

WAITAKI DISTRICT COUNCIL AND DUNEDIN CITY COUNCIL

LAND USE CONSENT “Coronation North Pit and Trimbells Waste Rock Stack” – OCEANA GOLD (NEW ZEALAND) LTD

WDC Reference: 201.2019.1241

DCC Reference: LUC-2019-42

Pursuant to the Resource Management Act 1991, the Waitaki District Council and Dunedin City District Council grants its consent to Oceana Gold (New Zealand) Limited for gold mining operations involving:

- (a) The extraction of minerals and overburden by mechanical means from the Coronation North pit shown on “Coronation North Extension, WDC/DCC LUC Consents, Map 1” attached to and forming part of this consent;
- (b) The transport, treatment and processing of minerals extracted from the Coronation North pit and expanded Coronation Pit;
- (c) The stacking, deposit and storage of substances considered to contain any mineral from the Coronation North pit and expanded Coronation Pit;
- (d) The deposit of waste rock produced by Coronation North pit and expanded Coronation Pit on the Trimbells Waste Rock Stack shown on “Coronation North Extension WDC/DCC LUC Consents Map 1” annexed and described at (a) above and the deposit of waste rock as backfill into the Coronation North and Coronation pits;
- (e) The construction, maintenance and use of a haul road from Coronation North area to the gold processing plant;
- (f) The use of two haul road crossings (approximately centered at grid reference NZTM 2000 1397100E 4975800N Horse Flat Road and NZTM 2000 1398200E 4974200N Golden Point Road);
- (g) The use and storage of diesel and explosives;
- (h) The construction and use of temporary buildings;
- (i) The de-commissioning, rehabilitation, de-construction or dismantling of the mine and of any structures and works resulting from activities set out in paragraphs (a) –(h) above;
- (j) The construction, operation and maintenance of silt ponds and silt control facilities necessary for controlling runoff from the Coronation and Coronation North mining operation;
- (k) The formation of a pit lake in the Coronation North pit and the formation of a pit lake in the expanded Coronation pit.

The duration of this consent shall be 25 years.

DEFINITIONS

"**Act**" means the Resource Management Act 1991, and includes all amendments to the Act, and any enactments made in substitution for the Act

"**Project Overview and Annual Work and Rehabilitation Plan**" means the Project Overview and Annual Work and Rehabilitation Plan required by Condition 3.

"**Building**" means any temporary or permanent structure.

"**Building Work**" means work for or in connection with the construction, alteration, operation, demolition or removal of a building and includes site work.

"**Councils**" means the Waitaki District Council and the Dunedin City Council and includes its successors, and also includes any person to whom the consent authorities delegate or transfer any of its functions, powers and duties as a consent authority under the Act.

"**Disturbed Land**" means any land where the soil has been removed or modified and includes any waste rock stacks, or any other structures that have not been rehabilitated with soil and vegetation;

"**Exploration**" means any activity undertaken for the purpose of identifying mineral deposits or occurrences and evaluating the feasibility of mining particular deposits or occurrences of one or more minerals; and includes any drilling, dredging, or excavations (whether surface or sub-surface) that are reasonably necessary to determine the nature and size of a mineral deposit or occurrence; and "to explore" has a corresponding meaning.

"**Heavy Vehicle**" means a vehicle with a gross vehicle mass of more than 3,500 kilograms.

"**Landscape Architect**" means a professional member of the New Zealand Institute of Landscape Architects Inc or equivalent body.

"**Life of the Macraes Gold Project**" means the period ending when all mining operations at Macraes cease.

"**Macraes Ecological District**" means the area described by the Department of Conservation (James Bibby), 1997: *Macraes ecological district: survey report for the Protected Natural Areas Programme*, ISBN 0478019254, 9780478019254 and as also defined in McEwen, W.M. (1987): *Ecological regions and districts of New Zealand, incorporating third revised edition in four 1:500 000 maps (Part 4)*. New Zealand Biological Resources Centre publication No. 5. 125p + maps.

"**Mining**" means to take, win, or extract, by whatever means, a mineral existing in its natural state in land, or a chemical substance from that mineral, for the purpose of obtaining the mineral or chemical substance; but does not include prospecting or exploration; and "to mine" has a corresponding meaning.

"**Mining Operations**" means operations in connection with mining, exploring, or prospecting for any mineral, gold, including –

- (a) The extraction, transport, treatment, processing, and separation of any gold mineral; and
- (b) The construction, maintenance, and operation of any works, structures, and other land improvements, and of any machinery, and equipment, connected with such operations; and

- (c) The removal of overburden by mechanical or other means, and the stacking, deposit, storage, and treatment of any substance considered to contain any mineral; and
- (d) The deposit or discharge of any mineral, material, debris, tailings, refuse, or wastewater produced from or consequent on, any such operations; and
- (e) The doing of all lawful acts incidental or conducive to any such operations - when carried out at or near the site where the mining, exploration, or prospecting is carried out.

“Nga Rūnanga” means Te Rūnanga o Moeraki, Kati Huirapa Runaka ki Puketeraki and Te Rūnanga o Otakou.

"ORC" means the Otago Regional Council and includes its successors, and also includes any person to whom the council delegates or transfers any of its functions, powers and duties under the Act

"Prospecting" means any activity undertaken for the purpose of identifying land likely to contain exploitable mineral deposits or occurrences; and includes:

- (a) Geological, geochemical, and geophysical surveys;
- (b) The taking of samples by hand or hand held methods; and
- (c) Aerial Surveys, -

and "to prospect" has a corresponding meaning.

“Service Truck” means a heavy vehicle that operates during the daytime and in one return trip at night to transport mine equipment (including parts, oils and fuels) to service the Coronation or Coronation North mine site.

