Our Reference: A942110 Consent No. RM16.138.09

DISCHARGE PERMIT

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

Name: Oceana Gold (New Zealand) Limited

Address: 22 MacLaggan Street, Dunedin

To discharge waste rock and contaminants from waste rock to land for the purpose of constructing the Coronation North Waste Rock Stack

For a term expiring 1 October 2026

Location of consent activity: Macraes Gold Project, approximately 6.5 kilometres to the northwest of the intersection of Macraes Road and Red Bank Road, Macraes Flat.

Legal description of consent location: Pt Section 2 Blk V Highlay SD, Pt Section 2 Blk VII Highlay SD

Map Reference: Within a 1 kilometre radius of NZTM 2000: E1395457 N4978458

Conditions

Specific

1. This consent shall be exercised together with Land Use Consent RM16.138.01 Discharge Permit RM12.378.03, Discharge Permit RM12.378.04, Discharge Permit RM12.378.05, RM16.138.20 and any subsequent variations to these consents.
2. The discharge shall not occur outside the area marked Coronation North Waste Rock Stack shown on Appendix I attached.
3. The consent holder shall ensure short and long term stability of all structures, works and their surrounds at all times.
4. The consent holder shall size, construct and locate the Coronation North Waste Rock Stack generally as described in Macraes Gold Project, Coronation North Waste Rock Stack Design Report, Engineering Geology Ltd, 29 April 2016. If the design is altered, the consent holder shall notify the Consent Authority and submit amended final design, including confirmation of best engineering practice, to the Consent Authority before commencement of this consent.

Performance Monitoring

5. Prior to the exercise of this consent the consent holder shall, in consultation with the Consent Authority, develop, submit and implement a Mitigation Plan that achieves the following, as a minimum:
   i) Identifies populations of aquatic fauna that are to be protected. This shall include, but not be limited to, freshwater crayfish (Koura) and flathead galaxiids (Galaxias depressiceps);
   ii) Identifies the threatening processes that are affecting the identified

populations;
iii) Identifies threats to any translocated populations in their new habitat, such as predation and seasonal flow variations;
iv) Provides a detailed methodology that identifies how and when the identified populations are to be protected;
v) Provides a framework for the monitoring and reporting of mitigation activities; and
vi) Provides a methodology to allow for the evaluation of the effectiveness of the mitigation activities.
Any translocation of species undertaken shall not detrimentally affect any existing population of native fish. The Mitigation Plan shall ensure that there is no net loss of biodiversity of the their associated conservation values resulting from the exercise of this consent and/or the proposed mitigation activities.

6. The consent holder shall notify the Consent Authority in writing at least ten working days prior to the commencement of the works authorised by this consent.

7. (a) No less than one month prior to the first exercise of this consent, the consent holder shall submit to the Consent Authority, an Operations and Management Plan for the Coronation North Waste Rock Stack. The Operations and Management Plan shall be in accordance with the conditions of this consent, and shall include (but not be limited to):
i) A general description of the site, including topography, natural water sources and geotechnical investigations;
ii) A description of all stages of construction, operation and rehabilitation of the waste rock stack;
iii) A plan showing the proposed final footprint and contours for the Coronation North Waste Rock Stack;
iv) An assessment of all potential environmental effects and the measures in place to avoid, remedy or mitigate these environmental effects;
v) A description of water management at the site, including procedures for controlling adverse effects of runoff and seepage on groundwater and surface water bodies in accordance with the Water Quality Management Plan required by Discharge Permit RM16.138.03, Discharge Permit RM16.138.04 and Discharge Permit RM16.138.05, and the Erosion and Sediment Control plan required by Discharge Permit RM16.138.03, Discharge Permit RM16.138.04 and Water Permit RM16.138.20;
vi) A plan showing all monitoring locations relevant to this consent, a description of monitoring frequency, parameters analysed and relevant compliance limits and details of all measuring, recording, sampling and testing methods including any relevant standards or accreditations;
vii) A monitoring programme for the discharge of waste rock, including regular topographic and aerial surveys for the determination of the volumes of waste rock discharged, resultant changes to the ground surface levels, and areas affected by the discharge; and
viii) A monitoring programme to assess waste rock stack cover integrity, vegetation health, any movement, erosion or other geotechnical instability, including a contingency plan should instability result in any health and safety issues at the site and a procedure for recording the outcome of the monitoring and any maintenance, remedial or corrective measures undertaken.

(b) The consent holder shall exercise this consent in accordance with the Operations and Management Plan.
(c) The consent holder shall review the Operations and Management Plan annually and if necessary, update it. Details of the review shall be included in the Project Overview and Annual Work and Rehabilitation Plan. The Consent Authority shall be provided with any updates of the plan within 1 month of any update occurring.

