

Before a joint hearing of the

Dunedin City Council
Otago Regional Council
Waitaki District Council

**LUC-2016-230 and LUC-2013-225/A
RM16.138
201.2016.779 and 201.2013.360-1**

Under the Resource Management Act 1991

In the matter of applications by Oceana Gold (New Zealand) Limited for
resource consents for the Coronation North Project

Statement of evidence of Dale Oram for Oceana Gold (New Zealand) Limited

14 October 2016

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**anderson
lloyd.**

Qualifications and experience

- 1 My name is Dale John Oram.
- 2 I am General Manager of Macraes Gold Operation, owned and operated by Oceana Gold (New Zealand) Limited (**OceanaGold**).
- 3 I am a mining professional with a BSc Earth Sciences (Geology) from Monash University, Australia. I have thirty-seven years mining experience in both surface and underground mining operations within both technical and senior managerial positions. I have worked within multiple commodities across regional Western Australia and NSW with the last three years as General Manager at the Globe Mine, Reefton, West Coast, New Zealand and presently at the Macraes Gold Operation, Macraes Flat. As General Manager I am responsible for all aspects of the Macraes operations including the Coronation North Project.
- 4 I am also a member of the Australasian Institute of Mining and Metallurgy (**AusIMM**).

Scope of evidence

- 5 On behalf of OceanaGold I will provide background on OceanaGold and the Macraes Gold Operation. I will provide an overview of the proposed expansion of mining operations called the Coronation North Project. My involvement in the Coronation North Project has been to lead and co-ordinate the OceanaGold consenting team. I will outline the consultation we have undertaken and the measures that we intend to use to avoid, remedy and mitigate potential adverse effects of the Coronation North development.
- 6 My evidence will cover:
 - (a) Background to OceanaGold;
 - (b) A summary of the history of Macraes operations including the last consented development, Coronation project;
 - (c) A description of the Coronation North project including the existing environment;
 - (d) An outline of the alternative options considered during the development of the Coronation North project;
 - (e) OceanaGold's environmental commitment;

- (f) A summary of consultation undertaken on the Coronation North project and a response to submissions; and
- (g) Responses to the Councils' recommending reports.

Background to OceanaGold and history of Macraes Mine

Overview

- 7 OceanaGold is a wholly owned subsidiary of OceanaGold Corporation (**OGC**). OGC is a publicly listed company on the Australian, New Zealand and Toronto stock exchanges.
- 8 OceanaGold has a portfolio of operating, development and exploration assets within New Zealand. In 2015 OceanaGold strengthened our existing operations with the acquisition of the Waihi Gold Mine. We now operate the open pit mines at Macraes, Reefton (currently in care and maintenance) and Waihi and underground mines at Waihi (Correnso Underground Mine) and Macraes (Frasers Underground Mine / FRUG).
- 9 The Macraes Mine is located about 30 kilometres (km) to the northwest of Palmerston, in East Otago. The mining operation is located 1 to 2 km to the east of the Macraes village and is predominantly surrounded by farmland.
- 10 The Macraes Mine has been operating continuously since 1990 when a gold processing plant to treat ore mined from open pit methods was constructed and commissioned. Originally the processing plant capacity was 1.5 million tonnes of ore per annum but that has increased since through a series of upgrades. The plant now processes nearly 6 million tonnes of ore per annum including, until March 2016, ore concentrate from OceanaGold's Reefton Mine.
- 11 Today mining operations at Macraes Mine continue using open pit methods, combined with FRUG which has been operating since 2006. Annualised gold production is around 160,000 ounces. Not only is the Macraes operation is the largest producing gold mine in New Zealand, contributing significantly to the local, regional and national economy, it is the largest and most successful gold mine in New Zealand history.
- 12 In 2014 OceanaGold poured the four millionth ounce of gold from New Zealand operations. In 2015 OceanaGold celebrated 25 years of continuous operation at Macraes Mine.
- 13 OceanaGold currently provides about 535 jobs for employees and contractors at the Macraes operation, and a further 25 staff engaged in the Dunedin office.