"Site work" means work on a building site, including earthworks, preparatory to or associated with the construction, alteration, demolition or removal of a building.

"Structure" includes a dam and a waste rock stack.

"Supporting documents" means the supporting documents listed as Appendices A -E attached to the application lodged 1st February 2019, listed as Appendices II, III, V, and VI attached to a response for further information lodged 5 April 2019 and Appendices II and III attached to a response for further information lodged 1st August 2019 , and also includes all other material (including statements of evidence and submissions) provided by the applicant to the consent authorities in support of the application for the consent.

"Rehabilitation objectives and terms" means the rehabilitation, objectives and terms set out in Condition 4.

"Works" includes any excavation, drilling and includes a road.

1 GENERAL

- 1.1 This consent shall be exercised substantially in accordance with the Coronation North Extension application for resource consent lodged to, and received by, the Councils in February 2019, including the Assessment of Environmental Effects and all Supporting Documents (which are deemed to be incorporated in, and form part of this consent), except:
- a) that the pit footprint has been reduced by 6.5ha from that applied for in order to avoid a number of seepage wetlands; and
 - b) to the extent that any condition in this consent is inconsistent with such material. If there is an inconsistency the conditions and terms of this consent shall prevail.
- 1.2 Pursuant to Section 125(1) of the Resource Management Act 1991 this consent shall lapse on the expiry of five years after the date of issue of the consent unless the consent is given effect to before the end of that period or upon application in terms of Section 125 (1) (b) of the Act, the Councils may grant a longer period of time.
- 1.3 The consent holder shall notify the Councils in writing of the first exercise of this consent.
- 1.4 In the event of any non-compliance with the conditions of this consent, the consent holder shall notify the Councils within 24 hours of the non-compliance being detected. Within five working days the consent holder shall provide written notification to the Councils 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 avoid any future occurrence of the non-compliance.
- 1.5 The Councils may, in accordance with sections 128 and 129 of the Act, serve notice on the consent holder of its intention to review the conditions in the last week of March in any year for the purposes of:
- (a) Dealing with any adverse effect on the environment (including cultural values) which may arise from the exercise of this consent and which is appropriate to deal with at a later stage, or which become evident after the date of commencement of the consent,
 - (b) Ensuring the conditions of this consent are appropriate,
 - (c) Ensuring rehabilitation is completed in accordance with the rehabilitation conditions of this consent;
 - (d) 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 consent.
- 1.6 The consent holder shall remedy or adequately mitigate any adverse effect on the environment from the exercise of this consent which becomes apparent after the expiry of this consent.
- 1.7 Prior to the expiry of this consent, the consent holder shall ensure that all rehabilitation and everything necessary to comply with the conditions of this consent has been completed.

Advice Note

In addition to the fees payable for the processing of this application, where further site inspections are required to monitor compliance with any of the conditions, the Councils may

render an account to the consent holder for additional monitoring fees at the rate prescribed in the Annual Plan on the basis of time involved.

2 LOCATION OF VARIOUS MINING ACTIVITIES

2.1 The pits, waste rock stacks, water reservoir and haul road shall not materially exceed those footprints shown on “Coronation North Extension Project WDC/DCC LUC Consents Map 1” attached to and forming part of this consent.

3 PROJECT OVERVIEW AND ANNUAL WORK AND REHABILITATION PLAN

3.1 The consent holder shall submit a Project Overview and Annual Work and Rehabilitation Plan to the Councils by 31 March each year that will cover the upcoming year (1 July to 30 June). The consent holder may, at any time, submit to the Councils 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:

- (a) A description and timeline of intended mining activities for the duration of mining operations including a plan showing the location and contours of all existing and proposed structures at completion of mining;
- (b) A description (including sequence, method and form) of mining operations, monitoring and reporting carried out in the last 12 months;
- (c) 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;
- (d) An explanation of any departure in the last 12 months from the previous Project Overview and Annual Work and Rehabilitation Plan;
- (e) 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;
- (f) 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;
- (g) A description and analysis of any non-compliance with any conditions of consent that have occurred in the last 12 months and the steps that were taken to deal with it and the results of those steps;
- (h) 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 is proposed or has been undertaken as a result of a non-compliance event and/or any adverse effects on the environment;
- (i) A summary description of all Management Plans and Manuals required under this land use consent and any resource consents issued by ORC and details of any review or amendment of any of the Management Plans or Manuals;
- (j) An overview of the monitoring and reporting programme for the previous 12 months and any changes proposed for the next 12 months;
- (k) A detailed section on rehabilitation including, but not limited to the following:
 - i. The total area of disturbed land during the mining of Coronation North, including the haul road, yet to receive rehabilitation and indicative rehabilitation dates for various areas of the mine site;
 - ii. The area of additional disturbed land in the coming year that will require future rehabilitation;
 - iii. The area of disturbed land rehabilitated in the previous year;
 - iv. The area of disturbed land proposed to be rehabilitated in coming year;
 - v. A description of rehabilitation planned for the life of mine at Coronation North;

