

APPENDIX 1B - Recommended conditions on groundwater permit

RM23.819.02 – Water Permit to take and use groundwater for the purpose of transient mine pit dewatering and/or augmentation purposes, plant processing, dust suppression and rehabilitation

Specific	
1.	<p>The take and use of groundwater for the purpose of transient mine pit dewatering and/or augmentation purposes, plant processing, dust suppression and rehabilitation 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.</p> <ul style="list-style-type: none"> a) Resource consent application forms, Form 1, Form 5, Form 6, Form 8B, and 9A, signed by the Applicant and dated 18/05/23 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 c) Site Plans, Sheets 1 to 8, prepared by Overview Surveying, dated 26/02/24 d) Groundwater Assessment, <i>Hawkeswood Mining Limited, - Technical Assessment of Proposed Groundwater Take and Discharge</i>, prepared by Environmental Associates Ltd, dated October 2023 e) Ecology Report, <i>Tima Burn Aquatic Ecology Assessment</i>, prepared by Water Ways Consulting, dated September 2023 f) Preliminary Site Investigation, <i>Preliminary Site Investigation 1484 Teviot Road Millers Flat for Hawkeswood Civil Limited</i>, prepared by Environmental Consultants Otago Ltd, dated 28 June 2021 g) <i>Sampling Summary Report – 1484 and 1534 Teviot Road</i>, prepared by Environmental Consultants Otago Ltd, dated 12 February 2024 <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.	<p>This consent must be exercised in conjunction with Land Use Consent RM23.819.01, Discharge Permit RM23.819.03 and Discharge Permit RM23.819.04.</p>
3.	<p>The rate and quantity of abstraction must not exceed:</p> <ul style="list-style-type: none"> i. 124.8 litres per second; ii. 10,783 litres per day; iii. 222,394 cubic metres per month; and iv. 1,967,846 cubic metres between 1 July of any year and ending 30 June of the following year as a rolling average over three consecutive years.
4.	<p>If, as a result of the mine pit pond dewatering authorised by this resource consent, the direct drawdown effect upon any adjacent well to the extent that the water supply is no longer viable, then the Consent Holder must, within 48 hours of receipt of a request from any affected well owner, provide the affected well owner with an alternative water supply of at least 2,000 litres per day for each household provided by the supply, until such time as the affected well becomes viable again. All costs shall be borne by the Consent Holder.</p>

5.	<p>During any period of groundwater abstraction for mine dewatering purposes and where any water table level decline as a result of mine dewatering exceeds 0.2 m adjacent to the reach of the Tima Burn from Teviot Road Bridge to the confluence with the Clutha River:</p> <p>a) The consent holder shall provide environmental flow augmentation to the Tima Burn to maintain either:</p> <ul style="list-style-type: none"> i. A minimum of 21 L/s of stream flow throughout the reach from Teviot Road Bridge to the confluence with the Clutha River, or ii. The assessed natural flow in the Tima Burn at/downstream of Teviot Road Bridge to the confluence with the Clutha River corresponding to an upstream catchment natural MALF of 21 L/s (i.e. inclusive of any natural stream leakage). <p>b) The non-consumptive flow augmentation to the Tima Burn shall be abstracted from groundwater sources and form part of the dewatering allocation to this resource consent.</p> <p>c) Any non-consumptive flow augmentation from groundwater sources to the Tima Burn shall be fresh (clean) water to fresh water, and be undertaken within the requirements of the relevant permitted activity in the Regional Plan: Water for Otago.</p> <p>d) Any flow augmentation to the Tima Burn shall be reasonably oxygenated by aerating the water using a diffuser and/or riffles or similar approach, and shall not cause scour or bank erosion.</p>
6.	<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> <p>a) The consent is given effect to; or</p> <p>b) The Consent Authority extends the period after which the consent lapses.</p>
Performance Monitoring	
7.	<p>Prior to the exercise of this consent, the Consent Holder must provide to the satisfaction of the Consent Authority, an assessment of natural flow (losses) within the lower reaches of the Tima Burn, to confirm the assessed natural flow in Condition 5a) ii.</p>
8.	<p>a) The Consent Holder shall monitor groundwater levels within the lateral boundaries of the advancing mine pit pond. The Consent Holder must monitor groundwater levels (at least) on a weekly basis, commencing one month prior to the commencement of any site dewatering. Once temporary site dewatering is complete, groundwater monitoring shall then be undertaken until such time that steady state conditions are reached and verified within the aquifer.</p> <p>b) Piezometric water level records as required by this monitoring condition, shall be provided to the Consent Authority on an annual basis by 30 June each year, and as requested in writing.</p>
9.	<p>a) Prior to the first exercise of this consent, the Consent Holder must install a:</p> <ul style="list-style-type: none"> i. Water meter(s) that will measure the rate and the volume of water taken to within an accuracy of +/- 10% over the meter's nominal flow range at the point of take. The water meter must be capable of output to a datalogger. ii. Water meter that will measure the rate and the volume of water taken to augment the Tima Burn flows within an accuracy of +/- 10% over the meter's nominal flow range. The water meter must be capable of output to a datalogger. iii. A datalogger(s) that time stamps a pulse from the flow meter at least once every 15 minutes and have the capacity to hold at least twelve months data of water taken. <p>b) Provide records from the datalogger electronically to the Consent Authority at annual intervals by 31 July each year and at any time upon request. Data must be provided</p>