Major Phases of Macraes Operation

- 14 Phase I: In 1990 the Macraes operation was consented to allow the processing plant construction, the mining of Round Hill and Southern pits and the construction of associated structures including the earlier waste rock stacks, roads, tailings and water storage dams.
- 15 Phase II: In 1996 the Macraes operation was consented to allow the mining of Golden Point, Innes Mills and Frasers pits and associated waste rock stacks and increased tailings storage. This consent (LRC96/98) required mining operations to cease no later than 31 August 2012.
- 16 Phase III: In 2011 the Macraes Phase III (**MPIII**) consents were put in place to allow mining to continue beyond 2020. The suite of consents included provision for:
 - (a) A new tailings storage facility called Top Tipperary Tailings Storage Facility (**TTTSF**) to be constructed in the upper Tipperary catchment basin to increase consented tailings storage capacity from 81 million tonnes (**Mt**) to 132Mt;
 - (b) Construction of new waste rock stacks and extensions of existing rock stacks to increase the total consented tonnage from 850Mt to 1,180Mt;
 - (c) Road realignments (Macraes-Dunback Road and a portion of Golden Bar Road);
 - (d) Expansion of existing open pits;
 - (e) Continuation of development of FRUG (mining in FRUG commenced in 2006 after underground consents were obtained);
 - (f) A new fresh water storage dam in Camp Creek (a tributary of Deepdell Creek) that will fill from flood flows and be used to support flows in Deepdell Creek in dry periods so as to ensure water quality is maintained;
 - (g) Management of surface water from expanded mining infrastructure by diversions and new silt control dams; and
 - (h) A revised community support closure strategy.

The majority of MPIII activities operate within the Waitaki District Council's Macraes Mining Zone. However, activities outside the Zone were also authorised, for instance the Camp Creek dam and reservoir are located within the Rural Scenic Zone.

- 17 A slip in the Frasers open pit in 2014 suspended operations in that pit, as further described below, and with it much of the development of the pit and waste rock storage envisaged in the MPIII applications. However, the tailings storage capacity consented as part of the MPIII project continues to sustain operations at other parts of the Macraes site, including Coronation and now Coronation North.

Coronation Project

- 18 OceanaGold has an active exploration programme to identify and define further gold resources that can be developed as part of the Macraes Gold operations. The line of strike at Macraes extends in a northerly direction towards Hyde, and areas within the Dunedin City boundary have been identified as prospective. The Coronation project was the first of those. Coronation North is a continuation north along line of strike, and with drilling continuing I am hopeful that additional gold resources will be identified in the future.
- 19 In 2013 OceanaGold consented Coronation - a 62 hectare (ha) open pit, associated 94Mt waste rock stack covering 105ha, and other infrastructure (haul road, diversions, silt ponds and so on). Coronation pit and infrastructure straddles the local authority boundary between Waitaki and Dunedin City Districts. We obtained a land use consent for Coronation from the Dunedin City Council (**DCC**) and Waitaki District Council (**WDC**) and various water and discharge permits from the Otago Regional Council (**ORC**).
- 20 The Coronation project elements within the Waitaki District were mainly zoned Rural Scenic and within Dunedin City were underlying rural zoning with a High Country Outstanding Landscape Area (**HCOLA**) overlay.
- 21 The Coronation project elements are shown on the aerial photograph of the built elements of the Macraes Gold Project attached.
- 22 OceanaGold was fortunate to have the Coronation consents in hand because in 2014 a large slip in Frasers Pit closed the pit and access to FRUG for a period. Operations at Coronation were brought forward in the mining schedule and, by virtue of this, potential workforce redundancies were avoided.
- 23 As a consequence, mining at Coronation is going to be completed more rapidly than originally planned. Instead of campaign mining over 3 years the work at Coronation has been carried out continuously. Stages 1 and 2 of the Coronation pit have been completed, and we are planning for the remaining two stages to be mined concurrently with the development of Coronation North. It is therefore critical for the Macraes operation that we obtain consents for Coronation North as soon as possible so that we can integrate the development

at Coronation North with the mining and rehabilitation of Coronation pit and waste rock stack.

Planning Instruments

- 24 Before I explain the Coronation North project I would like to comment on the dynamic planning regime we find ourselves in. This consenting process comes along at an interesting time in the development of planning instruments. OceanaGold is familiar with consenting projects under the operative provisions of the Otago Regional Policy Statement (**RPS**), Dunedin City District Plan and Waitaki District Plan (**WDP**). But the instruments are potentially changing and some of the changes are very concerning to us. We have made significant submissions on the proposed Otago Regional Policy Statement (**PORPS**) and the DCC's Second Generation District Plan (**2GP**), have been to hearings, and will continue active involvement in both processes before these plans become operative to ensure the final provisions provide a sound basis upon which to make good decisions for the ongoing development of important mineral resources. We also expect to participate in the planned review of the WDP. It is really important that the planning instruments recognise the benefits of enabling mining developments like the Coronation and Coronation North projects in places that are considered significant. Currently the PORPS takes a fundamentally different approach than the RPS and does not seem to appreciate the consequences of this different approach to operations like the Macraes Mine. I look forward to continuing to see these planning instruments develop in a sensible and balanced way that enables mining.