8. The waste rock stack shall be constructed in stages, with progressive rehabilitation and revegetation undertaken in accordance with the following:
(a) The consent holder shall leave water bodies (including their banks and beds) in a natural and stable condition as far as practicably possible. This excludes reclaimed watercourses.
(b) The consent holder will, as far as practicable, stockpile soil from any disturbed ground, unless the soil is required to be left in place to protect water and soil values. All salvaged soil will be used for rehabilitation purposes.
(c) The consent holder shall locate, form and shape all earthworks so that their profiles, contours, skylines and transitions closely resemble and blend with the surrounding natural landforms. If earthworks cannot be fully naturalised, the consent holder shall minimise the extent of their visibility and maximise their integration into the surroundings.
(d) The consent holder shall use a landscape architect in the planning and design of the waste rock stack and associated structures.
(e) Land will be rehabilitated as follows:
i) As improved pasture as close as possible to its original productive use with plantings of appropriate shelter trees; or
ii) With indigenous species which visually blend into the surroundings; or
iii) Into forestry plantings subject to local and regional planning requirements.
(f) The consent holder shall maintain vegetation cover until the expiry of this consent and shall ensure that the vegetation will be self-sustaining after the expiry of this consent.

9. Prior to the expiry of this consent, the consent holder shall ensure that the whole of the waste rock stack has been rehabilitated in accordance with Condition 14 of this consent and that everything necessary to comply with the conditions of this consent has been completed.

10. (a) The consent holder shall submit a Project Overview and Annual Work and Rehabilitation Plan to the Consent Authority by 31 March each year that will cover the forthcoming year. The consent holder may, at any time, submit to the Consent Authority an amended Project Overview and Annual Work and Rehabilitation Plan. The Project Overview and Annual Work and Rehabilitation Plan shall include, but not be limited to:
i) A description and timeline of intended key mining activities for the duration of the mining operation including a plan showing the location and contours of all existing and proposed structures at completion of mining;
ii) A description (including sequence, method and form) of mining operations, monitoring and reporting carried out in the last 12 months;
iii) A detailed description (including sequence, method and form) of all mining operations, monitoring and reporting, not covered by a separate management plan intended to be carried out in the next 12 months;
iv) An explanation of any departure in the last 12 months from the previous

Project Overview and Annual Work and Rehabilitation Plan;

v) Plans showing the contours (at 5 metre intervals) and footprints of all works and structures and any proposed changes at the end of the next 12 months;

vi) A description and analysis of any unexpected adverse effects on the environment that have arisen as a result of the exercise of the consent in the last 12 months and the steps taken to deal with it and the results of those steps;

vii) A description and analysis of any non-compliance events that have occurred in the last 12 months and the steps taken to deal with it and the results of those steps;

viii) A full report describing and evaluating the mitigation measures used in the last 12 months and any that are proposed to be implemented in the next 12 months. This should detail where further mitigation has been proposed as a result of a non-compliance event and/or any adverse effects on the environment;

ix) Details of the annual review of any Management Plans or Manuals, including, but not limited to; Tailings Storage Facility Operations, Maintenance and Surveillance Manuals, Tailings Storage Facility Emergency Action Plans, Erosion and Sediment Control Plans, Waste Rock Stack Operations and Management Plans, Water Quality Management Plans and the Dust Management Plan;

x) An overview of the monitoring and reporting programme for the previous 12 months and any changes proposed for the next 12 months;

xi) A detailed section on rehabilitation including, but not limited to the following:

- A description of rehabilitation planned for the next five years;
- A description of proposed rehabilitation methods;
- The details of the location, design (including shape form and contour) and construction of all permanent structures;
- Details of all proposed rehabilitation, topsoil to be stripped and stockpiled, surface pre-treatment and re-use of topsoil on finished areas in the next 12 months;
- Drainage details for disturbed and recently rehabilitated areas;
- Details of any vegetation rehabilitation planned for the next 12 month period, including the areas to be rehabilitated, methods proposed, results of previous trials and rehabilitation work, any further trials proposed, and any revegetation or rehabilitation problems encountered and the steps being taken to resolve these; and
- Details of the management of areas previously rehabilitated.

xii) An up to date and detailed calculation of the cost of dealing with any adverse effects on the environment arising or which may arise from the exercise of this consent;

xiii) An up to date and detailed calculation of the costs of complying with all rehabilitation conditions of this consent;

xiv) An up to date and detailed calculation of the costs of any monitoring required by the conditions of this consent;

xv) A contingency closure plan describing in detail the steps that would need to be taken if mining operations stopped in the next 12 months; and

xvi) Any other information required by any other condition of this consent

and any related consent.
(b) The Project Overview and Annual Work and Rehabilitation Plan for this consent may be combined with any Project Overview and Annual Work and Rehabilitation Plan required by any other consent held by the consent holder for mining operations at Macraes Flat.
(c) The consent holder shall provide the Consent Authority with any further information, or report, which the Consent Authority may request after considering any Project Overview and Annual Work and Rehabilitation Plan. This information or report shall be provided in the time and manner required by the Consent Authority.
(d) The consent holder shall exercise this consent in accordance with the Project Overview and Annual Work and Rehabilitation Plan.
(e) The consent holder shall design and construct all permanent earthworks to the form shown in the Project Overview and Annual Work and Rehabilitation Plan.
(f) Each year, the consent holder shall provide the Chairperson of Macraes Community Incorporated, Te Runanga o Moeraki, Kāti Huirapa Rūnaka ki Puketeraki and any successive groups with a copy of the Project Overview and Annual Work and Rehabilitation Plan.

