OF FERGUS CHARLES BOUGHTON (DUST)

DATED 12 OCTOBER 2026

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BRIEF OF EVIDENCE OF FERGUS BOUGHTON (DUST)

Introduction

1. My full name is Fergus Charles Boughton.

2. I am a Principal Air Quality Consultant at Anemos Ltd based in Raglan. I was formerly Air Quality Team Leader at WSP Ltd based in Hamilton.

3. I hold a Master of Science degree (MSc) in Air Pollution Management and Control from the University of Birmingham, UK.

4. In addition to my MSc, I hold a Bachelor of Science degree (BSc) in Physical Geography with Environmental Management. I am a Certified Air Quality Professional with the Clean Air Society of Australia and New Zealand, and a full member of the Institute for Air Quality Management in the UK.

5. I have worked as an air quality consultant since leaving university and have subsequently gained 18 years' experience. I worked for 15 years in the UK at Mouchel Limited and then AECOM, prior to relocating to New Zealand in January 2023 to work for WSP. In August 2026 I started Anemos Limited as a Director and Principal Air Quality Consultant.

6. My experience as an air quality consultant includes the completion and oversight of numerous dust, odour and exhaust emissions assessments and management plans, for a variety of proposed activities including quarrying, nationally significant roading schemes, industrial sites, and wastewater treatment plants.

7. Although this is not an Environment Court hearing, I have read and agree to comply with the Code of Conduct for Expert Witnesses

(Environment Court Practice Note 2023). I confirm that the opinions that I express in this evidence are on matters within my expertise.

Scope of Evidence

8. In preparing this evidence, I have read and familiarised myself with the following documents and submitted evidence:

   (a) The Technical Air Quality Assessment for the Proposed Sandy Point Gold Mine, WSP, April 2026 (reference NZ006910.3761-REP-AQL-001-RevB);
   (b) The Dust Management Plan (DMP) for the Proposed Sandy Point Gold Mine, WSP, April 2026 (reference NZ006910.3761-REP-AQL-002-RevB);
   (c) The memorandum entitled “Technical Review of an Application by Awa Koura Mining Ltd to Discharge Contaminants to Air (Dust) from a Proposed Gold Mining Operation near Luggate”, Specialist Environmental Services Limited, 28 May 2026.
   (d) The submissions lodged in relation to Resource Consent Application RC250077, insofar as they address air quality, dust and odour matters; and
   (e) The video submitted by Richard and Caroline Bell alongside Submission 19, viewed in the Central Otago District Council’s resource consent repository.

9. My evidence addresses the following matters:

   (a) the existing air quality environment;

   (b) the potential sources of discharges to air;

   (c) the assessment criteria and findings;

   (d) dust mitigation, monitoring and site procedures;

(e) comments on the Council's technical review;

(f) responses to air quality matters raised by submitters;

(a) comments on the Council Officer's section 42A report; and

(g) my overall conclusions.

10. I do not repeat all the information lodged with the resource consent application. My evidence focuses on the discharges to air that may arise from the activities proposed by the Applicant, the resulting potential effects on neighbouring properties, and the measures proposed to avoid or mitigate those effects.

11. The assessment was completed by a team of air quality consultants I led at WSP, where I was responsible for reviewing and approving the assessment report. I subsequently visited the site in September 2026 working for Anemos Limited, to observe in person the site layout, proximity to nearby receptors, existing land use and existing dust sources.

12. Overall, I consider that the air quality effects of the Awa Koura mining operation can be appropriately controlled such that any residual dust effects are infrequent, short lived and low intensity, and significant nuisance and health effects are avoided. This is provided that proposed mitigation, monitoring and response measures are properly and consistently implemented.

Existing air quality environment

13. The site is on relatively flat farmland at Sandy Point in a predominantly rural valley environment. The Clutha River/Mata-Au bounds the site to the east, with mountainous terrain to the east and south-west. The area has a relatively dry climate. To the immediate west of the site

there is an embankment, on top of which several receptors are located between the site and State Highway 6.

14. There are existing natural and rural dust sources in the receiving environment. Fine sediments deposited on exposed riverbanks can become dry and susceptible to wind erosion. Notably there is an exposed, sparsely vegetated escarpment of approximately 2.4 hectares located to the east of the Clutha River and site, which is vulnerable to wind and weather erosion.

15. Nearby grazing, stock movement, cultivation, farm tracks and unsealed rural roads can produce intermittent dust during dry conditions. These sources form part of the existing dust environment and therefore generate intermittent dust independently of the proposed mining activity. Existing use of the site also includes cultivating the current grazing paddocks and leaving them as exposed soil temporarily, until newly planted grazing crops begin to grow, and this will also generate intermittent dust emissions.

16. There are no publicly available ambient air quality monitoring stations in the immediate vicinity from which to establish existing background air quality conditions at the site. Estimates of background air quality used in the assessment were therefore taken from data provided by NZ Transport Agency Waka Kotahi which provides estimates of background pollutant concentrations. These estimates indicate a 24-hour average PM_{10} concentration of 15.9 µg/m³ and an annual average of 5.6 µg/m³, which is below the National Environmental Standards for Air Quality (NESAQ) 24-hour mean standard of 50 µg/m³ and the New Zealand Ambient Air Quality (NZAAQ) guideline of 20 µg/m³. On that basis, the existing background air quality was assessed as good.

Potential for discharges to air

17. The wet screening process substantially suppresses dust and so is not expected to be a significant dust source. The potential discharges arise from topsoil stripping; loading, transport and placement of topsoil; vehicle movements on unsealed access roads; handling and placement of dewatered oversize or tailings material; wind erosion from exposed surfaces and the initial stockpile; and rehabilitation activities. Dust generation will depend on material moisture, vehicle activity, wind conditions, the extent of exposed ground and the duration of that exposure.

Assessment criteria and findings

18. WSP assessed nuisance dust using the FIDOL framework: frequency, intensity, duration, offensiveness and location. Frequency considers how often dust-generating activities and meteorological conditions coincide; intensity considers source dustiness, proximity and containment; duration considers both the three-year project and the progressive movement of the active area; offensiveness considers the visible soil- and mineral-based character of the dust and community sensitivity; and location considers the sensitivity and exposure of nearby receptors.

19. The assessment identified 12 dwellings within 350m of the site boundary and 16 dwellings between 350 - 600m of the site boundary. If there is no appropriate mitigation, then there could be a perceptible impact from dust emissions up to 350m[1,2].