	<p>electronically giving the date, time and flow rates in no more than 15-minute increments of water.</p> <p>c) Within 20 working days of the installation of the water meter and datalogger, any subsequent replacement of the water meter and datalogger, and at five yearly intervals (for any electromagnetic or built in ultrasonic meter) or annual (for any mechanical or clamp on ultrasonic meter) intervals thereafter, and at any time when requested by the Council, the Consent Holder must provide written certification to the Consent Authority signed by a suitably qualified person certifying, and demonstrating by means of a clear diagram, that:</p> <ol style="list-style-type: none"> i. Each device is installed in accordance with the manufacturer's specifications; ii. Data from the recording device can be readily accessed and/or retrieved in accordance with the conditions above; and iii. that the water meter has been verified as accurate. <p>d) The water meter and datalogger must be installed and maintained throughout the duration of the consent in accordance with the manufacturer's specifications.</p> <p>e) All practicable measures must be taken to ensure that the water meter and recording device(s) are fully functional at all times.</p> <p>f) The Consent Holder must report any malfunction of the water meter and datalogger to the Consent Authority within 5 working days of observation of the malfunction. The malfunction must be repaired within 10 working days of observation of the malfunction and the Consent Holder must provide proof of the repair, including photographic evidence, to the Consent Authority within 5 working days of the completion of repairs. Photographs must be in colour and be no smaller than 200 x 150 millimetres in size and be in JPEG form.</p> <p><i>Note: the water meter and data logger should be safely accessible by the Consent Authority and its contractors at all times. The Water Measuring Device Verification Form and Calibration Form are available on the Consent Authority's website.</i></p>
10.	Prior to the first exercise of this consent, the Consent Holder must take representative water samples from the targeted monitoring bores and settling pond(s) in accordance with Condition 10 of Discharge Permit RM23.819.03.
11.	<p>During the exercise of this consent, the Consent Holder shall (as practicable):</p> <ol style="list-style-type: none"> a) Assess the flow in the Tima Burn at or above the Teviot Road Bridge on a weekly basis, or otherwise, b) When the flow in the Tima Burn reduces to at or below the environmental flow augmentation requirement in Condition 5 a) i or ii as appropriate, it shall be assessed on a daily basis. c) All Tima Burn flow assessments shall be recorded and kept in a log book and/or electronic device specifically for that purpose and shall be made available to the Consent Authority upon request.
General	
12.	<p>The Consent Holder shall take all practicable steps to ensure that as a result of the groundwater take:</p> <ol style="list-style-type: none"> a) There is no unintended leakage from pipes and structures; b) There is no unintended run-off of abstracted groundwater either on site or off site; and c) There is no flooding of other person's property, including erosion, land instability, sedimentation or property damage.

13.	The Consent Holder must monitor downstream Dissolved Oxygen (after reasonable mixing) of the flow augmentation input on the Tima Burn. To support ecological values, the 7-day mean minimum Dissolved Oxygen level at this sampling location must be ≥ 8 mg/L.
Review Condition	
14.	<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"> 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; b) Ensuring the conditions of this consent are consistent with any National Environmental Standards, relevant regional plans, and/or the Otago Regional Policy Statement; c) Reviewing the frequency of monitoring or reporting required under this consent; d) Amending the monitoring programme set out in accordance with Conditions 7 to 11; or e) Varying the consented quantities and rates of take and monitoring, operating and reporting requirements, and performance requirements to respond to: <ul style="list-style-type: none"> i. the results of previous monitoring carried out under this consent and/or: <ul style="list-style-type: none"> a) water availability, including alternative water sources; b) actual and potential water use; c) groundwater levels and/or the setting of aquifer restriction levels; d) surface water flow and level regimes; e) groundwater or surface water quality; f) efficiency of water use; g) Instream biota, including fish passage and the functioning of aquatic ecosystems; or h) new requirements for measuring, recording and transmission.
Notes to Consent Holder	
1.	<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>
2.	<i>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 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.</i>
3.	<i>Where information is required to be provided to the Consent Authority in condition/s 7 to 11 this is provided in writing to watmetering@orc.govt.nz, and the email heading is to reference RM23.819.02 and the condition/s the information relates to.</i>
4.	<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</i>

	<i>compliance with the conditions attached to this consent, collected in accordance with Section 36 of the Resource Management Act 1991.</i>
5.	<i>It is the responsibility of the Consent Holder to ensure that the water abstracted under this resource consent is of suitable quality for its intended use. Where water is to be used for human consumption, the consent holder should have the water tested prior to use and should discuss the water testing and treatment requirements with a representative of the Ministry of Health and should consider the New Zealand Drinking Water Standards.</i>
6.	<i>The Consent Holder is advised that water supplied for human consumption may also need to meet the requirements of the Health Act 1956, the Drinking Water Standards for New Zealand 2005 (Revised 2018), and any other Ministry of Health requirements.</i>