11. (a) The consent holder shall submit to the Consent Authority a Site Decommissioning Plan, not less than 12 months before completion of mine operations.
(b) The Site Decommissioning Plan shall be prepared in consultation with Takata Whenua, Macraes Community Development Trust, Macraes Community Incorporated and any successive groups.
(c) The Site Decommissioning Plan shall include but not be limited to:
i) A plan(s) showing the final design and intended contours (at 5 metre intervals) of all permanent structures and works, including but not limited to, waste rock stacks, permanent earthworks, tailings impoundments, dam embankments, water storage reservoirs, pit lakes, water bodies, roads or other works which under this consent or any related consent are authorised or required to remain after the relevant consents expire;
ii) A summary of rehabilitation completed to date, and a summary of rehabilitation required to fulfil the conditions of this consent and any related consents;
iii) Details on infrastructure to be decommissioned, such infrastructure may include buildings, plant, and equipment;
iv) Details of specific infrastructure to remain on-site post-closure. Such infrastructure may include buildings, plant, equipment and any monitoring structures required by this consent and any related consent to remain after the expiry of the consents;
v) Details on the decommissioning of infrastructure associated with existing art works, heritage sites, tracks and interpretation signage; and
vi) Details of management, any ongoing maintenance, monitoring and reporting proposed by the consent holder to ensure post-closure compliance with numerical standards and mitigation plans.

12. The consent holder shall maintain a record of any complaints received regarding their operation. The register shall include, but not be limited to:

(a) name and location of site where the problem is experienced;
(b) nature of the problem;
(c) date and time problem occurred, and when reported;
(d) action taken by consent holder to remedy the situation and any policies or methods put in place to avoid or mitigate the problem occurring again.

These complaints shall be incorporated into the Project Overview and Annual Work and Rehabilitation Plan required as part of Condition 16 of this consent.

13. The consent holder shall pay to the Consent Authority, the costs for monitoring, enforcing and administering this consent as agreed upon between the consent holder and the Consent Authority pursuant to Section 36 of the Resource Management Act 1991.

General

14. In the event of any non compliance with the conditions of this consent, the consent holder shall notify the Consent Authority within 24 hours of the non compliance being detected. Within five working days the consent holder shall provide written notification to the Consent Authority providing details of the non-compliance. This notification will at a minimum include an explanation of the cause of the non compliance, the steps taken to remedy the situation and steps taken to mitigate any future occurrence of the non compliance.

15. During construction, operation and rehabilitation of the waste rock stack, the consent holder shall keep the area of disturbed ground to a minimum.

16. The Consent Authority may, within 6 months of receipt of the Coronaiton North Project Cultural Impct Assessment prepared by Kai Tahu Ki Otago on behalf of Te Runanga o Moeraki, Te Runanga o Otakou and Kati Hurapa Runanga ki Puketeraki, commissioned in 2016; serve notice of its intention to review the conditions of this consent for the purpose of amending or adding conditions to address mitigation of the effect(s) of the exercise of this consent on cultural values and associations. All costs associated with any such review shall be borne by the consent holder.

17. (a) The consent holder shall provide and maintain in favour of the Consent Authority one or more bonds to secure:
i) The performance and completion of rehabilitation in accordance with the conditions of this consent; and
ii) The carrying out of the monitoring required by the conditions of this consent; and
iii) The remediation of any adverse effect on the environment that may arise from the exercise of this consent.
iv) Compliance with Conditions 17(m) to 17(q) of this consent.
(b) Before the first exercise of this consent, the consent holder shall provide to the Consent Authority one or more bonds required by Condition 17(a).
(c) Subject to the other provisions of this consent, any bond shall be in the form and on the terms and conditions approved by the Consent Authority.
(d) Any bond shall be given or guaranteed by a surety acceptable to the Consent Authority.
(e) The surety shall bind itself to pay for the carrying out and completion of the conditions of consent which are the subject of the bond on default by the consent holder or the occurrence of any adverse environment effect requiring