20. The mining activity will not extend to the site boundary. The setbacks are shown in Mr Sycamore's evidence. This increases actual

[1] Clean Air Society of Australia and New Zealand. 2023. Good Practice Guide for the Assessment and Management of Air Pollution from Road Transport Projects. https://www.casanz.org.au/resources/the-good-practice-guide/.
[2] Institute of Air Quality Management. 2014. Guidance on the assessment of dust from demolition and construction. https://iaqm.co.uk/text/guidance/construction-dust-2014.pdf.

separation from some receptors. The two closest dwellings, at 3364 and 3360 Luggate-Cromwell Road, were identified as approximately 9 meters and 10 meters from the site boundary, respectively. Both properties have given affected party approval and support the consent application.

21. Rural residential receptors identified were treated as moderate to highly sensitivity in line with the Good Practice Guide for Assessing Discharges to Air from Industry.

22. The assessment findings from the case of dust impacts not being mitigated were intermittent frequency, moderate intensity, moderate duration, slightly offensive character and moderate to high location sensitivity.

23. The main potential effect is local amenity impact through visible dust and soiling. Emissions are expected to comprise predominantly PM_{10} and larger particles that settle in relatively short distances from their source.

24. The assessment considers project-related PM_{10} effects to be short-term, highly localised and episodic, with nuisance effects more likely to occur than exceedances of health-based standards. It also identifies a low potential for respirable crystalline silica because there is no drilling or crushing and the screening of material is a wet process.

25. A Dust Management Plan (DMP) for the site has been drafted, and with the mitigation, monitoring and response measures set out within that DMP properly and consistently implemented, the assessment finds that the residual dust effect would be low, with additional effects expected to be infrequent, short-lived and of low intensity. I confirm that my opinion is aligned with the assessment findings.

Dust mitigation and site procedures

26. The DMP provides a set of mitigation measures that work together to ensure dust emissions from the site are well controlled using best practice measures. These measures include daily visual monitoring, consideration of forecast wind speeds and direction, regular inspections and incident records to be completed by trained staff. The key source controls include pre-wetting earthworks, limiting drop heights, limiting stockpile height and slope, revegetating and dampening the initial stockpile, minimising exposed ground, using a water cart and/or fixed sprinklers, compacting or damping inactive stripped areas, levelling and stabilising tailings, and limiting site vehicle speeds to 10–15 km/h.

27. The DMP also provides for pausing work where wind speeds exceed 5 m/s for more than 20 minutes, increased water application during dry periods, and temporary reduction or cessation of dust-generating activities where triggers are observed. Visual dust crossing the boundary, specified wind conditions, deposited dust and PM_{10} values are identified as potential triggers. Within the DMP continuous PM_{10} monitoring is proposed when works are within 350 meters of sensitive receptors potentially affected by discharges from the active area during winds from the northwestern quadrant; and within 250 meters of all other sensitive receptors.

28. The adaptive approach proposed allows controls and monitoring to be escalated in response to site conditions, monitoring or complaints; its effectiveness therefore depends on timely observation, response and record-keeping. The reason for recommending that the mitigation measures are managed via the DMP in an adaptive manner, is to allow the applicant the ability to more easily update the measures over the life of the mine as part of the annual DMP review, to ensure any effects continue to be appropriately mitigated.

Comments on the Council's technical review

29. The Council's air-quality reviewer, Specialist Environmental Services (SES), agrees that the qualitative FIDOL method is appropriate, that the assessment identified the principal dust sources, and that adverse health effects from PM_{10} and respirable crystalline silica are likely to be less than minor, subject to the recommended controls. However, the review considers that the draft DMP lacks sufficient detail and that reliance on adaptive management alone does not provide sufficient certainty for this receiving environment.

30. The Applicant has adopted the recommendations within the various peer reviews, including a 2 ha limit on the active mining area, a 100 meter setback from the curtilage of 3360 Luggate-Cromwell Road, water-cart and sprinkler requirements, a 1.5 meter stockpile-height limit, a 15 km/h vehicle speed limit, prompt revegetation, an on-site meteorological station with real-time alarms, stopping specified material-handling activities when 10-minute average wind speed exceeds 5 m/s and the wind is directed toward sensitive receptors within 350 m, an updated certified DMP, the maintaining of complaint records, and that the discharges must not cause objectionable or offensive particulate matter beyond the site boundary.

31. I agree with the mitigation measures recommended, they will assist to effectively manage dust impacts from the site. I consider the proposed setback of 100 metres from 3360 Luggate-Cromwell Road to the active mining site to be an appropriate separation distance.

32. I acknowledge that SES's preference for consent-condition controls, I consider adaptive management to be appropriate because dust effects are measurable and observable in real time, and operational responses can be implemented immediately. The proposed conditions establish clear performance expectations. The DMP provides flexibility

to refine management measures where monitoring demonstrates that additional controls are warranted.

33. The mitigation measures discussed in this evidence and contained in the conditions of the ORC dust discharge consent are reasonable.[3] This consent is appended to my evidence as Appendix 1.

34. As part of the proposed conditions SES has recommended real-time PM_{10} monitoring when mining is close to sensitive receptors. The recommended monitoring would apply when the active area is within 350m of receptors potentially affected during winds from the north-western quadrant and within 250m of all other receptors. The monitor will be positioned between the active area and the closest receptor and action triggers and electronic alerts specified in the DMP.

35. I agree that proactive monitoring provides an additional level of assurance to allow operational responses to occur before off-site effects arise. I recommend that specifics of this monitoring be set out within the DMP such that they can be certified and adapted as necessary during the operation of the activity.

36. I recommend that the monitoring device be used for comparison of measured concentrations to the PM_{10} trigger level for dust management of 150 $\mu g/m^3$ as a 1-hour average, to allow the need for additional mitigation to be easily identified in real time. As outlined in the Ministry for Environment's Good Practice Guide for Assessing and Managing Dust, this trigger level has been found effective by regional councils and independent consultants in reducing dust complaints on quarry sites, which I would expect to have a higher likelihood of dust emissions than the proposed activity.

[3] RM26.315.04.

Response to submitters

37. I have considered the air quality and dust concerns raised by submitters. Most of these submissions cover the same topics, and therefore I have not responded to individual submissions but rather the topics that were raised. These include:

    (a) the potential for dust to be transported by valley winds to residences and outdoor areas, particularly from earthworks, vehicle movements on unsealed surfaces, stockpiles and exposed ground,

    (b) dust being carried across the Clutha River/Mata-Au,

    (c) degradation of air quality,

    (d) health risks, and

    (e) effects on vegetation, agriculture and property use.

