

## APPENDIX 1D – Recommended conditions on air discharge permit

RM23.819.04 – Discharge Permit to discharge contaminants to air for the purpose of operating an alluvial gold mine.

Conditions	
1.	<p>The discharge to air associated with the operation of the alluvial gold mine must be carried out in accordance with the plans and all information submitted with the application, detailed below, and all referenced by the Consent Authority as consent number RM23.819.04.</p> <ul style="list-style-type: none"> <li>a) Resource consent application forms, Form 1, Form 5, Form 6, Form 8B, and 9A, signed by the Applicant and dated 18/05/23</li> <li>b) Assessment of Environmental Effects, <i>Proposed alluvial gold mine at Millers Flat Resource Consent Applications – Otago Regional Council</i>, prepared by MacDonell Consulting Ltd, dated 16 November 2023</li> <li>c) Site Plans, Sheets 1 to 8, prepared by Overview Surveying, dated 26/02/24</li> <li>d) Air Discharge Assessment, <i>Assessment of Environmental Effects; Discharge of Contaminants into Air from the Operation of an Alluvial Gold Mine</i>, prepared by Air Matters, dated 14 November 2023</li> <li>e) Dust Management Plan, <i>Hawkeswood Mining Limited: Dust Management Plan</i>, prepared by Town Planning Group, dated 25 October 2023</li> <li>f) <i>Dust Management Plan – Peer Review – Hawkeswood Mining Limited, Teviot</i>, from Nigel Goodhue of Air Matters, dated 12/10/23</li> </ul> <p>If there are any inconsistencies between the above information and the conditions of this consent, the conditions of this consent will prevail.</p>
2.	This consent must be exercised in conjunction with Land Use Consent RM23.819.01, Water Permit RM23.819.02, and Discharge Permit RM23.819.03.
3.	There must be no discharge of dust or the deposition of particulate matter beyond the boundary of the site that is noxious, dangerous, offensive or objectionable.
4.	Extracted material from the Site shall not be processed, crushed or screened on the Site.
5.	The Site Manager or another nominated person shall be available at all times (including outside mine operation hours) to respond to dust emission complaints and trigger level alerts in accordance with measures described in the Dust Management and Monitoring (DMMP), as required by Condition 8.
6.	<p>The maximum area of unconsolidated land comprising of the excavation area, backfilling areas and rehabilitation area shall not exceed 2 hectares.</p> <p><i>Advice Note: The maximum area of unconsolidated land does not include the haul roads, processing area, stockpiles, areas which are covered with 50mm (or more) of washed gravels or stabilised with a dust suppressant (excluding water), portacoms or workshops, or the conveyor and its associated service area.</i></p>
7.	<p>Under Section 125 of the Resource Management Act 1991, this consent lapses five years after the date of commencement of the consent unless:</p> <ul style="list-style-type: none"> <li>a) The consent is given effect to; or</li> </ul>

	b) The Consent Authority extends the period after which the consent lapses.
<b>Dust Management and Monitoring Plan</b>	
8.	<p>At least one month prior to exercising this consent, the Consent Holder must submit a DMMP to the Consent Authority for certification. Works must not commence until the Consent Holder has received written certification of the DMMP from the Consent Authority.</p> <p>The DMMP must include the following:</p> <ol style="list-style-type: none"> <li>a) The objective of DMMP</li> <li>b) A description of the dust sources on site;</li> <li>c) A description of the receiving environment, and identification of the Sensitive Receptor Management Zone, i.e. (SRMZ) sensitive receptors within 250 m of site boundaries (sensitive receptors, being any dwelling and the land within 20 m of the façade of an occupied dwelling’s notional boundary, commercial storage building and sensitive commercial crops);</li> <li>d) The dust mitigation methods (including dust reduction through design methodologies) which will be employed to ensure compliance with the conditions of this consent including, but not limited to: <ol style="list-style-type: none"> <li>i. Water suppression;</li> <li>ii. Stockpiles;</li> <li>iii. Vehicle movements on unpaved surfaces;</li> <li>iv. Backfill areas;</li> <li>v. Earthworks, including stripping of overburden and topsoil;</li> <li>vi. Bund construction, maintenance and the recontouring of slopes during rehabilitation;</li> <li>vii. Loading and unloading materials.</li> </ol> </li> <li>e) Additional dust suppression measures to be implemented within the SRMZ;</li> <li>f) A description of particulate matter and wind monitoring requirement including: <ol style="list-style-type: none"> <li>i. Monitoring instrumentation methodology, relevant ANS standards, install and commissioning requirements, maintenance and calibration procedures, and the frequency of review of the location of monitoring equipment and calibration.</li> <li>ii. The methods used to select the location and height of the wind monitoring equipment;</li> <li>iii. The methods used to select the location of particulate matter monitors between active work areas and sensitive off-site activities;</li> <li>iv. Details of wind speed trigger levels and the associated alarm system, including wind direction;</li> <li>v. Details of the particulate matter trigger levels as set out in Conditions 13 and 14 and the associated alarm system; and</li> </ol> </li> <li>g) A description of procedures for responding to dust and wind condition-based trigger levels and associated follow up investigations, actions and recording of findings;</li> <li>h) A system for training employees and contractors to make them aware of the requirements of the DMMP;</li> <li>i) Names and contact details of staff responsible for implementing and reviewing the DMMP in order to achieve the requirements of this consent, and procedures, processes and methods for managing dust outside of standard operating hours;</li> <li>j) A method for recording and responding to complaints from the public in accordance with Condition 18;</li> </ol>