Overview of Coronation North Project

- 25 The Coronation North Project is a further expansion of the Macraes Gold operation and will add about three years to the mine life. Most aspects of the Coronation North project are a continuation of the same mining approach that we are successfully using at Coronation.
- 26 The following matters do not change from the consented Coronation Project:
- (a) The Coronation North Project will use the existing haul road with additional infrastructure such as a crib room, toilet facilities and explosive magazines required. The current Coronation diesel storage and refueling facility will be utilised. The existing Coronation infrastructure will continue to be used as appropriate;
 - (b) The same mining fleet equipment that is being used for Coronation will be used for Coronation North Project;

- (c) The existing processing rate at the plant of approximately six million tonnes per annum will remain the same; and
- (d) Progressive rehabilitation of the waste rock stack, opportunistic pit backfilling and formation of pit lakes at closure.

27 The main features of the Coronation North Project will be:

- (a) Expansion of the currently consented Coronation Pit from a total area of about 62 hectares to about 85 hectares (an increase of 23 hectares), which will expand expected ore recovery from 5Mt to approximately 8.5Mt (including that already extracted by existing mining);
- (b) Reduction in size of the consented Coronation Waste Rock Stack (**WRS**) from a currently consented 94Mt (an area of approximately 105 hectares) to approximately 29Mt (an area of approximately 41 hectares). This is a reduction of approximately 65Mt (and 64 hectares in area). The consented maximum height of the Coronation WRS will remain 730 mRL;
- (c) Construction of a new Coronation North Pit to cover a maximum potential area of 63 ha, estimated to contain approximately 9Mt of ore (for total additional ore stocks comprised in this application of 12.5 Mt);
- (d) Construction of a new Coronation North WRS. The maximum volume of waste rock will be 280 Mt (a maximum potential area of about 230 hectares). The maximum height will be 695mRL. The Coronation North WRS is capable of containing the total excavated waste material from Coronation North Pit and the Coronation Pit expansion. With the potential for opportunistic backfill placement within the Coronation pits, the size of the WRS may reduce in proportion to the amount of backfill placed in the pits;
- (e) Extension of the existing haul road by 2 kilometres to the north;
- (f) Variation of the realignment to unformed Matheson Road that was consented for Coronation Project;
- (g) Potential construction of Coal Creek freshwater storage dam to be used to supplement natural low flow periods and dilute sulphate within discharged mine water;
- (h) Construction of new temporary buildings adjacent to Coronation North Pit; and
- (i) Creation of diversion drains, silt control dams and sediment control facilities surrounding the pits, waste rock stacks and haul road.

- 28 The proposed dam may not be required or may be reduced in scale (or possibly located elsewhere) as a result of OceanaGold's ongoing work to identify viable alternative mitigation methods to ensure the site, at all times post-closure, achieves water quality year-round, including during low-flow conditions. OceanaGold intends to consent the proposed dam, as the fall-back solution, but before it seeks to activate those consents we will provide the ORC with a mitigation and best practicable options (**BPO**) report which identifies whether the dam is the most appropriate way to ensure water quality. We will ensure that report is independently peer reviewed by an external expert. You will hear evidence from Paul Weber on some of the work that has already been done to identify management options to control water quality.
- 29 We note, and are sympathetic to, the wishes of the Macraes community that the freshwater dam is built to provide a water source for farming when the site returns to pastoral use at closure. This is one of a number of competing land use considerations that the panel will need to consider. However, the consensus of the expert evidence on ecological and heritage effects favours the proposal as it stands, to build the dam only if necessary.

Existing Environment

- 30 It is important to note that the existing environment of the Coronation North project has already been widely impacted and modified by the predominant land use – farming – and some historic mining activity. This is apparent in the large areas of pastoral land which have been cleared of indigenous vegetation. Also by the already impacted waterways of the Mare Burn catchment.
- 31 Our aquatic ecology expert Dr Ryder recorded the following evidence of stock damage in his assessment¹:
- (a) To the channels of Maori Hen Creek, particularly in the lower reaches;
 - (b) Significant stock pugging of the bed and channel margins of Trimbells Gully tributary;
 - (c) Heavy grazing by cattle/sheep and the margins and channel well tramped in Trimbells Gully Creek, and evidence of stock disturbance throughout the fish and invertebrate monitoring site TC01; and
 - (d) The Coal Creek catchment suffers from heavily degraded physical habitat, due largely to cattle and to a lesser extent sheep trampling and pugging.

¹ Appendix 8 of the AEE, section 2

- 32 Dr Ryder also observed that in Coal Creek historic mining and farming activities had significantly modified watercourses through straightening and diverting of channels and damming of gullies. He considered water quality was likely to be characterised by elevated sediment loads and nutrient concentrations. Green algae is common and indicative of high nutrient levels.
- 33 I raise this to provide some balance. Although you will hear a lot about the ecological values of the project site during this hearing, please bear in mind that it is not a pristine or uninfluenced natural environment, and that the scale of the impacts mining has had and will have within the broader Macraes Ecological District is but a fraction of the impacts caused by farming.