38. Considering topics (a), (b) and (c), the assessment recognises that local winds may be channelled along the valley and that dry and windy conditions increase the potential for off-site dust transport. However, the principal emissions are expected to comprise coarse particulate matter and larger visible dust particles that settle relatively quickly, and even faster with mitigation implemented on site. Effects are therefore expected to be very localised and episodic.

39. Considering point (c) and (d), the proposal does not include drilling or crushing, and the screening process is wet. Accordingly, with the proposed dust controls applied, the primary potential effect is amenity-related visible dust or soiling rather than an exceedance of any health-based particulate standards.

40. Whilst not specifically considered within the assessment, the potential for an impact on health-based standards from vehicle emissions is considered to be negligible. In my experience, the number of daily movements required to produce a perceptible impact at receptors would be several orders of magnitude higher than the number of vehicle movements associated with the proposed activity, given the separation and proposed setback distances between the site and receptors.

41. Considering point (e), the assessment does not include consideration of effects on specific vegetation or agriculture, however, the mitigation measures set out within the DMP (paragraphs 26 to 28 above), and discussed further in relation to council review comments (paragraphs 29 to 36) are intended to minimise the potential for visible dust from crossing the site boundary and thereby minimise the potential for deposition on neighbouring land and vegetation, and I believe those measure to be effective if applied consistently and correctly.

42. In addition to the written submissions, I have watched the video provided by Richard and Caroline Bell, which is described as showing dust generated by a truck travelling on an unsealed area in windy conditions.

43. I acknowledge that the use of unsealed roads or areas by vehicles associated with the proposal presents a risk of dust generation if appropriate mitigation is not applied. The video highlights the importance of ensuring that the proposed mitigation measures are implemented consistently and effectively, as it demonstrates the type of effect that could occur if appropriate controls are not applied. The key controls related to this potential dust source include wet suppression of unsealed surfaces, the site speed limit and increased controls during dry or windy conditions.

44. The video does not alter my conclusion that vehicle-generated dust can be appropriately controlled, and I have witnessed the same mitigation proposed for this site being successfully applied on a quarry site in New Zealand, which had similar riverbed based sediments and unsealed access and haul roads.

45. Richard and Caroline Bell's property is identified in their submission as 738 Luggate-Tarras Road. This corresponds to a sensitive receptor assessed in the Technical Air Quality Assessment. The dwelling lies to the east of the site, approximately 265 meters from the site boundary, while their property boundary is approximately 147 meters from the site boundary.

46. The Bell property was therefore included in the assessment as a rural residential receptor of moderate to high sensitivity. Having regard to that separation distance, the progressive movement of the active mining area, the wet nature of the screening process and the proposed dust-management measures, I consider that the Bells would not experience offensive or objectionable dust effects from the proposal, provided the mitigation measures set out within the DMP and proposed consent conditions are properly and consistently applied.

47. All of the concerns raised reinforce the importance of implementing the controls in the proposed Dust Management Plan and consent conditions, including wet suppression, limiting vehicle speeds, minimising exposed areas, managing dust-generating activities during dry or windy conditions, completing environmental monitoring and implementing prompt corrective action.

Comments on the section 42A report

48. I have read the section 42A report, which has concluded that with reliance on our assessment of dust, the peer review provided from SES, alongside the conditions imposed through this consent and the

ORC discharge permit, it is considered that effects of dust will be appropriately avoided or mitigated. I agree with this conclusion.

Conclusion

49. In summary, the principal potential air quality effect is intermittent visible dust and soiling associated with earthworks, vehicle movements, exposed surfaces, stockpiles and rehabilitation activities. The wet screening process is not expected to be a significant dust source, and the potential for health effects from PM_{10} or respirable crystalline silica is assessed as low.

50. Subject to the final form of the consent conditions and Dust Management Plan, I consider that the proposed controls will manage dust so that offensive or objectionable effects do not occur beyond the site boundary.

Dated 12 October 2026

F Boughton

Appendix 1 - Consent RM26.315.04

Otago Regional Council

Our Reference: 2129690870-22642 Consent No. RM26.315.04

DISCHARGE PERMIT

Pursuant to Section 104B of the Resource Management Act 1991, the Otago Regional Council grants consent to:

Name: Awa Koura Mining Limited

Address: 4 Julius Place, Richmond, 7020, New Zealand

To discharge dust to air for the purpose of alluvial gold mining

For a term expiring 6 October 2029

Location of consent activity:	Queensberry, approximately 440 metres northeast of the intersection of State Highway 6 and Pukerangi Drive
Legal description of consent location:	Lot 1 DP 46667
GPS location NZTM (2000) of approximate centre point of site:	E1309685 N5036915

Conditions

Specific

1. This consent authorises the discharge of dust to air as a result of alluvial mining. The discharge to air must be carried out and located in accordance with the plans in Appendix 1 and Appendix 2, and all information submitted with the application, detailed below, and all referenced by the Consent Authority as consent number RM26.315:
   a) Application Forms 4E, 5, 6, 9A;
   b) Resource Consent Application to the Otago Regional Council for Awa Koura Mining Limited, Terramark, 5 June 2026;
   c) Proposed Sandy Point Gold Mine, Technical Air Quality Assessment, Revision B, WSP, April 2026;
   d) Proposed Sandy Point Gold Mine, Dust Management Plan, Revision B, WSP, April 2026;
   If there are any inconsistencies between the above information and the conditions of this consent, the conditions of this consent will prevail.

2. The Consent Holder must manage the active mining area to minimise the discharge of dust, including, but not limited to, the following measures:
   a) The active mining area, including unsealed haul roads and unrehabilitated areas, must not exceed 2 hectares;
   b) The height of overburden/ topsoil stockpiles must not exceed 0.6 metres above

ground level;
c) The speed of vehicles on the site must be limited to not more than 15 kilometres per hour;
d) The site entrance and adjacent sealed highway must be regularly swept or cleaned to remove accumulated debris;
e) Water must be applied to overburden material, soil and tailings when dry to minimise dust emissions from these activities;
f) Stripping, handling and deposition of overburden material and soil, and handling of dry tailings material, must not occur during wind speeds of more than 5 metres per second (10 minute average), as measured on site, when the wind is blowing towards neighbouring sensitive receptors that are located within 350 metres of the activity as shown in Appendix 2;
g) Inactive and rehabilitated areas must be revegetated promptly.