remedy; during or after the expiry of this consent.
(f) The amount of each bond shall be fixed annually by the Consent Authority which will take into account any calculations and other matters submitted by the consent holder relevant to the determination of the amount to be bonded in the Project Overview and Annual Work and Rehabilitation Plan required for by condition 15 of RM16.138.02, condition 6 of RM16.138.05, condition 8 of RM16.138.06, condition 10 of RM16.138.10, condition 8 of RM16.138.17 and RM16.138.18.
(g) The amount of the bond(s) shall include:
i) The estimated costs of complete rehabilitation in accordance with the conditions of consent on the completion of the mining operations proposed for the next year and described in the Project Overview and Annual Work and Rehabilitation Plan.
ii) The estimated costs of:
- Monitoring in accordance with the monitoring conditions of the consent;
- Monitoring for and of any adverse effect of the activity authorised by this consent which may become apparent during or after expiry of this consent;
- Monitoring any rehabilitation required by this consent.
iii) Any further sum which the Consent Authority considers necessary for monitoring and dealing with any adverse effect on the environment that may arise from the exercise of the consent whether during or after the expiry of this consent.
(h) The amount shall be calculated for the duration of this consent and for a period of 20 years after its expiry.
(i) If, on review, the total amount of bond to be provided by the consent holder is greater or less than the sum secured by the current bond(s), the consent holder, surety and the Consent Authority may, in writing, vary the amount of the bond(s).
(j) While the liability of the surety is limited to the amount of the bond(s), the liability of the consent holder is unlimited.
(k) Any bond may be varied, cancelled, or renewed at any time by written agreement between the consent holder, surety and Consent Authority.
(l) The costs (including the costs of the Consent Authority) of providing, maintaining, varying and reviewing any bond shall be paid by the consent holder.
(m) For a period of 20 years from the expiry or surrender of this consent the consent holder shall provide in favour of the Consent Authority one or more bonds.
(n) The amount of the bond to be provided under Condition 17(m) shall include the amount (if any) considered by the Consent Authority necessary for:
i) Completing rehabilitation in accordance with the conditions of this consent.
ii) Monitoring for and of any adverse effect on the environment that may arise from the exercise of the consent.
iii) Monitoring any measures taken to prevent, remedy or mitigate any adverse effect on the environment that may arise from the exercise of this consent.
iv) Dealing with any adverse effect on the environment which may become apparent after the surrender or expiry of this consent.

v) Contingencies.

(o) Without limitation, the amount secured by the bond given under Condition 17(m) may include provision to deal with structural instability or failure, land and water contamination, and the failure of rehabilitation in terms of the rehabilitation objectives and conditions of this consent. Costs shall include costs of investigating, preventing, remedying or mitigating any adverse effect.

(p) The bond(s) required by Condition 17 (m) must be provided on the earlier of:

i) 12 months before the expiry of this consent.

ii) Three months before the surrender of this consent.

(q) Conditions 17(c), (d), (e), (h), (i), (j) and (k) apply to the bond(s) required by Condition 17(m).

Review

18. 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:

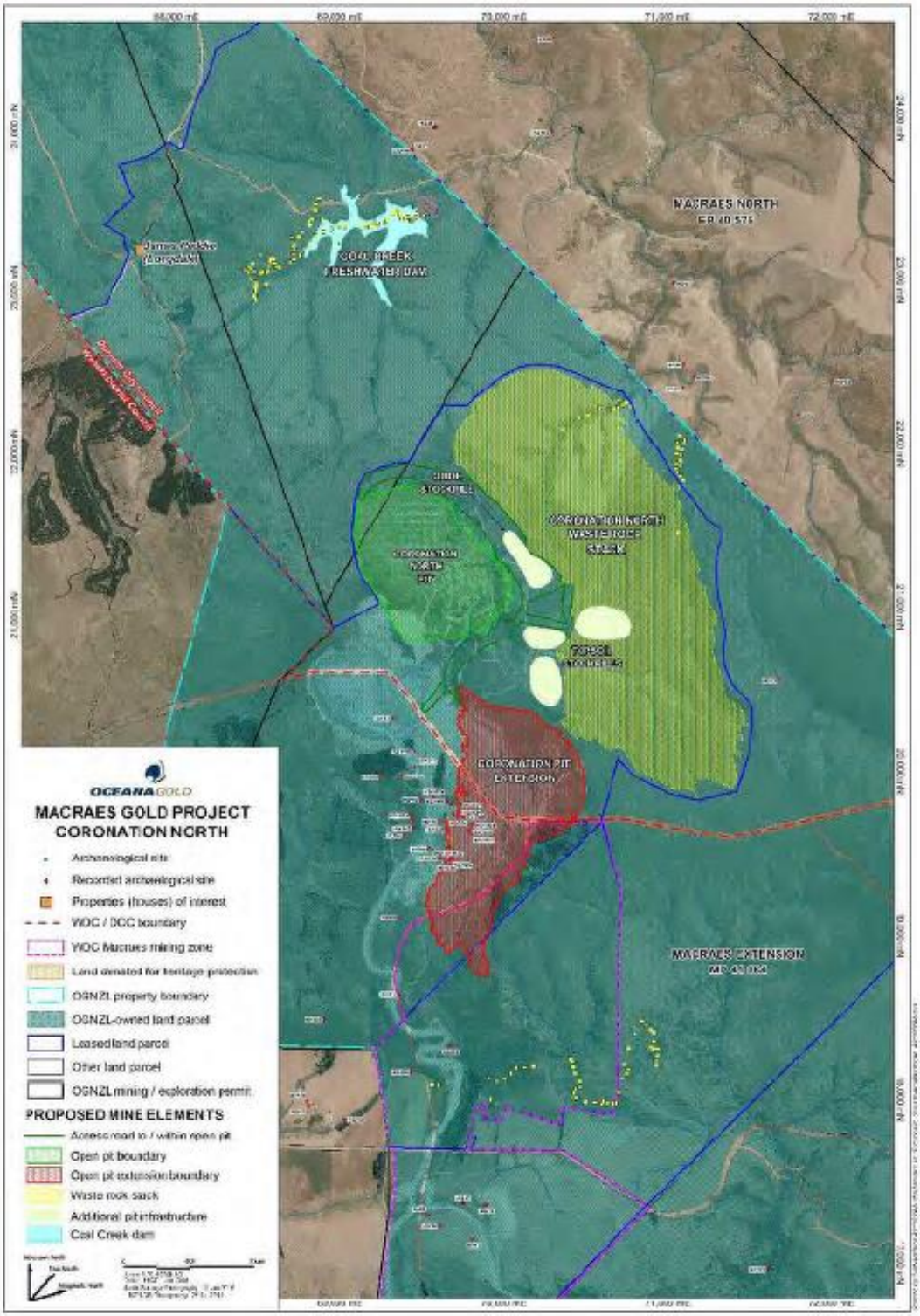
(a) determining whether the conditions of this consent are adequate to deal with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage, or which become evident after the date of commencement of the consent; or

(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, in order to remove or reduce any adverse effect on the environment arising as a result of the exercise of this consent.

(d) ensuring the Coronation North Waste Rock Stack is sized, constructed and located appropriately.

Appendix I
RM16.138.09



CORONATION NORTH WASTE ROCK STACK

COMPLIANCE AND MONITORING SCHEDULE

GENERAL PROVISIONS

1. This schedule describes monitoring and sampling required pursuant to consent numbers RM16.138.04, RM16.138.05 and RM16.138.09 in addition to any monitoring specified in those consents.

2. The design of all monitoring and sampling programmes shall be to the satisfaction of the Consent Authority. Where the consent to which the monitoring programme relates, directs that an Operations and Management Plan shall be prepared then the monitoring programme shall be incorporated into that plan.

3. The parameters analysed, site locations and frequency of sampling shall be reviewed as part of the annual review of the management plan for the consent(s) to which this monitoring relates. New parameters, sites and frequencies may be approved by the Consent Authority under an application by the consent holder for a change of conditions for monitoring made pursuant to Section 127 of the Act.

4. All sampling procedures, including collection, transportation of samples and laboratory analyses undertaken in accordance with this consent must be performed to IANZ registered standards, or otherwise as specifically approved by the Consent Authority.

5. Reporting shall be quarterly unless specified otherwise. A quarterly consolidated report containing all sampling and monitoring results shall be submitted to the Consent Authority within one month of the end of the quarter being reported. This report shall highlight any particular features arising from monitoring and sampling and shall provide appropriate commentary on such features.

6. Where a monitoring location is destroyed, engulfed, made redundant or unusable for any other reason, the consent holder shall, in consultation with the Consent Authority:
   a) discuss and determine whether an alternative monitoring location is required and if so where it should be located; and
   b) assign a timeframe for establishment of the new monitoring location.

REPORTING OF NON-COMPLIANCE

Any non-compliance with any compliance criteria shall be reported to the Consent Authority within 24 hours of the non-compliance first being detected.

COMPLIANCE CRITERIA

This following describes the compliance criteria pursuant to consent numbers RM16.138.04, RM16.138.05 and RM16.138.09.

(a) Narrative Standard for Receiving Waters

The waters of the Mare Burn, shall at all times be free of contaminants attributable to mineral processing and associated activities in concentrations which adversely affect directly or indirectly water uses or which adversely affect humans, animals, plants and/or aquatic life.