- vi. A description of proposed rehabilitation methods for any area, including proposed topsoil to be stripped and stockpiled, surface pre-treatment and re-use of topsoil on finished areas in the next 12 months.;
 - vii. The details of the location, design (including shape form and contour) and construction of all permanent structures;
 - viii. Drainage details for any disturbed land and recently rehabilitated areas;
 - ix. Details of any vegetation to be used as part of rehabilitation for the next 12 month period; and
 - x. Detailed results of any revegetation trials.
- (l) A description of any rehabilitation problems encountered and the steps being taken to resolve these problems;
 - (m) 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;
 - (n) An up to date and detailed calculation of the costs of complying with all rehabilitation conditions of this consent;
 - (o) An up to date and detailed calculation of the costs of any monitoring required by the conditions of this consent;
 - (p) A contingency closure plan describing in detail the steps that would need to be taken if mining operations stopped in the next 12 months in accordance with Condition 20; and;
 - (q) Any other information required by any other condition of this consent and any related consent.
- 3.2 Each year the consent holder shall provide the Chair of Macraes Community Incorporated, Kāti Huirapa Rūnaka ki Puketeraki, Te Rūnanga o Ōtākou and Te Rūnanga o Moeraki with a copy of each Project Overview and Annual Work and Rehabilitation Plan.
- 3.3 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.
- 3.4 The consent holder shall provide the Councils with any further information, or report, which the Councils 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 Councils.
- 3.5 The consent holder shall exercise this consent in accordance with the Project Overview and Annual Work and Rehabilitation Plan.
- 3.6 The consent holder shall design and construct all permanent earthworks to the form shown in the Project Overview and Annual Work and Rehabilitation Plan.

4 REHABILITATION

- 4.1 The rehabilitation objectives to be achieved by the consent holder are:-
- (a) To ensure short and long term stability of all structures and works and their surrounds;
 - (b) To avoid maintenance after completion of rehabilitation requirements;
 - (c) To protect soil from erosion and to protect water from contaminants affected by mining operations;

- (d) To stabilise and rehabilitate the banks and surrounds of any waterbodies;
- (e) To return land as closely as possible to its original condition, including any exotic pastoral and indigenous species appropriate to the area; and
- (f) To visually integrate finished structures, land-forms and vegetation into the surrounding landscape so they appear to be naturally occurring features; and,
- (g) To control invasive environmental weeds, including wilding conifers, in the Disturbed Land for the Life of the Macraes Gold Project.

Earth Shaping and Visual

- 4.2 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.
- 4.3 The consent holder shall use a Landscape Architect in the planning and design of all permanent earthworks and structures.

Waste Rock Stack

- 4.4 The consent holder shall design and construct the waste rock stack in accordance with the following principles:
 - (a) Slopes shall be suitably concave or convex in cross-profile to match nearby natural slopes;
 - (b) Slope gradients shall be no steeper than nearby natural surfaces;
 - (c) Transitions between natural and formed surfaces shall be rounded and naturalised;
 - (d) Contours should be curvilinear in plan form, in keeping with original natural contours in that area;
 - (e) The skyline shall be variable and curved, simulating natural skylines;
 - (f) New landforms shall be aligned and located so they seem to continue, not cut across, existing landscape patterns; and
 - (g) Silt ponds shall be removed and the site rehabilitated or be converted to stock water drinking ponds following completion of mining operations and rehabilitation.
- 4.5 Backfilling of Coronation North pit shall occur in the west section of the pit to a minimum height of mRL 575 as shown on 'Macraes Gold Project Coronation North Extension Figure 1' attached to and forming part of this consent.
- 4.6 Prior to the commencement of the Trimbells waste rock stack, the consent holder shall in consultation with the Councils, design the shape and construction details of the stack. The final design and construction details shall be lodged with the Councils and include a report prepared by a Landscape Architect that includes, but is not limited to, the following:
 - (a) A detailed description of the proposed waste rock stack;
 - (b) A detailed description of the adjoining landforms; including their slopes and transitions; and
 - (c) A detailed discussion on how the proposed waste rock stack meets the principles set out in condition 4.4 (a) – (f).
- 4.7 If after commencement of the construction of the Trimbells waste rock stack, the consent holder wishes to change the design or construction details it shall design the changes in consultation with the Councils. The design or construction changes shall be lodged with the Councils. The change document shall include a report by a Landscape

Architect that details the proposed changes and reassess whether the design changes better meet the principles set out in Condition 4.4 (a) – (f).

Soil

- 4.8 The consent holder shall, as far as practicable, stockpile soil from any disturbed land, unless the soil is required to be left in place to protect water and soil values.
- 4.9 All salvaged soil shall be used on disturbed land for rehabilitation purposes.

Revegetation

- 4.10 The consent holder shall in accordance with the rehabilitation objectives undertake progressive rehabilitation of disturbed land as operational activities allow. It shall be revegetated with:

- (a) Exotic pastoral species; and
- (b) Tussock species which are as far as practicable sourced from the Macraes Ecological District and include *Chionochloa rigida subsp. rigida* (narrow-leaved snow tussock) *Festuca novae-zelandiae* and *Poa cita*. Details of area, density and methods of planting are set out in the Ecological Management Plan required under Condition 15.

- 4.11 Within six months from the first exercise of this consent, the consent holder shall prepare and submit in writing to the Councils a Rehabilitation Management Plan (RMP) for the Trimbells Waste Rock Stack, the Coronation North Waste Rock Stack, and the Coronation North Pit backfill, the rehabilitated features shown on Figure 1 attached to and forming part of this consent.

The RMP shall be prepared by a suitably experienced and qualified person(s) in consultation with the Department of Conservation and Macraes Community Incorporated.

- 4.12 The purpose of the RMP is to, as far as practicable, ensure that the rehabilitated features described in Condition 4.11 are integrated with and maintain the landscape character of the surrounding tussock grasslands, consistent with the rehabilitation objectives set out in Conditions 4.1 (e) and (f). To achieve the purpose, the RMP shall include, but not be limited to, the following:

- (a) Providing a detailed map and an associated inventory of the vegetation types and cover that either is yet to be disturbed or existed prior to disturbance;
- (b) Detailing the proposed rehabilitation to be carried out into either exotic pasture, or into tussock grassland reflecting the original vegetation cover determined under paragraph (a) above;
- (c) Describing the methodology to be used to rehabilitate into tussock grassland, which may include but not be limited to the direct transfer of soil containing tussock species or direct plantings at the densities reflecting the original cover;
- (d) Describing the maintenance work to enable survival of the tussock grassland species used to rehabilitate the waste rock stacks; and
- (e) Detailing the monitoring to be carried so the rehabilitation outcomes can be measured against the purpose of the RMP.