3. Visual monitoring of dust conditions must be undertaken by site staff during the execution of their normal daily duties to ensure mitigation measures can be quickly applied to address any potential dust emissions.

4. A water cart with spray bar must be used on unsealed haul roads and other dust generating areas as required for dust control. This water cart must be available on site at all times that mining and associated activities are undertaken.

5. Water sprinklers must be used to apply water to surfaces not accessed by the water cart. Sprinklers must be used on all rehabilitated areas until grass becomes established.

Performance Monitoring

6. No less than **20 working days** prior to commencement of the mining activity on site, the Consent Holder must submit a **Dust Management Plan (DMP)** to the Consent Authority for certification. The DMP must be prepared by a suitably qualified and experienced air quality expert. The overall objective of the DMP is to set out the practices and procedures to be adopted to ensure compliance with consent conditions and must at a minimum:
a) Identify the specific device proposed to be used for real-time PM_{10} monitoring. The device must be a near-reference grade monitoring device with a heated inlet;
b) Include baseline environmental monitoring (Meteorological and PM_{10}) that has been undertaken prior to works commencing to establish existing conditions on site in varying meteorological conditions;
c) In addition to general monitoring required by Condition 3, identify the appropriate location(s) for environmental monitoring on site while mining is occurring;
d) Identify all fugitive and point sources for discharges of contaminants into air, including a map showing the location of each source;
e) Detail management and monitoring practices to minimise discharges of contaminants into air;
f) Identify staff responsibilities and contact details;
g) Detail staff training to ensure the implementation of dust management measures;
h) Outline the procedures for keeping and maintaining records of the activity on site;
i) Identify trigger levels at which PM_{10} concentration would result in remedial action being undertaken in accordance with Condition 10;

j) Outline the procedures for the receipt, recording and handling of air quality complaints received.

7. a) The Consent Holder must implement and comply with the DMP referenced in Condition 6, or any subsequent revisions accepted by the Consent Authority for the duration of the consent.
b) Any proposed revisions of the DMP must be submitted to the Consent Authority for written acceptance at least 10 working days prior to formalising and implementing the revision.
c) All personnel working on the site must be made aware of the requirements contained in the DMP.
d) A copy of the certified DMP plan must be held on-site at all times.

8. a) The DMP required by Condition 6 must be reviewed on an annual basis.
b) The purpose of this review is to confirm that it accurately reflects on-site activities and operations and to identify if changes to management procedures contained within the DMP are required.
c) The results of the review must be reported to the Consent Authority within 20 working days of the review being undertaken.
d) If the review results in amendments to the DMP, the amendments must be certified by the Consent Authority prior to implementation.
e) If there are any inconsistencies between the DMP and the conditions of this consent, the conditions of this consent will prevail.

9. a) **Prior to the commencement** of the mining activity, the Consent Holder must install a weather station within the site that has the capability of measuring and logging wind speed and direction at a minimum of 1 minute intervals.
b) The weather station must be mounted on a mast located at a site representative of wind flows across the working area.
c) Wind speed and direction must be continuously monitored on the site at 6 metre minimum height, with real-time data sent to the site manager.
d) The weather station must have the ability to record the data and send automated alarms to site staff when wind speed and direction triggers are exceeded.

10. **Prior to the commencement** of the activity:
a) the Consent Holder must hold a pre-start meeting that:
    i. is located on the subject site;
    ii. is scheduled not less than five days before the commencement date;
    iii. includes Otago Regional Council Compliance Monitoring Officer(s); and
b) The meeting must discuss the mitigation and control measures, the mining methodology and must ensure all relevant parties are aware of and familiar with the necessary conditions of this consent. All additional information required by the Council must be provided at least two days prior to the meeting.
c) The following information must be made available at the pre-start meeting:
    i. Timeframes for key stages of the works authorised under this consent;
    ii. Resource consent conditions; and
    iii. The approved Dust Management Plan prepared in accordance with Condition 6.

11. a) Real-time PM_{10} monitoring must be undertaken using a near-reference grade monitoring device with a heated inlet. The specific device to be used must be outlined within the certified DMP. Monitoring must be undertaken at the site boundary between the 2 hectare active mining area and any sensitive receptor identified in Appendix 2 at all times when the mining area is:
    (i) Within 350 meters of sensitive receptors potentially affected by discharges from the active area during winds from the northwestern quadrant; and
    (ii) Within 250 meters of all other sensitive receptors.
    b) If there is more than one sensitive receptor within the specified distance, the monitor must be located between the active area and the closest receptor.
    c) If PM_{10} monitoring exceeds the trigger levels set in the DMP in accordance with Condition 6, electronic alerts must be sent to the site manager and remedial actions outlined in the DMP must be implemented.

12. a) The Consent Holder must maintain a register of any air quality complaints. The register must include, but not be limited to:
    (i) The location where the discharge was detected by the complainant;
    (ii) The date and time when the discharge was detected;
    (iii) A description of the discharge detected by the complainant;
    (iv) The name, phone number, and address of the complainant, unless the complainant elects not to supply this information;
    (v) A description of the weather conditions, including approximate wind speed and direction when the discharge was detected by the complainant;
    (vi) Action taken by Consent Holder to avoid, remedy or mitigate the discharge detected by the complainant and any policies or methods put in place to avoid the discharge occurring again.
    b) The Consent Holder must, within 24 hours, inform the Consent Authority of any complaints received from any person about the discharge to air associated with the consented works.
    c) The register of the complaints must be submitted to the Consent Authority by March each year and be made available for inspection at other times upon request.

General

13. The discharge must not cause objectionable or offensive particulate matter beyond the boundary of the site.

14 The Consent Holder must prevent the discharge of contaminants (including sediment) to land, groundwater, or any surface waterbody arising from the application of water for dust suppression during the exercise of this consent.

Review

15. The Consent Authority may, in accordance with Sections 128 and 129 of the Resource Management Act 1991, serve notice on the consent holder of its intention to review the conditions of this consent within three months of each anniversary of the commencement of this consent for the purpose of:
    (a) Determining whether the conditions of this permit are adequate to deal with any adverse effect on the environment which may arise from the exercise of the permit and which it is appropriate to deal with at a later stage, or which become evident after

the date of commencement of the permit; or
(b) Ensuring the conditions of this consent are consistent with any National Environmental Standards; or
(c) Requiring the consent holder to adopt the best practicable option to remove or reduce any adverse effect on the environment arising as a result of the exercise of this permit.