(b) Numerical Compliance Criteria

(i) Mare Burn Compliance Point MB01

Surface water within the Mare Burn at the Mare Burn Compliance Point, MB01 (NZTM 2000 E1392955 N4980551) shall not exceed the following water quality compliance criteria (where

the metals standards are all soluble determinations), unless infallible evidence can be provided that the level of a parameter is either naturally occurring or unrelated to mining activities:

Constituent	**Standard (g/m^3) unless stated otherwise**
Arsenic	0.013, 0.024
$Cyanide_{WAD}$	0.007
Copper [a]	0.0014
Iron	1.0
Lead [a]	0.0034
Zinc [a]	0.008
Sulphate	128
pH (range)	6.5 - 9.0 pH units
Nickel	0.011
Silver	0.00005
Manganese	0.5
Dissolved oxygen	>7.0
Nitrate	<2.4
Ammonia	<0.24
Turbidity	30-50% change in clarity
Suspended solids	30-50% change in clarity

Notes:
All units g/m^3 (i.e., mg/L) unless stated.
1. pH range from ANZECC. Aluminium becomes markedly more toxic at pH 6 so range should be limited. Ammonia toxicity increases at high pH.
2. Default metal guideline for a hardness of 30 g $CaCO_3$ m^3.
3. Guideline dependent on arsenic speciation (AsIII or AsV)
4. Manganese floc precipitates like iron floc. Estimated guideline value for initial evaluation.
5. Guideline is hardness-dependent. Value is for 'very soft' waters and may be higher in high hardness waters.
6. Values for 7 day mean minimum (1 day minimum) in summer period for 'B' attribute waters.
7. Values for median (95th percentile bracketed) for 'B' attribute waters.
8. Values for median (maximum bracketed) for 'B' attribute waters for total ammoniacal-N at pH 8. Note that pH adjustment for other pH values.
9. Turbidity and SS change relative to background water clarity as aesthetic measure. No values available for ecological protection.
10. Guideline dependent on arsenic speciation (AsIII or AsV)

(iii) Waste Rock – ANC/MPA Ratio

The acid neutralising capacity to maximum potential acidity (ANC:MPA) ratio, as referred to in California Administrative Code Article 7, 1992, shall be greater than 3:1 in rock discharged into the Waste Rock Stack.

MONITORING

(i) Surface Waters

The consent holder shall collect monthly representative water samples from the following surface water sites (as shown on Figure 1):

(i) Mare Burn Compliance Point MB01 (approximately NZTM 2000: E1394176 N4980401);
(ii) Mare Burn Compliance Point MB02 (approximately NZTM 2000: E1392955 N4980551); and
(iii) Coal Creek Monitoring Point CCMP01 immediately upstream of the confluence with the Mare Burn (approximately NZTM 2000: E1392985 N4980236)

All surface water sampling shall occur on the same day.

Samples shall be analysed for the following parameters:

Constituent	Monthly
Major cations:	
calcium	✓
magnesium	✓
potassium	✓
sodium	✓
Major anions:	
bicarbonate	✓
carbonate	✓
chloride	✓
sulphate	✓
nitrogen	✓
pH	✓
Conductivity	✓
Arsenic	✓
Copper	✓
Iron	✓
Lead	✓
Zn	✓
Cyanide $_{(WAD)}$	✓
Turbidity	✓
Suspended solids	✓

With the prior written approval of the Consent Authority, the consent holder may reduce the frequency of monitoring or the number of contaminants being monitoring in accordance with the table above where it is shown that maintenance of the original monitoring programme is not required. The Consent Authority may, by notice in writing at any time, require the consent holder to resume the monitoring programme as set out in the table above.

(ii) Waste Rock Stack Seepage

The consent holder shall obtain representative samples of groundwater seepage from the toe of the Coronation North Waste Rock Stack at the following points (as shown on figure 2):

- Trimbells Gully (at the main waste rock stack seepage point);
- Maori Hen Gully;
- Coal Creek 1; and
- Coal Creek 2.

Samples shall be analysed for the following parameters at the following intervals:

Constituent	Quarterly	Annually
Major cations:		
calcium	✓	
magnesium	✓	
potassium	✓	
sodium	✓	
Major anions:		
bicarbonate	✓	
carbonate	✓	
chloride	✓	
sulphate	✓	
pH	✓	
Conductivity	✓	
Copper		✓
Iron		✓
Lead		✓
Total Inorganic Nitrogen		✓
Arsenic		✓
		✓

(iii) Waste Rock Stack Seepage Flow Monitoring

The consent holder shall install and operate a flow monitoring station at the main waste rock stack seepage discharge point in Trimbells Gully.

The flow monitoring system shall be capable of providing a continuous flow record in an electronic format.

The final location and method of flow monitoring shall be determined in consultation with the Consent Authority. If the Trimbells Gully site is deemed unsuitable, the location of the flow monitoring station shall be moved to another tow seepage point following consultation with the Consent Authority.

(iv) Waste Rock ANC/MPA Ratio

The consent holder shall, at monthly intervals collect representative samples of waste rock from the Coronation Waste Rock Stack.

(v) Aquatic Biological Monitoring

The consent holder shall engage a suitably qualified and experienced freshwater biologist to design and undertake an aquatic biological monitoring programme.