- 4.13 The RMP shall be certified if it meets the requirements of Conditions 4.11 and 4.12 above.

- 4.14 If in the opinion of the Council Officer with the delegated authority to certify the RMP it does not meet Conditions 4.11 and 4.12, it may be returned to the Consent Holder together with written reasons why the RMP does not meet these conditions.
- 4.15 If, after any amendments required under Condition 4.14 of this consent the Consent Authority fails to certify the RMP within 30 working days, the RMP will be regarded as being certified
- 4.16 The Consent Holder may at any time re-submit an updated or amended RMP for certification by the Consent Authority
- 4.17 This consent shall at all times be exercised in accordance with the certified RMP
- 4.18 The outcomes of the monitoring carried out in accordance with condition 14.12 (e) shall be reported in the Annual Ecology Report required under condition 15.2
- 4.19 The consent holder shall maintain vegetation cover until the expiry of this consent and ensure that the vegetation, including any vegetation established on disturbed land, shall be self-sustaining after expiry.

Soil and Vegetation Monitoring

- 4.20 At three yearly intervals, the consent holder shall complete a review of all soil and pasture on land that has been rehabilitated. The first review shall be not later than the third anniversary of the commencement of this consent. The review shall include, but not be limited to, the following:
- (a) Monitoring for ground cover, species components, plant nutrition status, soil organic matter and concentrations of exchangeable nutrients in the soil;
 - (b) Analysis and interpretation of the monitoring results by a suitably qualified soil or agricultural scientist;
 - (c) Evaluation of the vegetation and its potential to be self-sustaining for pastoral farming after mining ceases; and
 - (d) Any necessary recommendations for future rehabilitation, including plant species or varieties to be used, cultivation and seeding methods to be introduced, or fertilisers to be used; and,
 - (e) A copy of the review will be forwarded to the Councils and Department of Conservation within three months of the review being completed.

5 SITE DECOMMISSIONING AND CLOSURE

- 5.1 The consent holder shall submit to the Councils a Site Decommissioning Plan, not less than 12 months before completion of the operations.
- 5.2 The Site Decommissioning Plan shall include but not be limited to:
- (a) 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, pit lakes, roads, water storage reservoirs or other works which under this consent or any related consent are authorised or required to remain after the relevant consents expire;
 - (b) A summary of rehabilitation completed to date, and details of rehabilitation required to fulfil the conditions of this consent and any related consents;

- (c) Details on infrastructure to be decommissioned, such infrastructure may include buildings, plant, and equipment;
- (d) 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;
- (e) Details of management, any ongoing maintenance, monitoring and reporting proposed by the consent holder to ensure post-closure activities are carried out in accordance with the conditions of this consent;
- (f) Details of measures to protect public safety, including any fencing yet to be completed;
- (g) The costs of complying with (a)-(f) above.

5.3 The consent holder shall remove all buildings, plant and equipment (whether attached to the land or not) associated with site decommissioning. This condition does not apply to:

- (a) Any waste rock stacks, permanent earthworks, silt pond, waterbody, road or other works and any associated plant and equipment which under this or any other resource consent is permitted or required to remain after decommissioning or after this consent expires;
- (b) Any monitoring structure required by this or any other resource consent to remain after the expiry of this consent.

6 COMPLAINTS

6.1 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.

6.2 The register of complaints shall be incorporated into the Project Overview and Annual Work and Rehabilitation Plan required by Condition 3 of this consent and provided to the Councils on request.

7 BLASTING AND VIBRATION

7.1 The consent holder shall ensure that blasting practices minimise air and ground borne vibration. Fly-rock shall be minimised and all blasting procedures shall be carried out so as to ensure the safety of employees and the public. No blasting shall occur when the weather is unsuitable.

7.2 Blasting shall be restricted to within the following hours:
Monday to Friday 9.00am to 5.30pm
Saturday and Sunday 10.00am to 4.30pm

7.3 Details of blasting method, strength of the blast and time of blast shall be entered into a record kept for that purpose and shall be available to the Councils on request. This information shall also be included in the monitoring report, required under Condition 9.

- 7.4 Vibration due to blasting or any other activity associated with the mining operation, when measured at any point within the notional boundary of any dwelling not owned by the consent holder, shall not exceed a peak particle velocity measured in the frequency range 3-12 Hz of 5 mm/sec provided this level may be exceeded on up to 5% of the total number of blasts over a period of 12 months. The level shall not exceed 10 mm/sec at any time.
- 7.5 Airblast overpressure from blasting associated with the mining operation, when measured at any point within the notional boundary of any dwelling not owned by the consent holder shall not exceed a peak non-frequency-weighted (Linear or flat) level of 115 decibels (dB), provided this level may be exceeded on up to 5% of the total number of blasts over a period of 12 months. The level shall not exceed 120 dB (Linear peak) at any time. For the purpose of this consent, C-frequency-weighting may be considered equivalent to the Linear or Flat-frequency-weighting.

Advice Note

The notional boundary is defined as a line 20 metres from the exterior wall of any rural dwelling or the legal boundary where this is closer to the dwelling.