Notes to Consent Holder

1. *If you require a replacement consent upon the expiry date of this consent, any new application should be lodged at least 6 months prior to the expiry date of this consent. Applying at least 6 months before the expiry date may enable you to continue to exercise this consent under section 124 of the Resource Management Act 1991 until a decision is made on the replacement application (and any appeals are determined).*

2. *The Consent Holder is responsible for obtaining all other necessary consents, permits, and licences, including those under the Building Act 2004, the Biosecurity Act 1993, the Conservation Act 1987, 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 in Employment Act 1992), 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.*
   Where information is required to be provided to the Consent Authority this is provided in writing to compliance@orc.govt.nz, and the email heading is to reference RM26.315 and the condition the information relates to.

3. *The Consent Holder will be required to pay the Consent Authority an administration and monitoring charge to recover the actual and reasonable costs incurred to ensure ongoing compliance with the conditions attached to this consent, collected in accordance with Section 36 of the Resource Management Act 1991.*

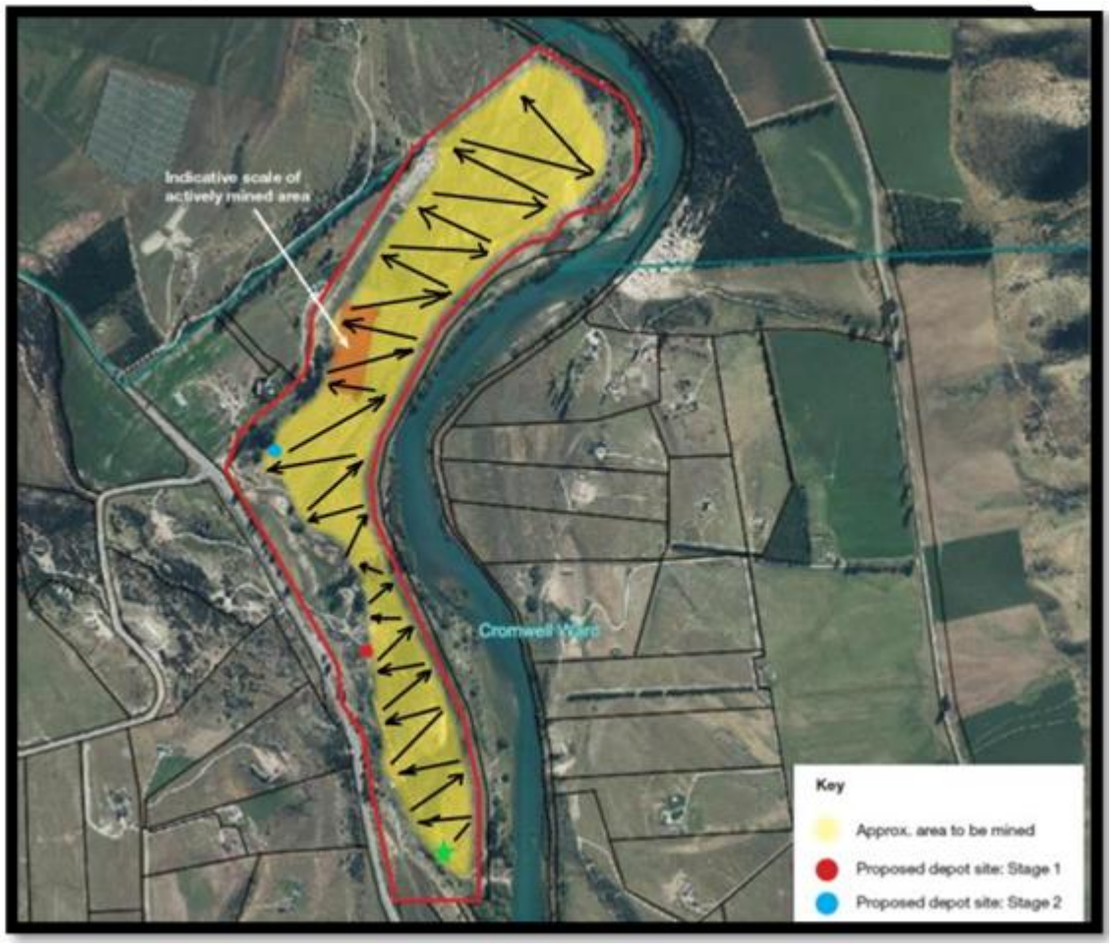
4. *Where information is required to be provided to the Consent Authority this is provided in writing to compliance@orc.govt.nz, and the email heading is to reference RM26.315.04 and the condition the information relates to.*