Alternative options

- 34 While the location of the gold resource determines where the pit must be located, alternative options were considered in the development of the Coronation North project for possible locations of the Coronation North WRS. The final location was driven by its proximity to the Coronation North Pit, which reduces haulage of waste rock and also provides the ability for cost effective backfilling of Coronation and/or Coronation North pits if the opportunity arises. Opportunistic backfilling would reduce the final size of the WRS.
- 35 Also the natural topography provides opportunities for maximum storage in gullies, which reduces the overall height (and therefore visibility) of the WRS.
- 36 Since it was initially designed, and in response to submissions, the final footprint design of the WRS has been modified to avoid impacting some archaeological sites and some significant indigenous vegetation. This was an extensive and time consuming project requiring a high level of technical expertise and was not a standard design application.

Environmental commitment

- 37 OceanaGold operates the Macraes Gold operations within the framework of our Group Environment Policy. A copy of the policy is attached at Appendix 1. In all our operations in New Zealand and internationally we strive to make an overall positive contribution to the environment. We avoid, remedy and mitigate adverse effects. We operate as efficiently as we can to maximise benefits and reduce wastage and unnecessary costs (both financial and environmental). We seek to continually improve our environmental performance. Over 25 years of operations at Macraes OceanaGold has demonstrated it is able to operate a large mine in a way which respects the environment within which we operate. While the nature of mining means that some adverse effects cannot be avoided, and there must inevitably be changes to things such as landscape, biodiversity, and end-of-mine land use, these sorts of effects are always taken seriously, and

appropriate mitigation, rehabilitation and compensation practices are used to ensure that overall the concept of sustainable management is promoted.

- 38 To the extent that we can, we seek to internalise the effects that mining has. By that I mean that we tend to own the land upon which major mine-related activities like the Coronation North project occur, and we own the surrounding land thereby creating an effective buffer between our active mining activities and our neighbours. This works well, and means that we do not have issues with effects such as noise, vibration from blasting, dust, lighting and so on.
- 39 However, there are some effects that cannot be fully internalised. For example, some aspects of the mine are clearly visible from adjacent properties or public roads, and sometimes it is necessary to temporarily or permanently close and relocate roads where the road alignment coincides with the necessary location of a pit or other infrastructure. When this happens we are required to ensure the adverse effects on people are appropriately managed.
- 40 By their very nature mineral resources are fixed in location. The location of gold is fixed by geological processes over which we have no control and if we want to access and use those resources we can only do so in the places where they exist. As a consequence, the effects that mining has on other values that co-locate with the mineral resource are often inevitable. While they can be and are mitigated, minimised and compensated, they cannot be avoided.
- 41 For example, open pit mining and associated waste rock stacks have inevitable and unavoidable impacts on the plants and animals that occupy the areas to be disturbed. The only way to avoid those impacts is not to mine in the first place, and then of course the consequence is that the substantial benefits of mining are not realised.
- 42 Where minerals are located within or near to ridgelines, as they are with Coronation and Coronation North, it is not possible to avoid impacts on those features when developing the resource. Instead, we ensure that the resulting modified landscapes created by the pits and waste rock stacks are shaped and contoured to fit into the surrounding landscapes. We do this in consultation with landscape experts and have achieved excellent results.

Mitigation

Ecology

- 43 This topic is covered in the evidence of Dr Thorsen, Dr Ryder and Debbie Clarke. I consider OceanaGold is offering to undertake appropriate mitigation measures to address the impact on ecological values arising from the project.

Heritage

- 44 This topic is addressed in Debbie Clarke's evidence. I consider OceanaGold will undertake appropriate mitigation measures to address any impact on heritage features arising from the project.

Water management – irrigation

- 45 Irrigation of WRS leachate to land would be consistent with land management post-mining where there will be a return to pasture and farming activities. We will assess irrigation as a potential mitigation option during the BPO assessment.

Consultation

- 46 During development of the Coronation North project OceanaGold identified some parties as potentially being affected by the proposed project. After the application was lodged and submissions closed it became apparent that some additional parties were interested in the possible effects of the project on them. OceanaGold has liaised with parties to explain the project and try to resolve concerns and mitigate potential effects where they might exist.