Biological monitoring shall be undertaken at the following sites as shown on Figure 3:

- Mare Burn at MB01 (approximately NZTM 2000: E1394176 N4980401); and
- Mare Burn at MB02 (approximately NZTM 2000: E1392955 N4980551);

Monitoring of macro-invertebrates and periphyton shall be carried out at each of the sites on one occasion during each of the following periods each year:

- December to February inclusive;
- March to May inclusive;
- June to August inclusive; and
- September to November inclusive

(unless there are insufficient flows to support any significant aquatic community). A flow reading shall be completed on each monitoring occasion.

Macroinvertebrate sampling shall include calculation and consideration of Macroinvertebrate Community Index (MCI) and its semi-quantitative variant (SQMCI).

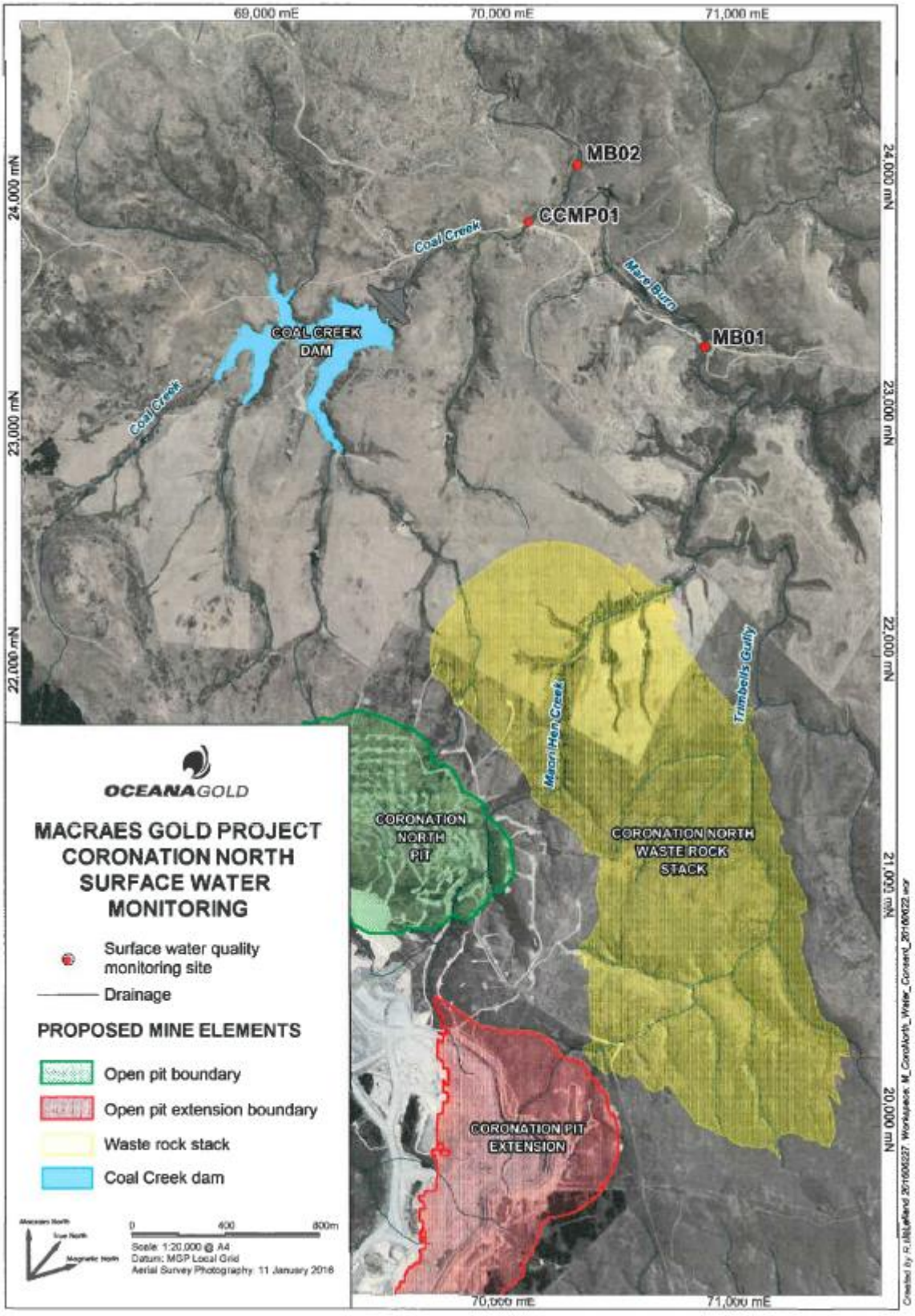
An annual electric fishing survey shall be carried out at each of the sites (unless there are insufficient flows) during the period 1 February to 31 March inclusive. A flow reading shall be completed at each site. Within six months of the exercise of any of the consents to which this schedule is attached, a standard electric fish surveying method shall be developed in consultation with the Consent Authority and documented. This method shall be followed for every subsequent fish survey undertaken in accordance with this schedule.