	<ul style="list-style-type: none"> <li>k) Contingency measures for responding to dust suppression equipment malfunction or failures, including wind and particular matter monitoring instruments;</li> <li>l) A procedure for completing a start-of-day dust control checklist;</li> <li>m) Environmental information management for recording, quality assurance, archiving and reporting all data required for dust management on the site;</li> <li>n) The process of reviewing and revising, if justified, PM10 and alert trigger concentration levels set in Conditions 13 and 14; and</li> <li>o) The process of reviewing and updating the DMMP annually, and/or following a validated dust complaint.</li> </ul> <p>All works on-site must comply with the certified DMMP at all times. All personnel working onsite must be made aware of the requirements contained in the DMMP. A copy of the DMMP must be held on-site at all times while the construction activity is occurring.</p>
9.	<ul style="list-style-type: none"> <li>a) The DMMP as required by Condition 8 must be reviewed on an annual basis.</li> <li>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 DMMP are required.</li> <li>c) The review shall confirm that the PM10 trigger concentration levels set in Conditions 13 and 14 are not giving rise to a breach of Condition 3 of this consent or if they are set unnecessarily low for avoiding such effects, and shall identify whether a change is needed to the trigger levels in Conditions 13 and 14 to achieve routine compliance with Condition 3 of this consent.</li> <li>d) The results of the review must be reported to the Consent Authority within 20 working days of the review being undertaken.</li> <li>e) If the review results in amendments to the DMMP, the amendments must be certified by the Consent Authority prior to implementation.</li> </ul> <p>If there are any inconsistencies between the DMMP and the conditions of this consent, the conditions of this consent will prevail.</p>
<b>Meteorological Monitoring</b>	
10.	<p>Prior to exercising this consent, the Consent Holder shall install a meteorological monitoring station at a location that is, as far as practical, consistent with the requirements of AS/NZS 3580.1.1:2016 Methods for sampling and analysis of ambient air. Part 1.1: Guide to siting air monitoring equipment. The meteorological monitoring station must be capable of continuously monitoring:</p> <ul style="list-style-type: none"> <li>a) Wind speed and direction at a minimum height of 6m above the natural ground level;</li> <li>b) Rainfall;</li> <li>c) Relative humidity; and</li> <li>d) Temperature.</li> </ul>
11.	<p>The meteorological monitoring instruments shall be, as far as practical, consistent with the requirements of AS/NZS 3580.1.1:2016 Methods for sampling and analysis of ambient air. Part 14: Meteorological monitoring for ambient air monitoring applications.</p>
12.	<p>All meteorological monitoring data shall be made available to the Consent Authority on request.</p>
<b>Particulate Matter Monitoring</b>	
13.	<ul style="list-style-type: none"> <li>a) Prior to exercising this consent, the Consent Holder must commission, operate and maintain at least two real-time dust monitors for continuous monitoring of</li> </ul>