Submissions

Mr Neil J Roy - Support

- 47 Mr Roy supports the grant of consents for the Coronation North project with certain conditions. His primary interest relates to roading and dust. He:
- (a) Supports proposed roading conditions 13.3 and 13.4 which provide for the Matheson Road and Golden Point Road (north of Horseflat Road) realignments;
 - (b) Does not agree with proposed roading conditions 13.1 and 13.2 relating to Golden Point Road (south of Horseflat Rd), does not accept that Golden Pt Rd (south of Horseflat) is OceanaGold's private road, and does not accept that the Public Works Act process is the correct process to follow for road closure;
 - (c) Considers that large areas of the Coronation North footprint will be exposed at higher altitude and stronger winds, creating greater volumes of dust. His concern is that our proposed dust control measures will only partly eliminate the problem; and
 - (d) Seeks consent conditions that are realistic, achievable and complied with in timely manner.

Roading north of Horseflat Road

- 48 Since its earliest days, the Macraes mine has targeted a broadly continuous line of strike known as the Hyde-Macraes Shear Zone (the **HMSZ**). As its name suggests, the HMSZ runs broadly North-West to South-East between Hyde and Palmerston. It is bisected by the Macraes-Dunback Road and, spanning approximately 30 kilometres North to South, crosses a number of other formed and unformed roads. Consequently, roading is an area where some impacts from mining are unavoidable.
- 49 We have a number of places around Macraes mine where development has required roads to be moved. The best example is the Macraes-Dunback road which has been realigned several times over the years to allow earthworks to take place while still ensuring public traffic is able to move freely. As part of the Coronation project, and now the Coronation North project, we will have to realign an unformed part of Matheson Road which constitutes the boundary between the Dunedin City and Waitaki Districts. These roading changes are always done in conjunction with traffic engineers within the councils, and are subject to all the necessary statutory approvals.
- 50 As for the correct process to use to close the public roads north of Horseflat Road, OceanaGold has been guided by expert advice and is confident that the Public Works Act is an appropriate mechanism. OceanaGold will replace the unformed roads that cross through the Coronation and Coronation North project areas and vest replacement unformed roads in the appropriate Council.
- 51 It is worth noting that I, and also other OceanaGold staff, consulted with Mr Roy before the Coronation North applications were lodged and as a result of that agreed a preferred replacement alignment of the Golden Point Road. It will now follow the haul road alignment, which will provide better four-wheel drive public access than the alignment that was proposed during the Coronation hearing. In addition, the new final proposed alignment of Matheson Road now aligns closely with that proposed by Mr Roy during the previous Coronation hearing, and this post mining alignment has been resolved with Mr Roy.

Roading south of Horseflat Road

- 52 I comment on the roading arrangement south of Horseflat Road, running South to the point where it joins the access to the historic Battery site. The formed road that is known locally as Golden Point Road is in fact OceanaGold's private road. The historical records, including very early topographical plans, to which Mr Roy refers when he says it is a public road have been considered and referred to OceanaGold's surveyors for an opinion. A great deal of care has been taken to ensure the position taken is correct. The view remains, as it did

for the Coronation project, that this section of road is not public road. Mr Bowen will give evidence confirming this.

- 53 As it is a private road on OceanaGold's land public access can be restricted, but we are proud of our good relationship with the Macraes community and this is not done lightly. The temporary closure of this road during mining operations is motivated by the obvious and unavoidable need to ensure the mine's heavy earthmoving fleet and general public traffic do not mix. OceanaGold must ensure the safety of the public and its employees by removing the potential for conflict between mine vehicles and public vehicles. Safety is a paramount consideration. We have a standard operating procedure (**SOP**) containing safe work instructions for control of Horse Flat Road during carting of ore from the site to the process plant (attached at Appendix 2). Steps 7 to 13 are the process we follow to enable public vehicles to use the haul road south of Horse Flat Road. Mr Carr refers to the SOP in his traffic evidence.
- 54 Under the conditions already agreed by all parties (including Mr Roy) for the Coronation project, once mining operations and rehabilitation at Coronation North are completed the road will be amended to a standard suitable for use by public vehicles (as approved by WDC) and made available for public use. The road will be provided to WDC as public road. The WDC will decide separately whether to formally close the unformed legal road 'Golden Point Road' alignment and what process to use to achieve this.
- 55 Road conditions have varied due to both traffic and ground conditions and we will engage a consultant to inspect, review and report on current road conditions. This report will provide advice as to actions required to enable roads to be maintained to an acceptable standard. This report will be provided to Councils to enable consultation and agreed action plans.

Dust

- 56 Dust will continue to be monitored and mitigation actions for suppression maintained. Dust control is a critical safety aspect for mining operations as well as for the nuisance effect it may have on adjoining stakeholders. While short term atmospheric conditions cannot be controlled dust monitoring will continue to be used so as to enable the appropriate action to be taken to minimise any detrimental effect.

David & Jocelyn Kinney - Neutral

- 57 The Kinneys ask for conditions to remedy any effects on their stock and domestic water supply e.g. if water supply was lost that OceanaGold would provide a quick response and provide a long term alternative water supply. They also seek solutions to noise effects particularly at night.