Issued at Dunedin this 6th day of October 2026

Natasha Pritchard
Principal Consents Planner

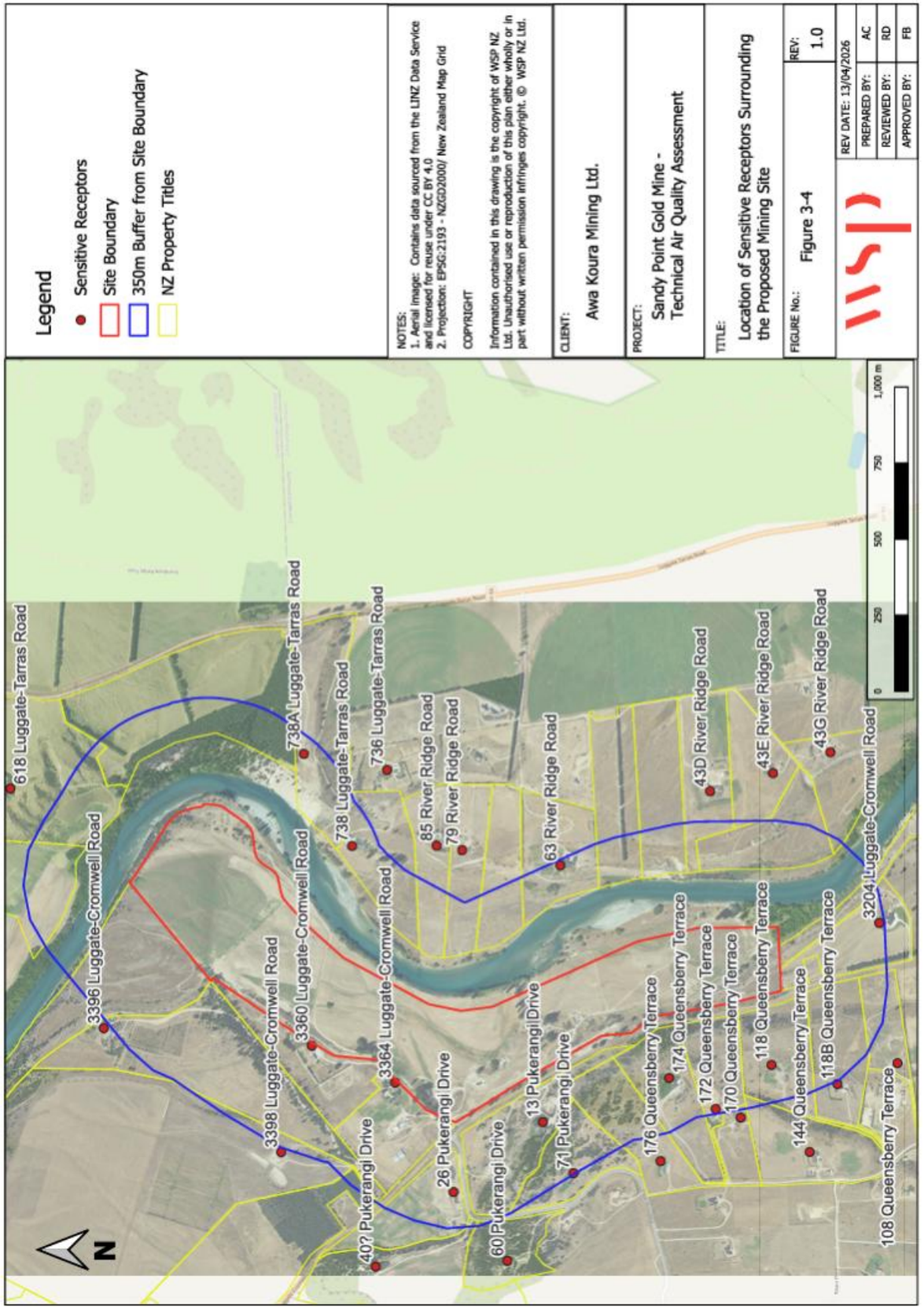
Otago Regional Council

Appendix 1 to Discharge Permit RM26.315.04 – Mining Envelope and depot location



Otago Regional Council

Appendix 2 to Discharge Permit RM26.315.04 – Location of sensitive receptors



Appendix 2 - Dust Management Plan

Proposed Sandy Point Gold Mine

Dust Management Plan

Prepared for: Awa Koura Mining Limited
Prepared by: Anemos Limited
Date: 13 October 2026
Reference: 2618_R001

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Document Control

Version	Date	Prepared by	Reviewed by
1.0	12 October 2026	Fergus Boughton	Neil Gimson

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1 Introduction

1.1 Project Overview

Awa Koura Mining Limited is proposing to undertake an alluvial gold mining operation for a period of up to three years on farmland located along the Clutha River/Mata-Au terraces, north of Queensberry and southeast of Luggate in Central Otago. The operation is proposed to commence at the southern end of the proposed area, progressively moving northward and restoring the land, so that previously consented residential development may begin immediately thereafter.

1.2 Purpose of the Dust Management Plan

This Dust Management Plan (DMP) has been prepared to identify potential sources of dust generated by the proposed Sandy Point gold mining operation and to outline the measures that will be implemented to avoid, remedy, or mitigate dust emissions. The DMP provides a framework for proactive dust control, monitoring, and response to ensure that adverse effects on human health, amenity, and the surrounding environment are minimised as far as practicable. The DMP has been developed in accordance with the Ministry for the Environment's *Good Practice Guide for Assessing and Managing Dust*.

1.3 Key Personnel and Contacts

The Site Manager has overall responsibility under delegation from the General Manager for all aspects of the mining operation, including implementation of the DMP. On a day-to-day basis, site personnel are responsible for carrying out specific tasks on site and in relation to this DMP; however, these personnel remain accountable to the Site Manager. It is estimated that six permanent staff will be employed to run the mining operation.

Table 1: Key personnel, contacts and responsibilities

Name	Role	Mobile	Email
xxx	General Manager	xxx	xxx
xxx	Site Manager	xxx	xxx
xxx	Environmental Manager	xxx	xxx

1.4 Staff Training and Records

Records of staff training should be updated as necessary and stored by Awa Koura Mining Limited. Records should include training completed, methods used and training frequency. Records should also note when staff have reviewed and understood this DMP and the actions required of them.

1.4.1 DMP Induction

All site personnel are required to complete an induction covering the requirements of the DMP. The induction is intended to equip personnel with the knowledge required to implement and comply with the DMP effectively.

Visitors may also be required to complete the induction if they are involved in activities with the potential to generate discharges of contaminants to air. Visitors or other personnel who have not completed the induction must be accompanied by personnel who have completed it when accessing relevant areas. The Site Manager is responsible for ensuring that all appropriate personnel undertake the DMP induction.

2 Site Description and Context

2.1 Location and Surrounding Environment

The Sandy Point site is a relatively flat area in the Central Otago District at Queensberry, within a predominantly rural and topographically complex environment. The surrounding valley comprises mainly rural farmland, with mountainous terrain to the east and southwest. The Clutha River/Mata-Au bounds the site to the east. The site is on Lot 1 DP 466676, Title Number 623528, which has a land area of 698,680 m².

There are 28 potentially sensitive receptors with part of their property within 350 m of the site boundary. Twenty-six are residential receptors and two are both residential and commercial.

2.2 Site Layout and Activities

Mining will follow a zig-zag pattern from the southern end northward. The active mining area, including unsealed haul roads and unrehabilitated areas, will not exceed two hectares at any time. Areas that are no longer active will be rehabilitated and revegetated promptly, including during winter, so that the combined active and unrehabilitated area remains within the two-hectare limit. Development works will follow once each active area has been remediated.

Work will occur Monday to Friday for up to 10 hours per day, at a screening throughput of 200 m³ per hour.

Mechanical excavators on the working bench will feed material to a floating shaker plant, where gold product will be separated from rock and finer material. Washed-rock tailings will accumulate behind the screening pond before periodic levelling. Once or twice per month, topsoil will be relocated from in front of the screen to reclaimed areas. No active stockpiles will be present. Material initially removed to commission the site will be revegetated as soon as practicable and maintained until repurposed during decommissioning.