8 NOISE

Noise limits

- 8.1 The consent holder shall ensure that all construction and operation activities associated with the mining operations are designed and conducted so that the following noise limits are not exceeded at the locations specified in Condition 8.2:
- (a) On any day between 7 am to 9 pm (daytime): 50 dBA L_{Aeq} ; and
 - (b) On any day between 9.00 pm to 7.00am the following day (night-time): 40dBA L_{Aeq} ; and/or 70 dBA L_{Amax} .

Noise Management

- 8.2 No Heavy Vehicles other than a service truck shall use the haul road between the Coronation or Coronation North mine site and the gold processing plant as shown on Map 1 between the hours of 9.00 pm to 7.00am each day. Condition 8.2 ceases to have effect if the consent holder obtains an agreement with the residents of 406 Horse Flat Road that the condition is no longer necessary. The residents' consent to the cessation of condition 8.2 must be provided in writing to the Councils and their consent shall operate to amend the noise limit at their residence between those night-time hours to 51dBA L_{Aeq} , in this consent and also in consents LUC-2016-230/B, LUC-2013-225/B, 201.2016.779.1 and 201.2013.360.2

Measurement Locations

- 8.3 Noise measurements shall be taken at the notional boundary of any dwelling not owned by the consent holder.

Advice Note

The notional boundary is defined as a line 20 metres from the exterior wall of any rural dwelling or the legal boundary where this is closer to the dwelling.

Measurement and Assessment

- 8.4 All noise measurements referred to in Conditions 8.1 and 8.2 above shall be measured in accordance with the provisions of NZS 6801:2008 Acoustics: Measurement of Environmental Sound, and shall be assessed in accordance with the provisions of NZS 6802:2008 Acoustics: Environmental Noise.

9 MONITORING OF NOISE, AIRBLAST AND VIBRATION

- 9.1 Prior to exercise of this consent, the consent holder shall prepare a Noise, Airblast and Vibration Monitoring Plan. The plan shall include but not be limited to:
- (a) Details of the monitoring locations, the frequency of monitoring and the method of measurement and assessment in accordance with Conditions 7.4, 7.5 8.1 and 8.2;
 - (b) Procedures for recording blasting method, strength of the blast and time of blast; and
 - (c) Procedures for addressing non-compliant results and notification of the Councils.
- 9.2 The Noise, Airblast and Vibration Monitoring Plan for this consent may be combined with any other Noise, Airblast and Vibration Monitoring Plan required by any other consent held by the consent holder for mining operations at Macraes Flat.
- 9.3 The consent holder shall exercise this consent in accordance with the Noise, Airblast and Vibration Monitoring Plan. The consent holder shall review the plan annually and if necessary update it. Confirmation of the review shall be included in the Project Overview and Annual Work and Rehabilitation Plan. The Councils shall be provided with any updates of the plan within one month of any update occurring.
- 9.4 The consent holder shall produce a report each year summarising the results of the Noise, Airblast and Vibration Monitoring. The report shall be included in the Project Overview and Annual Work and Rehabilitation Programme.
- 9.5 All measurements from the monitoring programmes shall be recorded and shall be made available to the Councils on request.
- 9.6 Within one month of Condition 8.2 ceasing to have effect the consent holder shall engage a suitably qualified and experienced person to complete a noise measurement compliance test at the notional boundary of 406 Horse Flat Road to assess compliance with the revised night-time noise limit of 51dBA LAeq. The consent holder shall report the results of the compliance test to the residents of 406 Horse Flat Road and the Councils.

10 LIGHTING

- 10.1 All flood lighting luminaires that could potentially cause a glare nuisance or a traffic hazard shall be fitted with shields and, as far as is practicable, orientated so that the principal output is directed away from residences and traffic.

11 WASTE ROCK STACKS

- 11.1 The Trimbells waste rock stack shall be designed for operating basis earthquake (OBE) with a recurrence interval of 150 years and maximum design earthquake (MDE) with a recurrence interval of 2,500 years and otherwise shall otherwise be designed in accordance with sound engineering practice.

- 11.2 The consent holder shall engage a suitably qualified geotechnical engineer to design the waste rock stack. A construction report shall be prepared for the waste rock stack and this report provided to the Councils prior to the commencement of construction of the waste rock stack. The report shall include details of site formation, design construction, appearance, and testing for stability of the waste rock stack, and shall include evaluation of the long-term stability and performance of the waste rock stack.
- 11.3 The Trimbells waste rock stack shown on "Coronation North Extension WDC/DCC LUC Consents Map 1" annexed shall not exceed the following height: 695mRL.

12 FINAL PIT LAKES

- 12.1 The pit lake shall, at all times, have sufficient freeboard to fully contain waves induced by landslides and earthquakes.
- 12.2 No less than twelve months prior to commencement of filling of the pit lake, the consent holder shall provide the Councils with a Closure Manual for the lake. The manual shall include, but not be limited to:
- (a) Details of how Condition 12.1 shall be achieved;
 - (b) Details of the lake filling, including but not limited to mean flow-rates, location of inflows and the quality of the discharge; and
 - (c) Details of the long term pit wall stability.
- 12.3 The consent holder shall exercise this consent in accordance with the Closure Manual. The consent holder shall review the manual annually and if necessary update it. Confirmation of the review shall be included in the Project Overview and Annual Work and Rehabilitation Plan. The consent holder shall provide the Councils with any updates of the plan within one month of any update occurring.