- 58 We do not expect there to be any detrimental effects on other water users under normal and historic conditions. Should there be any change, we would consult closely with those effected to action a suitable and practicable mitigating solution.
- 59 Our noise expert has produced evidence indicating that noise will not be at non-compliant levels at the Kinney residence.

Craig and Erin Howard - Neutral

- 60 The Howards' submission is neutral but they are concerned by noise from the haul road nearby their residence, particularly at night time when weather conditions are still or foggy and sound carries. Atmospheric conditions are not able to be controlled but mitigation actions will be utilised as previously described.
- 61 The Howards also raise the issue of increased traffic on Horseflat, Matheson and Longdale Roads and a safety concern regarding interaction of mine traffic with the school bus route. Firstly, no mining equipment will operate on these public roads (mining equipment is restricted to the haul road) and it is only light vehicles that need consideration. Traffic should not increase as it will in fact be a quicker and more direct route for mine based light vehicles use the mine haul road. OceanaGold takes road safety extremely seriously. We will address this concern by introducing an internal policy which alerts staff to the school bus route and timetable, and encourages them to use the haul road instead of the public roads where practicable during those times. Adherence to posted road speed limits and road rules is expected of all staff. Staff will be reminded of the relevant road code regarding school buses:
- If a school bus has stopped, you must slow down and drive at 20km/h or less until you are well past (no matter which direction you are coming from) if:
- the bus displays a school bus sign on which the lights a flashing, or
- the bus displays a school bus sign (with or without flashing lights) and has stopped for the purpose of picking up or dropping off school children.
- 62 The Howards raise the quality of drinking water with WRS seepage and increased sulphate concentrations forecast. Water quality monitoring, review and mitigation strategies are an integral part of the project submission and are well described in other technical evidence papers.
- 63 The Howards raise visual pollution - mitigation is described in the landscape impact assessment technical evidence.

- 64 The Howards raise increased dust – mitigation actions will be utilised as previously stated.

KTOK Consultancy Ltd for the three Runanga – Neutral

- 65 OceanaGold has liaised with KTKO before and since the application was lodged. Debbie Clarke outlines the nature of our consultation in her evidence. We consider that the suite of mitigation measures that we are offering will address the concerns raised in their submission and the Cultural Impact Assessment.

Heritage New Zealand Pouhere Taonga (HNZPT) – Oppose

- 66 HNZPT wants to ensure that any conditions of consent require appropriate measures to avoid, remedy, or mitigate effects on heritage sites including an Accidental Discovery Protocol. Before lodging the Coronation North application, and since, OceanaGold staff have met with HNZPT to discuss heritage issues. I am pleased that we have agreed in principle a suite of mitigation measures that will address their concerns. Debbie Clarke will outline the detail of this in her evidence.

Director-General of Conservation – Oppose

- 67 The Director-General seeks appropriate conditions (including monitoring) to address effects, compensation or offset to achieve no net loss & preferably net gain in biodiversity, and appropriate conditions to amend locations of land use disturbance where feasible. Debbie Clarke will explain the mitigation package that OceanaGold has been discussing with DOC. We consider it addresses these concerns and Dr Thorsen agrees.

Matthew & Kate O'Connell – Oppose

- 68 The O'Connells are concerned that their property receives a significant amount of dust and a substantial amount of noise from Coronation. Our experts will address these concerns in their evidence.

Macraes Community Inc. - Oppose

- 69 MCI is concerned about the maintenance of Horseflat, Matheson, Longdale & Four Mile Roads. As is suggested in the WDC/DCC Recommending Report (at paragraph 95) we will ask our traffic expert, to survey the local roads to determine whether there are any parts that need maintenance work on them despite relatively low traffic volumes. We will provide the survey results to the WDC for inclusion in the Council's roading maintenance programme if considered necessary.

- 70 MCI's concern about the safety of children using the Macraes Moonlight School Bus should be addressed by the internal safety policy I referred to above.
- 71 MCI considers WRS rehab is given low priority especially in isolated areas. Their concern is that rehabilitation will not be completed in a timely fashion and there will not be sufficient topsoil to rehabilitate properly.
- 72 Rehabilitation activities are often completed in stages so as to monitor and review practices to enable a long term naturally sustainable result and to best utilise all resources including manning and equipment within the mining production schedule Top soil is a resource that is not always in great supply. This can be due to natural landform history or where previous activity has in some cases has made the use of some top soil unfavourable due to an already heavy load of noxious plant seed material. Utilising such material is detrimental to a weed free environment and so requires a different approach to progressive rehabilitation.
- 73 MCI are concerned that gorse & broom on OceanaGold land has increased. OceanaGold conducts annual spraying on land under its direct control. Some leased land has shown increased weed and this is being investigated towards compliance with conditions.
- 74 MCI identify a concern about noise generated at night e.g. bulldozers working on the haul road at night that awoke residents. Bulldozers working at night on the haul roads would be a minimal activity as a result of maintenance and safety requirements. All such work would normally be scheduled to occur in daylight hours, but if this is not able to be scheduled or requires urgent intervention then a review of the prevailing conditions would be taken to ensure minimum noise disturbance.
- 75 MCI would like to see Coal Creek and Camp Creek dams built as community assets. Dams are a mitigation option to control possible water contamination, they have been included in the application but the final need and size will be determined following the monitoring and review of water quality.