The primary potential dust sources are:

- Topsoil stripping, because loose site sediments can be readily dispersed when disturbed.
- Material handling and placement of oversize or tailings material following dewatering, especially when material is dropped from height.
- Tailings that dry after initial placement.
- Wind erosion from exposed surfaces and the initial stockpile.
- Vehicle movements on unsealed access roads.
- Rehabilitation activities similar to initial stripping and soil movement.

2.3 Site Equipment

- One floating gold shaker screen in continuous use.
- One large excavator of 50–60 tonnes in continuous use.
- Two smaller excavators of 20 and 30 tonnes in intermittent use.
- Two contractors' vehicles attending one to two times per month.
- One bulldozer in intermittent use.

2.4 Dust Mitigation Measures

2.4.1 Good Housekeeping Practices

Good housekeeping practices will be implemented from commencement of operations and maintained throughout the project. These include:

- Ensuring site staff are trained to respond to potential dust emissions.
- Daily visual monitoring by site staff for fugitive dust.
- Considering forecast wind speed, wind direction and soil conditions before daily works begin.
- Regular site inspections, recording results and making the inspection log available to Otago Regional Council (ORC) and Central Otago District Council (CODC) on request.
- Recording exceptional incidents that cause dust on or off site and the actions taken.
- Maintaining construction machinery in accordance with manufacturers' recommendations, supported by weekly check sheets.

2.4.2 Activity-Specific Controls

2.4.2.1 Earthmoving

- Keep adequate irrigation systems available to dampen areas before earthworks and use them as needed until rehabilitation is complete.
- Limit drop heights from excavator to screen.

2.4.2.2 *Initial Stockpile*

- Limit stockpile height and slope to reduce wind entrainment.
- Revegetate the initial stockpile as soon as practicable.
- Keep the initial stockpile damp while vegetation establishes.
- Inspect the stockpile weekly.

2.4.2.3 *Exposed Surfaces*

- Limit exposed areas as far as practicable.
- Apply wet suppression to unsealed haul roads and other accessible dust-generating areas whenever required to control dust, using a water cart fitted with a spray bar. Typical requirements are up to 1 litre per square metre per hour.
- Use water sprinklers on surfaces that cannot be accessed by the water cart and on all rehabilitated areas until grass is established. During winter, sprinkler coverage and application rates will be maintained as necessary to prevent dust.
- Compact unconsolidated surfaces where practicable.
- Cover or frequently dampen stripped areas not in active use if they may cause excessive dust.

2.4.2.4 *Tailings Pile*

- Reduce tailings-pile height by levelling as soon as practicable.
- Rehabilitate mined areas as soon as practicable.
- Stabilise tailings if rehabilitation will not occur immediately. Methods may include water or polymer additives to promote crusting, metalling, grassing, mulching or vegetative cover.

2.4.2.5 *Vehicle and Plant Movements*

- Apply a site speed limit of 15 km/h.
- Inspect the site entrance and adjacent sealed highway regularly and sweep or cleaned whenever accumulated soil, sediment or other debris is present.

2.4.2.6 *High-Wind or Dry Conditions*

- Stripping, handling and deposition of overburden material and soil, and handling of dry tailings material, will cease when the on-site weather station records wind speeds greater than 5 m/s as a 10-minute average and the wind is blowing towards a sensitive receptor located within 350 metres of the activity, as identified in Appendix 2 to RM26.315.04. Work may resume only when the wind-speed and wind-direction trigger is no longer exceeded.
- Schedule dusty operations for conditions that minimise emissions, particularly where no other mitigation option is available.
- Increase wetting frequency if there has been no rain for several weeks.

2.4.3 Contingency Procedures

If adverse effects on sensitive receptors are identified and confirmed, contingency measures will be implemented as appropriate.

2.4.3.1 *Housing Exteriors*

If dust is noticeably settling on nearby homes, the issue will be addressed as soon as practicable. Water carts or similar devices may be used to wash down house exteriors.

2.4.3.2 *Alternatives for Clothes Drying*

If laundry is soiled while drying outdoors, solutions will be discussed with the property owner. Standard mitigation measures will remain in place to prevent further impacts.

2.4.3.3 *Alternatives for Drinking Water Sources*

If a roof-collected drinking-water supply is contaminated with dust, the source will be investigated using the complaints procedure. Turbidity testing may be required, and samples may be tested against drinking-water

standards. Measures may include providing an alternative water source, cleaning or replacing first-flush filters, and refilling or replacing water tanks.

3 Monitoring and Inspection

3.1 Visual Monitoring

All site staff will undertake daily visual monitoring during normal duties to confirm that mitigation measures are effective and identify dust crossing the site boundary towards receptors. Visible dust plumes or dust crossing the boundary will be logged with the prevailing weather conditions and reported to the Environmental Manager so that controls can be increased.

3.2 Meteorological Monitoring

An on-site meteorological station will be provided. As a minimum, it will measure rainfall, temperature, wind direction and wind speed. The monitoring site will be installed on a mast at a location representative of wind flows across the working area and may be re-located as mining progresses to ensure it remains representative of the working area of the site.

Wind speed and direction will be continuously measured and logged at intervals of no more than one minute at a minimum height of 6 metres. Real-time data will be transmitted to the Site Manager, and automated alarms will be sent to site staff when the wind-speed and wind-direction triggers are exceeded.

3.3 Continuous PM_{10} Monitoring

Continuous monitoring of particulate matter with an aerodynamic diameter of 10 micrometres or less (PM_{10}) will be completed. This monitoring will be undertaken using a Dust Master Pro provided by Thompson Environmental Services (or an equivalent standard of monitor). This is a near reference grade monitor with a heated inlet and has been successfully used in the management of dust impacts from similar sites within New Zealand.

Monitoring will operate at all times when the two-hectare active mining area is within 350 metres of a sensitive receptor potentially affected during winds from the northwestern quadrant, or within 250 metres of any other sensitive receptor identified in Figure 3-4, within Appendix 2 to RM26.315.04. The monitor will be located at the site boundary between the active mining area and the potentially affected sensitive receptor. Where more than one receptor is within the relevant distance, the monitor will be located between the active area and the closest receptor.

3.4 Baseline Monitoring

Before work begins, both the Meteorological and PM_{10} monitoring will be undertaken to establish existing conditions at the site across a range of meteorological conditions. The baseline programme will record PM_{10} concentrations together with wind speed, wind direction and other relevant meteorological parameters. Monitoring locations, equipment, sampling periods, data completeness and results will be documented so that operational monitoring can be compared with representative pre-works conditions.