	<p>ambient PM10 or TSP concentrations, which must be installed and operated at two predominant downwind locations on, or near, the site boundary.</p> <p><i>Note: The location of these dust monitors may change in relation to the different stages of the mine development, provided that where works are undertaken within the Sensitive Receptor Management Zone identified in the DMMP, a dust monitor must be placed on the site boundary between the active works area and sensitive receptors.</i></p> <p>b) The locations must be outlined in the DMMP required by Condition 8.</p>
14.	<p>All dust monitors must:</p> <ol style="list-style-type: none"> <li>Be sited in general accordance with AS/NZS 3580.1.1:2016 Methods for sampling and analysis of air – Guide to siting air monitoring equipment;</li> <li>Have a GPS locator (or similar technology) which enables their locations to be remotely monitored and recorded;</li> <li>Provide and record the results continuously using an electronic data logging system with an averaging time for each parameter of not more than one minute;</li> <li>Record monitoring results in real-time as rolling 10-minute averages in an appropriate electronic format;</li> <li>Be fitted with an alarm system that is able to send warnings and alerts to the Site Manager or other nominated person; and</li> <li>Be installed, operated, maintained and calibrated in accordance with the AS/NZS 3580.12.1:2015 Methods for sampling and analysis of ambient air – Determination of light scattering – Integrating nephelometer method, or else an equivalent or superior standard which is approved by the Consent Authority.</li> </ol>
<b>Trigger Levels</b>	
15.	The trigger concentration which indicates the potential for excessive mine-derived dust at or beyond the site boundary is a maximum real time PM10 concentration of 150 micrograms per cubic metre, as a rolling 1-hour average, which shall be updated every ten minutes.
16.	A pre-trigger concentration alert level shall be specified in the DMMP, the purpose of which is to provide an early warning that the trigger concentration in Condition 15 may be reached. This shall be a maximum PM10 concentration value of 150 micrograms per cubic metre, as a rolling 10-minute average, which shall be updated every 1 minute.
17.	<p>If at any time, including outside normal operating hours, visible dust is blowing beyond the site boundary or if the particulate matter monitoring trigger in Condition 15 is breached, the Consent Holder must:</p> <ol style="list-style-type: none"> <li>Cease all mining activities, except dust suppression measures;</li> <li>Continue all dust suppression activities including but not limited to the immediate watering of both active and inactive exposed surfaces;</li> <li>Investigate possible sources of the dust;</li> <li>Only resume mining activities (other than dust suppression) once there is no longer visible dust blowing beyond the site boundaries and when the monitoring trigger in Condition 15 is no longer being breached; and</li> <li>Notify the Consent Authority within 24 hours, detailing its cause and the dust suppression actions undertaken.</li> </ol>
<b>Complaints</b>	
18.	<p>The Consent Holder must maintain a record of any discharge complaints received. The register must include, but not be limited to:</p> <ol style="list-style-type: none"> <li>The date and time the complaint was received;</li> <li>The nature and location of where the complaint has originated, if provided;</li> <li>A summary of the complaint including the actual or potential source/s of dust;</li> </ol>

	<ul style="list-style-type: none"> <li>d) A description of the particulate matter and weather conditions, including wind speed and direction, when the dust was observed by the complainant;</li> <li>e) The name, phone number, and address of the complainant, unless the complainant elects not to supply this information;</li> <li>f) Any corrective action taken by Consent Holder to avoid, remedy or mitigate the dust issue detected by the complainant; and</li> <li>g) Any review and amendments made to the DMMP in response to the complaint(s).</li> </ul> <p>The Consent Holder must, within 24 hours, inform the Consent Authority of any complaints received from any person about activities on the site associated with the consented works.</p>
<b>Annual Reporting</b>	
19.	<p>By the 30<sup>th</sup> of June each year, the Consent Holder must provide a report to the Consent Authority to include the following:</p> <ul style="list-style-type: none"> <li>a) The number of occasions that the particulate monitors recorded a breach of the trigger level in Condition 15;</li> <li>b) Complaints Records for the preceding 12 months;</li> <li>c) Maintenance and calibration records for the particulate monitors;</li> <li>d) The volume of aggregate extracted in the preceding 12 months;</li> <li>e) Any amendments made to the DMMP; and</li> <li>f) Details of the work plan for the next 12 months, including specification by a SQEP of the locations of the mobile PM<sub>10</sub> monitors during that period so as to comply with the requirements of conditions 13 and 14 of this consent.</li> </ul>
<b>Review</b>	
20.	<p>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 during the period of three months either side of the date of granting of this consent each year, or within two months of any enforcement action taken by the Consent Authority in relation to the exercise of this consent, or on receiving monitoring results, for the purpose of:</p> <ul style="list-style-type: none"> <li>a) Determining whether the conditions of this consent are adequate to deal with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage, or which becomes evident after the date of commencement of the consent;</li> <li>b) Ensuring the conditions of this consent are consistent with any National Environmental Standards, relevant regional plans, and/or the Otago Regional Policy Statement;</li> <li>c) Reviewing the frequency of monitoring or reporting required under this consent; and</li> <li>d) Amending the monitoring programme.</li> </ul>
<b>Notes to Consent Holder</b>	
1.	<p><i>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).</i></p>

2.	<i>Where information is required to be provided to the Consent Authority, this is provided in writing to <a href="mailto:compliance@orc.govt.nz">compliance@orc.govt.nz</a>, and the email heading is to reference RM23.819.02 and the condition/s the information relates to.</i>
3.	<i>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.</i>