Mark and Victoria O'Neill - Support

- 76 The O'Neills support the Coronation North Project but note that due to increased traffic on Four Mile, Longdale and Matheson Roads there will be a need for Councils to maintain these roads to a high and acceptable standard. The O'Neills understandably consider this important to keep their business running and for road user safety. Their concern should be addressed by OceanaGold's offer to have the roads surveyed by our traffic expert and the survey shared with the Council.

Affected party approval

- 77 It is worth noting that Mr Anthony Richards, who submitted on the Coronation Project with concerns about the water flow in the Mare Burn catchment, has not submitted on the Coronation North project. He provided us with his approval, attached at Appendix 3.

Conditions

- 78 I have reviewed the conditions of consent which OceanaGold is proposing, as detailed in the evidence of Debbie Clarke. They are based on conditions that were approved by Councils for the MPIII and Coronation consents. We have operated our projects successfully and in accordance with them. I believe they are appropriate consent conditions and that OceanaGold will also be able to comply with them for the Coronation North project.

Response to Recommending Reports

WDC/DCC

- 79 There is an error in the report at paragraph 179 where it says that the Economic assessment (Appendix 2 of the AEE) is that the project will add one year to mine life. The report assesses the project as providing a further **three-year** extension of the mine's life. Additional national, regional and local economic benefits of the project will result during that three-year period. Additionally, the extension of mine-life offered by Coronation North will provide time in which OceanaGold intends to continue exploration and technical studies targeting further mine-life extensions.

ORC

- 80 There seems to be some conflict within the report around the fish barrier consent condition volunteered by OceanaGold. At page 31 there is a recommendation that the conditions we proposed be implemented, but at page 39 "such a condition is not recommended". OceanaGold is happy that the fish barrier requirement be included as a consent condition including the requirement that we provide the specified funding to DOC. Then the obligation is enforceable. We can enter into a side agreement with DOC as to how the funding will be used.
- 81 At page 39 the report recommends a condition requiring the translocation of Taieri flathead galaxias and koura, similar to conditions on the Coronation consents. We do not agree that this is an appropriate condition. It is not recommended by our aquatic ecology expert Dr Ryder.

Conclusion

- 82 The Coronation North project will extend the Macraes mine life by 3 years. I am pleased to be able to plan for such a positive development.
- 83 OceanaGold has successfully mined at the Macraes Gold Project for over 25 years. Over that time the mine has contributed enormously to the local and wider economies. That contribution is set to continue as we develop new areas, like Coronation North. We have demonstrated the ability to operate a large mine in this environment in a responsible and appropriate way, and on the basis of advice from recognised experts. This includes having some unavoidable effects on significant values, but providing appropriate mitigation and compensation for those values in the same way as is offered for the Coronation North project.
- 84 OceanaGold will comply with the conditions of the resource consents granted for the Coronation North project.
- 85 I respectfully request that OceanaGold be granted the resource consents necessary for the Coronation North project to proceed.

Dale Oram

14 October 2016

Appendix 1 – OceanaGold Environment Policy

OceanaGold Corporation

Environment Policy

OceanaGold is committed to responsible environmental management across all of our business activities including exploration, all stages of the project development cycle (pre-feasibility, feasibility and construction), operations and closure.

We aim to respect, honour, protect and support biodiversity and the natural environments where we work by identifying, mitigating, minimising and managing our site based environmental impacts and our company environmental footprint.

Our commitment to responsible environmental management will be achieved through a cooperative approach between all OceanaGold personnel, including employees, contractors, business partners and visitors.

Specifically, we are committed to:

- assess and monitor the environmental impacts of all our activities;
- support the protection of biodiversity and integrated approaches to land use;
- comply with all host country environmental laws as a minimum;
- implement companywide environmental standards consistent with internationally accepted standards;
- the efficient use of resources to minimise waste and prevent pollution;
- promote accountability and positive attitude towards responsible environmental management;
- provide the necessary training, education, equipment and information to our employees and contractors to ensure greater environmental performance associated with our business activities; and
- continuously review and improve our environmental management and performance

We will ask our directors, employees, contractors, business partners and visitors to:

- maintain a positive attitude and open communications towards responsible environmental management;
- take personal responsibility for good environmental practice within our workplace;
- report all environmental hazards and incidents and undertake the corrective actions identified;
- comply with all policies, standards and procedures relevant to the work environment; and
- observe and support positive environmental management in others.