13 ROADING

- 13.1 Within 12 months of the Coronation North ceasing excavation the consent holder shall reinstate for public use that part of Golden Point Road south of Horse Flat Road shown on "Coronation North Extension WDC/DCC LUC Consents Map 1" annexed.
- 13.2 To achieve the reinstatement the following work must be completed:
- (a) The haul road shall be decommissioned, and replaced with a public road that has a minimum road reserve of 15 metres in width, and a carriageway of 5 metres in width;
 - (b) The public road shall be formed to a minimum 150 mm sub-base and a base course of 100mm AP40 with a wearing course of AP20;
 - (c) The road shall also be delineated and marked to a public road standard; (d) Design and construction details shall be lodged with the Waitaki District Council for its approval.
- 13.3 Within six months of completion of mining operations in Coronation North and Coronation Pits and rehabilitation of the project areas to the point of decommissioning silt ponds, the consent holder shall define and take steps to vest to the respective Councils (and make lawfully available to the Councils pending completion of vesting) a legal road of no less than 20m wide that approximately follows the blue line shown on the annexed Figure 2 (as a replacement for the unformed Matheson Road). Depending on the extent of pit excavations, the road may be modified to be south or southwest of the blue line. The

grade of Matheson Road shall be no more than 1 Vertical, 6 Horizontal at any location of the alignment. Prior to vesting, the road shall be graded to a standard enabling it to be used as a fine weather track for four wheel drive vehicles. The consent holder shall not have any ongoing responsibility to maintain the track or any form of public access along this unformed road as a consequence of this grading.

- 13.4 Where the road under Condition 13.3 crosses Trimbells waste rock stack, the consent holder shall design the road to avoid the road being scoured out or eroded. The detailed design shall be forwarded to the Compliance Manager at the Dunedin City Council.
- 13.5 Within six months of completion of mining operations in Coronation North and Coronation Pits ceasing and rehabilitation of the project areas to the point of decommissioning silt ponds, the consent holder shall define and take steps to vest to the Waitaki District Council (and make lawfully available to the Council pending completion of vesting) a legal road of no less than 20 metres wide that approximately follows the Coronation haul road alignment (as indicatively shown marked in orange on the annexed Figure 2) between Horse Flat Road and Matheson Road (as a replacement for the unformed Golden Point Road). Prior to vesting, the road shall be graded to a standard enabling it to be used as a fine weather track for four wheel drive vehicles. The consent holder shall not have any ongoing responsibility to maintain the track or any form of public access along this unformed road as a consequence of this grading.

Advice Note:

All road stopping, temporary road closures and vesting of new road reserve is to be completed under other relevant statutes.

14 HERITAGE

- 14.1 If the consent holder:
- (a) Discovers koiwi tangata (human skeletal remains), or Maori artefact material, the consent holder shall without delay:
 - i. Notify the Councils, Tangata whenua and Heritage New Zealand Pouhere Taonga and in the case of skeletal remains, the New Zealand Police.
 - ii. Stop work within the immediate vicinity of the discovery to allow a site inspection by Heritage New Zealand Pouhere Taonga and the appropriate runanga and their advisors, who shall determine whether the discovery is likely to be extensive; if a thorough site investigation is required and whether an Archaeological Authority is required.
 - iii. Any koiwi tangata discovered shall be handled and removed by tribal elders responsible for the tikanga (custom) appropriate to its removal or preservation.
 - (b) Discovers any feature or archaeological material that predates 1900, or heritage material, or disturbs a previously unidentified archaeological or heritage site, the consent holder shall without delay:
 - i. Cease work immediately at that place and within 20m around the site;
 - ii. Shut down all machinery, secure the area, and advise the Site Manager;
 - iii. Secure the site and notify the Heritage New Zealand Regional Archaeologist and the Consent Authority. Further assessment by an archaeologist may be required;
 - iv. If the site is of Maori origin, notify the Heritage New Zealand Regional Archaeologist, the Consent Authority and the appropriate iwi groups or kaitiaki representative of the discovery and ensure site access to enable appropriate cultural procedures and tikanga to be undertaken, as long as all statutory requirements under legislation are met (Heritage New Zealand Pouhere Taonga Act 2014, Protected Objects Act 1975). Heritage New Zealand will determine if

- an archaeological authority under the Heritage New Zealand Pouhere Taonga Act 2014 is required for works to continue; and
- v. Recommence site work following consultation with the Consent Authority, Heritage New Zealand and iwi, provided that any relevant statutory permissions have been obtained.

Advice note: An archaeological authority from Heritage New Zealand Pouhere Taonga may be required before work can proceed.

- 14.2 Site work shall recommence following consultation with the Councils, Heritage New Zealand Pouhere Taonga, Tangata whenua, and in the case of skeletal remains, the NZ Police, provided that any relevant statutory permissions have been obtained.

15 NATURE CONSERVATION AND LANDSCAPE VALUES

- 15.1 Within six months of exercising this consent the consent holder shall engage a suitably qualified and experienced ecologist to prepare and submit to the Councils an update of the Coronation North Project Ecological Management Plan ("EMP"). The EMP may be combined with any EMP required by any other consent held by the consent holder for mining operations at Macraes Flat. The purpose of the EMP is to ensure compliance with conditions of this consent and otherwise to minimise the actual and potential adverse effects on the threatened species and locally uncommon species and general ecological values. The EMP shall be developed and prepared in consultation with the Department of Conservation and the consent holder shall provide a copy to the Department of Conservation, Nga Runanga, ORC and Councils. The EMP shall:
 - (a) Include sections covering vegetation and threatened plant management, avifauna, lizard management and aquatic management;
 - (b) Have the following objectives:
 - i. To minimise the adverse effects from the implementation of the Coronation North Extension Project on amenity/landscape; indigenous vegetation; threatened plants; resident lizard populations; and aquatic biota;
 - ii. To protect indigenous flora, threatened, at risk and locally uncommon plants and vegetation types; resident lizard populations, and aquatic fauna where practicable.
 - (c) Detail the methods by which the objectives set out in Condition 15.1(b) shall be achieved, including:
 - i. propagation of three plant species as detailed in Condition 15.6;
 - ii. transplanting of the threatened plants identified in Condition 15.7;
 - iii. minimisation of construction effects including during construction of Trimbells Waste Rock Stack by keeping the area of disturbed land to a minimum; and
 - iv. monitoring.
 - (d) The consent holder shall implement the programme of activities specified in the EMP and in any subsequent EMP reports created pursuant to condition 15.2(c)
- 15.2 The consent holder shall engage a suitably experienced and qualified ecologist, to prepare an annual report:
 - (a) describing the works and other actions completed by the consent holder in the previous twelve months in order meet the purpose and objectives of the EMP; and
 - (b) evaluating the progress of the tussock species planting on rehabilitated land, transplanting of threatened plant species and the propagation and subsequent planting of the three rare plant species listed in Condition 15.6(a).