All aquatic biology monitoring shall be undertaken during low or stable flows.

Components to be Monitored

1. Benthic macro-invertebrates - the taxonomic composition and abundances shall be monitored at all sites.
2. Fish - the taxonomic composition and abundances of fish shall be monitored by an electric-fishing survey at each of the sites.
3. Benthic Algae - a qualitative assessment of the height and percentage cover of dominant species of benthic algae shall be made at all sites.

<u>Figure 1</u> – Surface Water Quality Compliance Monitoring Sites



<u>Figure 2</u> – Coronation North Waste Rock Stack Seepage Monitoring Points

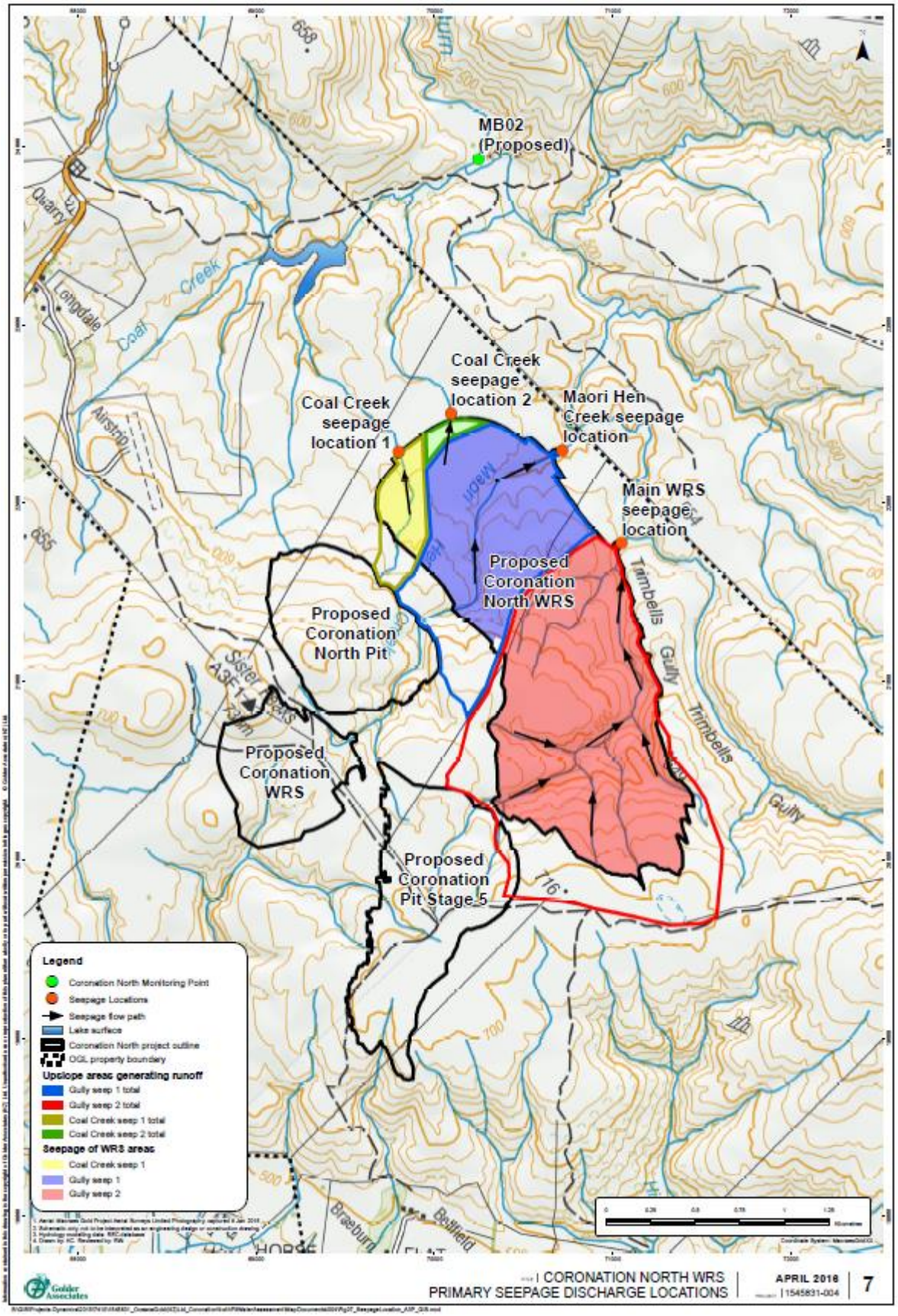


Figure 3: Aquatic Monitoring Sites