Through these commitments we will ensure continuous improvement of our environmental performance, resulting in healthy and sustainable environments that leave a lasting positive impact on our shared communities.

Signed:



Mick Wilkes
Managing Director & CEO

July 2014



Appendix 2 – Affected party approval

I (full name) Anthony John Richards of
(address) give
approval to the consent applications proceeding. I have authority to sign this approval on behalf of

Signed 

Date 22/6/2016

Name (co-owner / occupier)

Signed

Date

Note for Information: on the reverse is a summarised explanation relating to 'affected persons' and what the giving of approval means in relation to the Project.

Appendix 3 – Standard Operating Procedure

Sentry Duties Coronation / Deep Dell		Document Code:	
		Document ID:	MAC-351-PRO-017
		Major Process:	
		Location:	Macraes Open Pit
Risk Assessment Reference:	JHA 18019 – Sentry Duties	Risk Assessment Score:	1
Scope: Control of a public road (Horse Flat Road) during the carting of ore from Coronation to the Plant.			
Summary:			
Minimum Required Competencies: • OGL Site Induction • Open Pit Induction		Personnel Required: •	
Equipment Required: •		PPE Required: • Mandatory PPE • Gloves	
Hazards: • Public Vehicles & People • Heavy Machinery • Manual Handling • Lighting • Noise • Dust		Control Strategy: • Sentry, gates and cones • Sentry, gates, cones and 2 way communication • Gloves, gates on wheels • Lighting plant during night hours • Hearing protection • Water cart for dust suppression	
Related Procedures / Forms: Created from JHA 18019 – Sentry Duties Macraes Surface Traffic Management Plan MAC-255-PRO-020			
Safety, Environmental and Community Notes:			

Document Revision History					
Procedure Created:	29/9/2015	Author Name:	Glenda Beijeman		
Last Revision:		Last Reviewed by:	Name	Approved	Date
			Barney Kelly	Approved	17/5/2016
Next Revision Due:		Document Approved by:	Name	Approved	Date
			David Bartlett	Approved	17/5/2016

Revision Date:	Revision No.:	Reviewed by:	Approved by:	Description of Revision

#	Stage/Step	Key Points/Description
1.	Assign Sentry	One positioned on Golden Point entry One positioned on intersection of haul road and Horse Flat Road
2.	Close gates to the public to set up for hauling	Plant End: Either side of Golden Point Road to the battery Physical barrier 10m back from gates Coronation End: Either side of Horse flat road Physical barrier 10m back from gates 
3.	Communicate to Minestar / Supervisor of road set up for hauling	
4.	If public require access to cross the haul road at either end	Notify Minestar and operators Close gates to hauling Move cones / barricade to let the public vehicle cross the haul road
5.	Public vehicle has crossed the haul road	Open the gates for hauling Notify Minestar and operators Re-position cones / barricade 10m from the gates
6.	Access for OGL / Contractor vehicles onto haul road	Check at entrance area that haul road is clear Move cones to let vehicles onto haul road
7.	If public require access to travel on the haul road	Advise public to take alternative route – Horse Flat Road If want to travel on haul road proceed to step 8
8.	Inform Minestar and Supervisor	Communicate with other sentry Last truck coming through from either direction
9.	Close haul road to OGL operations	Inform OGL staff via Channel 1 that the road is closed and public is accessing the area
10.	Close gates across the haul road to halt OGL operations	Both Coronation and Plant gates to be closed
11.	Move cones for public to gain access to haul road	Advise to proceed and not to stop until they reach the sentry at the other end
12.	Sentry at end where public is exiting to inform sentry at opposite end of public exiting area	
13.	Close gates to public access to the haul road	Replace cones 10m from gates Inform Minestar / Supervisor and OGL staff via CH1 that the haul road is open to OGL personnel

14.	Public access haul road without permission	Try to stop the person gaining access Notify trucks on CH1 that a member of the public is on the haul road
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Questions:

1. Physical Barriers are placed how far back from the gates
 - a. 5m
 - b. 10m
 - c. 20m
2. Is the sentry required to close the road when trucks are hauling
 - a. Yes
 - b. No
3. If public is accessing the area, is the road closed to dump trucks hauling
 - a. Yes
 - b. No
4. Who gets notified if the public is accessing the area
 - a. Minestar
 - b. Operators
 - c. Both of the above

I have read and understood this SOP.

Name:		Signature:		Date:	
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