- (c) Describing what methods are to be implemented in the following 12 months in order to meet the purpose and objectives of the EMP.

The consent holder shall provide the Councils, Nga Runanga and Department of Conservation with a copy of the report by no later than 31 July each year. The report may be combined with any EMP report required by any other consent held by the consent holder for mining operations at Macraes Flat.

- 15.3 The consent holder shall, using a suitably qualified person or persons, fund measures for the translocation and/or cultivation of seeds, cuttings or other cultivation material from a selection of at least 2 of the following plant species taken from plants located within the impacted footprint of the Coronation North project ("salvage species") for planting out in areas undisturbed by mining activities:

Aciphylla subflabellata (target for establishment: 10 plants)

Deyeuxia quadriseta (target for establishment: 5 plants)

Epilobium insulare (target for establishment: 20 plants)

and the translocation areas will be mapped in the next update of the EMP.

- 15.4 Translocation will be carried out in accordance with the Coronation North Plant Propagation, Translocation and Management Manual.
- 15.5 The consent holder shall monitor the success of all plantings annually for five years following planting and report progress in its annual Ecological Monitoring Report. In this context success means the successful survival and growth of the plant species so that they may form potentially viable populations and shall be monitored by recording the survival and growth of individual plants and noting any flowering and recruitment of new individuals. Success shall be demonstrated by at least 75% of established plants surviving, and at least 50% increasing in size compared with their establishment. Where success is not attained a further round of translocation work in accordance with Conditions 15.3 and 15.4 will be carried out by the consent holder. If suitable material cannot be sourced from the affected area then seeds will as far as practicable be sourced from the Macraes Ecological District.
- 15.6 The consent holder shall conduct a survey of lizards, at a minimum in the 'give up" area shown in Figure 1 and the catchments that are connected to it, to confirm the extent and relative abundance of cryptic skink population (and other rare skinks (e.g. green skink) if they are detected). The survey shall:
- (a) occur during spring to autumn and will only be undertaken during appropriate weather conditions that maximise the chance of detection;
 - (b) occur over a minimum of three person days;
 - (c) focus around the known cryptic skink location and radiate out from that centre to similar/preferred habitat;
 - (d) be undertaken by an appropriately qualified herpetologist with proven experience in lizard surveys; and
 - (e) the consent holder will consult with the Department of Conservation on the survey design and methodology.
- 15.7 The consent holder will report on the results of the lizard survey required by Condition 15.6 as part of the annual Coronation North Ecological Monitoring Report.

- 15.8 Within six months of the exercise of this consent, the consent holder will conduct an invertebrate survey of the Trimbells Gully Recommended Area of Protection (RAP). The survey shall:
- (a) occur during spring to autumn;
 - (b) occur over a minimum of three person days;
 - (c) be undertaken by an appropriately qualified entomologist with proven experience in invertebrate survey; and
 - (d) the consent holder will consult with the Department of Conservation on the survey design and methodology.
- 15.9 The consent holder will report on the results of the invertebrate survey required by Condition 15.8 as part of the annual Coronation North Ecological Monitoring Report.
- 15.10 Within six months of the exercise of this consent, the consent holder shall remove approximately 3.6 ha of pine forest and remove any subsequent pine seedlings for a minimum period of three years in the vicinity of Coronation Haul Road and the pine forest / wilding pine removal area will be mapped in the next update of the EMP.
- 15.11 The objective of Condition 15.10 is to improve habitat for lizards and invertebrates and allowing populations to grow in extent and abundance while removing any pine seedlings or wilding pines that establish.
- 15.12 In consultation with the Department of Conservation the consent holder shall develop and implement a monitoring programme to provide evidence to support or otherwise the stated objective. The monitoring programme shall:
- (a) include the frequency of lizard and invertebrate monitoring surveys to be conducted
 - (b) be conducted for a minimum of three years and then a decision to extend will be based on a comparison of the results against the objective.
- 15.13 The consent holder will report on the results of the monitoring programme required by Condition 15.10 as part of the annual Coronation North Ecological Monitoring Report.

Advice Note

The actions set out in conditions 15.3 to 15.12 are additional to the actions required under Condition 15 of resource consent LUC-2016-230/B and 201.2016.779.1. The Coronation North Project Ecological Management Plan will retain all original content required from the 2016 consents as well as the additional actions required under these conditions.

- 15.14 As volunteered as part of the Coronation North Extension proposal, within two weeks of the commencement of this consent the consent holder shall, pursuant to section 138 of the Resource Management Act 1991, provide the Councils a written notice of surrender of the 52 hectares of land shown on the attached map 'Macraes Gold Project – Coronation North Extension Figure 1' and marked 'waste rock stack give up boundary', being land that is consented for disturbance under Coronation North consents LUC 2016-234 and 201.2016.779.
- 15.15 Annually, as part of the consent holder's Project Overview and Annual Work and Rehabilitation Plan, the area of land to be disturbed in the following 12 months shall be assessed for the presence of the species identified in Condition 15.6 above and a programme for cultivating and planting out and/or translocating a selection of plants taken from those species identified shall be determined by the consent holder in consultation with the Department of Conservation.