3.5 Trigger Levels and Response

Monitoring and management will be adaptive, using the trigger levels set out within Table 2. Additional management or monitoring will be initiated by ineffective suppression during dry or windy conditions, repeated dust complaints, sustained adverse weather, visible dust crossing the site boundary, exceedance of the wind trigger or exceedance of a PM_{10} trigger level. The PM_{10} monitoring system will send an electronic alert to the Site Manager whenever a PM_{10} trigger is exceeded, and the response actions in this DMP will be implemented immediately.

Table 2: Trigger Levels

Trigger	Type	Averaging period	Trigger level
Visible dust	TSP	Instantaneous	Visible dust crossing the boundary
Wind warning	TSP	1 minute	10 m/s during two consecutive 10-minute periods
Monthly	Deposited Dust	30 days	4 g/m²/30 days above baseline concentration
Short term	Ambient PM_{10}	1 hour	150 µg/m³

3.5.1 Response Actions

- Increase the frequency or volume of water application.
- Review and adjust existing dust controls.
- Implement contingency measures where effects are excessive.
- Temporarily reduce or cease dust-generating activities.
- Introduce instrumental monitoring or dust gauges where required.

3.6 Records and Documentation

Records will be maintained to demonstrate implementation of dust-management measures and compliance with consent requirements. Records will be retained on site and made available to ORC on request.

3.6.1 Monitoring Records

- Visual-monitoring notes.
- Baseline and operational PM_{10} data.
- Baseline and operational meteorological data.
- Monitoring locations.
- Trigger exceedances and automated alerts.

3.6.2 Control and Maintenance Records

- Records of controls implemented, including the date and time.
- Maintenance records for dust-suppression equipment.
- Records of changes to operating practices in response to dust.

3.6.3 Incident and Complaint Records

- Dust incidents.
- Complaints received.
- Investigation outcomes and corrective actions.

3.6.4 Complaints Procedure

Complaints will be directed to the person identified in the key personnel and contacts table. The following procedure applies to dust complaints relating to site activities.

3.6.4.1 Actions Upon Receipt of a Complaint

- The Site Manager or delegated person will promptly investigate whether site activities are causing an objectionable discharge to air that results in an adverse effect at or beyond the site boundary.
- If no objectionable discharge is identified, no further action is required. Evidence such as photographs may be retained.
- If an objectionable discharge is identified, determine and implement corrective and preventive actions as soon as practicable and add them to the DMP where appropriate.
- Record the investigation and all actions in the Complaints Log.
- Provide a written response to the complainant where contact details were supplied, outlining the investigation and any corrective or future actions.

3.6.4.2 Reporting to ORC

Awa Koura Mining Limited will notify the Otago Regional Council of each air-quality complaint within 24 hours of receipt. The complaints register will be submitted to the Otago Regional Council by March each year and will be made available for inspection at other times on request. Written notifications and submissions will be sent to compliance@orc.govt.nz with the email subject referencing RM26.315.04 and the relevant condition.

Table 3: Example complaints log

Date and time received	Complainant contact information	Nature and location	Weather conditions	Investigation	Corrective and future actions	Response to complainant and ORC
Complaint received: ORC advised:	Name: Address: Phone:		Wind direction: Wind speed: Rain: Y/N Other:			

4 System Review and Reporting Procedures

4.1 Review

The certified DMP will be implemented for the duration of RM26.315.04. All personnel working on the site will be made aware of its requirements, and a copy of the certified DMP will be held on site at all times.

This DMP is a living document and will be amended and updated. Amendments may arise from site-management changes that affect discharges to air and will ensure that the DMP continues to meet its purpose. Any proposed revision to the DMP will be submitted to the ORC for written acceptance at least 10 working days before it is formalised or implemented. Where an annual review results in amendments, those amendments will be certified by the Otago Regional Council before implementation. The current certified DMP will remain in effect until the revised version has been accepted or certified.

Awa Koura Mining Limited will review the DMP annually to confirm that it accurately reflects site activities and operations and to determine whether changes to its management procedures are required. The review findings will be reported to the Otago Regional Council within 20 working days after the review is completed.

At the written request of the CODC, the consent holder shall engage a suitably qualified and experienced air quality specialist to undertake an independent audit of compliance with the Dust Management Plan. The audit report shall be provided to CODC within 20 working days of completion.

Site activities will at all times be undertaken in accordance with the latest ORC and CODC approved version of the DMP.

4.2 Approval

The current certified DMP will remain in effect until any revised version has been accepted or certified by the ORC and CODC.

4.3 Pre-Start Meeting

Before mining commences, Awa Koura Mining Limited will hold an on-site pre-start meeting with Otago Regional Council Compliance Monitoring Officer(s). The meeting will be scheduled not less than five days before the commencement date and will cover the proposed mitigation and control measures, mining methodology and relevant consent conditions. Timeframes for key stages of the works, the conditions of RM26.315.04 and the certified DMP will be available at the meeting. Any additional information requested by the Otago Regional Council will be provided at least two days before the meeting.

4.4 Reporting to Otago Regional Council

Awa Koura Mini Limited will provide information required under RM26.315.04 to the Otago Regional Council in writing to compliance@orc.govt.nz, with the email subject referencing RM26.315.04 and the relevant condition.

Required reporting includes notification of air-quality complaints within 24 hours, submission of the complaints register by March each year, submission of annual DMP review results within 20 working days after the review, and submission of proposed DMP revisions at least 10 working days before implementation.

5 Limitations and Reliance Statement

This Dust Management Plan (DMP) has been prepared by Anemos Limited exclusively for Awa Koura Mining Limited in relation to the proposed Sandy Point Gold Mine Dust Management Plan. It has been prepared for the purpose of documenting dust-management measures for the proposed operation.

This DMP is based on information available at the time of preparation and on information provided by others, which has not necessarily been independently verified. The plan should be read in its entirety and is subject to the assumptions, qualifications and limitations described herein.

This report must not be used or relied upon for any purpose other than that for which it was prepared, nor by any party other than Awa Koura Mining Limited, without Anemos Limited's prior written consent. Any use by, or reliance placed upon, this report by a third party is entirely at that party's own risk.

To the fullest extent permitted by law, Anemos Limited accepts no liability to any third party for any loss, damage or expense arising from the use of, or reliance on, this plan.

Artificial Intelligence (AI) tools were used to support the drafting of this report. All AI-derived inputs have been reviewed and verified by Anemos Limited. Responsibility for the content of this report remains with Anemos Limited.