16 FENCING

- 16.1 Stock-proof fencing shall be used to keep livestock away from all working areas.
- 16.2 On the completion of mining operations the consent holder shall ensure that all fences, required to restrict people and/or stock for safety purposes, are installed and maintained. This shall include fences to be installed and maintained around Coronation North and Coronation pit lakes.

17 MANAGEMENT OF HAZARDOUS SUBSTANCES

- 17.1 The Consent Holder shall ensure that all fuels and oils used at the site are contained in appropriately bunded facilities and that all fuel/oil dispensers are fitted with non-return valves.
- 17.2 Refuelling, lubrication and any mechanical repairs shall be undertaken in a manner that provides sufficient mitigation measures to ensure that no spillages onto the land surface or into water occur.

18 BONDS

Obligations to be secured

- 18.1 The consent holder shall provide and maintain in favour of the Councils one or more bonds to secure:
- (a) The performance and completion of rehabilitation in accordance with the conditions of this consent; and
 - (b) The carrying out of the monitoring required by the conditions of this consent; and
 - (c) The remediation of any adverse effect on the environment that may arise from the exercise of this consent; and
 - (d) Compliance with conditions 18.13 - 18.17 of this consent.

When bonds to be provided

- 18.2 Before the commencement of this consent, the consent holder shall provide to the Councils one or more bonds required by Condition 18.1

Form of bond

- 18.3 Subject to the other provisions of this condition, any bond shall be in the form and on the terms and conditions approved by the Councils.

Surety

- 18.4 Any bond shall be given or guaranteed by a surety acceptable to the Councils.
- 18.5 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.

Amount

- 18.6 The amount of each bond shall be fixed annually by the Councils 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, or otherwise.
- 18.7 The amount of the bond(s) shall include:
- (a) 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.
 - (b) The estimated costs of:
 - i. Monitoring in accordance with the monitoring conditions of the consent;
 - ii. 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;
 - iii. Monitoring any rehabilitation required by this consent.
 - (c) 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.
- 18.8 The amount shall be calculated for the duration of this consent and for a period of 20 years after its expiry.
- 18.9 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 Councils may, in writing, vary the amount of the bond(s).

General

- 18.10 While the liability of the surety is limited to the amount of the bond(s), the liability of the consent holder is unlimited.
- 18.11 Any bond may be varied, cancelled, or renewed at any time by written agreement between the consent holder, surety and Councils.

Costs

- 18.12 The costs (including the costs of the consent authority) of providing, maintaining, varying and reviewing any bond shall be paid by the consent holder.

Bonding on expiry or surrender of this consent

- 18.13 For a period of 20 years from the expiry or surrender of this consent the consent holder shall provide in favour of the Councils one or more bonds.
- 18.14 The amount of the bond to be provided under Condition 18.13 shall include the amount (if any) considered by the Councils necessary for:
- (a) Completing rehabilitation in accordance with the conditions of this consent.
 - (b) Monitoring for and of any adverse effect on the environment that may arise from the exercise of the consent.

- (c) Monitoring any measures taken to prevent, remedy or mitigate any adverse effect on the environment that may arise from the exercise of this consent.
- (d) Dealing with any adverse effect on the environment which may become apparent after the surrender or expiry of this consent.
- (e) Contingencies.

18.15 Without limitation, the amount secured by the bond given under Condition 18.13 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.

18.16 The bond(s) required by Condition 18.13 must be provided on the earlier of:

- (a) 12 months before the expiry of this consent;
- (b) Three months before the surrender of this consent.

18.17 Conditions 18.3, 18.4, 18.5, 18.8, 18.9, 18.10 and 18.11 apply to the bond(s) required by Condition 18.13.

19 PUBLIC LIABILITY INSURANCE

19.1 The consent holder shall effect and keep current public liability insurance for an amount not more than twenty million dollars. The amount shall be determined by the Councils in consultation with the consent holder.

19.2 The indemnity expressed in the insurance policy shall be sufficiently wide in its coverage so as to include claims arising from damage caused by structural failure, or damage resulting from fire or explosion and all fire fighting costs resulting from the consent holder's operations in respect of the land and from any accidental or otherwise spillage of any chemical or reagent and/or resulting clean up and restoration costs and the costs of mitigation of those events.

19.3 The consent holder shall on request provide the Councils a copy of the insurance policy and the receipt evidencing payment of the premium in respect of any such policy.

19.4 The consent holder shall also indemnify the Councils against any claim arising from the public use of public roads for the time being under control of the consent holder.

20 CLOSURE OF OPERATIONS

20.1 The consent holder shall annually supply to the Councils a contingency plan for the early closure of the mine, as part of the Project Overview Annual Work and Rehabilitation Programme. This contingency plan shall be updated annually. The plan shall address the objectives listed in Condition 4 and include:

- (a) An evaluation of the residual risk of the operation with regard to the neighbouring community and environment; and
- (b) A plan for the long term management of the site, in particular the area of open pits or consequent lakes and the Coal Creek water reservoir, and include details of on-going maintenance and monitoring requirements and restrictions on future use.
- (c) Describe in detail what needs to be done to:
 - i. Decommission the mine site in accordance with this consent;

- ii. Rehabilitate the mine site in accordance with this consent;
- iii. Comply with other conditions relevant to cessation of mining; and
- iv. The costs needed to comply with (i)-(iii).

MAP 1

