

**OCEANA GOLD (NEW ZEALAND) LTD**  
**RESOURCE CONSENT APPLICATION**

**Proposed Coronation North Mining Operation at Macraes Flat, North Otago**

**SECTION 42A REPORT – LANDUSE CONSENTS**

**DUNEDIN CITY COUNCIL AND WAITAKI DISTRICT COUNCIL**

**October 2016**

**REPORT TO:** Commissioners

**SUBJECT** Application for the Proposed Coronation North Mining Operation at Macraes Flat, North Otago

**PREPARED BY:** Andrew Purves Planning & Resource Management Ltd

**AUTHOR:** Andrew Purves

**DATE:** 5 October 2013

### **INTRODUCTION**

1. The Waitaki District Council and Dunedin City Council (“Councils”) are required to hear and decide on land use consent applications lodged by Oceana Gold (New Zealand) Ltd (OGL). The application is for a significant expansion to the Coronation<sup>1</sup> mining area which is located at the northern-end of the wider Macraes mining operation.
2. The Assessment of Environmental Effects (“AEE”) states that the mining and rehabilitation of the Coronation North extension would take approximately five years and would add approximately three years to the total mine life at Macraes Flat.
3. The existing mining at Coronation first commenced in July of 2014 and was expected to be mined on a campaign basis, taking up to three years and was to add one year to the total mine life.
4. This application straddles the boundary between the Waitaki District and Dunedin City District and therefore both Councils are required to hear and decide on this proposal.
5. This proposal also requires water and discharge permits and landuse consents from the Otago Regional Council (ORC). A joint panel of Commissioners is to hear and decide on all applications.
6. This report is prepared under Section 42A of the Resource Management Act, 1991 (“RMA”). The purpose of this report is to bring relevant information and

---

<sup>1</sup> Historic name of the mine.

issues that should be considered in deliberating on the proposal to the attention of the Commissioners.

7. I emphasise that any conclusions reached in this report are not binding on the Commissioners, and it should not be assumed that the Commissioners will reach the same conclusions, having considered all the evidence.
8. In preparing this report, I record that I am a planning consultant on my own account. I hold a Masters Degree in Science and I am a full member of the New Zealand Planning Institute. I have been employed in the practice of Planning and Resource Management for twenty five years.
9. In preparing this report I also note the following:
  - i. My involvement in auditing Macraes Mining operation on behalf of the Council began in 1993. I have prepared numerous Section 42A Reports on the operation since then and until recent times was also involved in auditing the Annual Work and Rehabilitation Programme that has to be submitted by OGL to the Councils.
  - ii. The following other experts have contributed to this report:
    - a. Wildland Consultants  
Author of a peer review report on ecological matters
    - b. Mr Barry Knox (Dunedin City Council)  
Author of a peer review report on landscape change and visual effects
10. All matters relating to the taking and diverting of water and the discharge of contaminants into water and to air are addressed by a Section 42A report prepared by the ORC. The deposition of dust onto land is an issue that can be relevant to the landuse consents although in this instance I anticipate that any dust-related conditions would be included only in an ORC permit. This has been the practise in the past for the Macraes consents. Matters relating to natural hazards are also relevant to both the district and regional councils. These matters are being addressed primarily in the ORC Section 42A report although there are geotechnical-related conditions attached in the draft landuse consent conditions.

11. This report is set out under the following headings:
- Introduction
  - Proposal
  - Applications Received
  - Submissions Received
  - History of the Gold Mining Operation
  - Statutory Considerations
  - Assessment under Section 104D of the Act
    - a) Adverse effects of the activity on the environment
    - b) Objectives and policies of the relevant plans
  - Assessment under Section 104 of the Act
    - a) Actual or potential effects on the environment of allowing the activities
    - b) Relevant provisions of the statutory planning documents
    - c) Part II of the Act
  - Conclusions
  - Annexure A: Draft Consent Conditions
  - Annexure B: Further Information Requests and Responses
  - Annexure C: Peer Review of Ecological Effects (Wildland Consultants)
  - Annexure D: Peer Review of Landscape and Visual Effects (Mr Barry Knox, DCC)
12. **Annexure A** contains draft conditions that have been suggested by Jackie St John from OGL. These were kindly supplied to me on 16<sup>th</sup> September. In essence the conditions are a repeat of those contained in the existing Coronation consent<sup>2</sup> with any track changes and justification for the changes included. They do not include any conditions relating to ecological matters as discussions between OGL, the Department of Conservation and Wildland Consultants are continuing. Many of these conditions are common to not only the Coronation consent but other consents held by OGL.

---

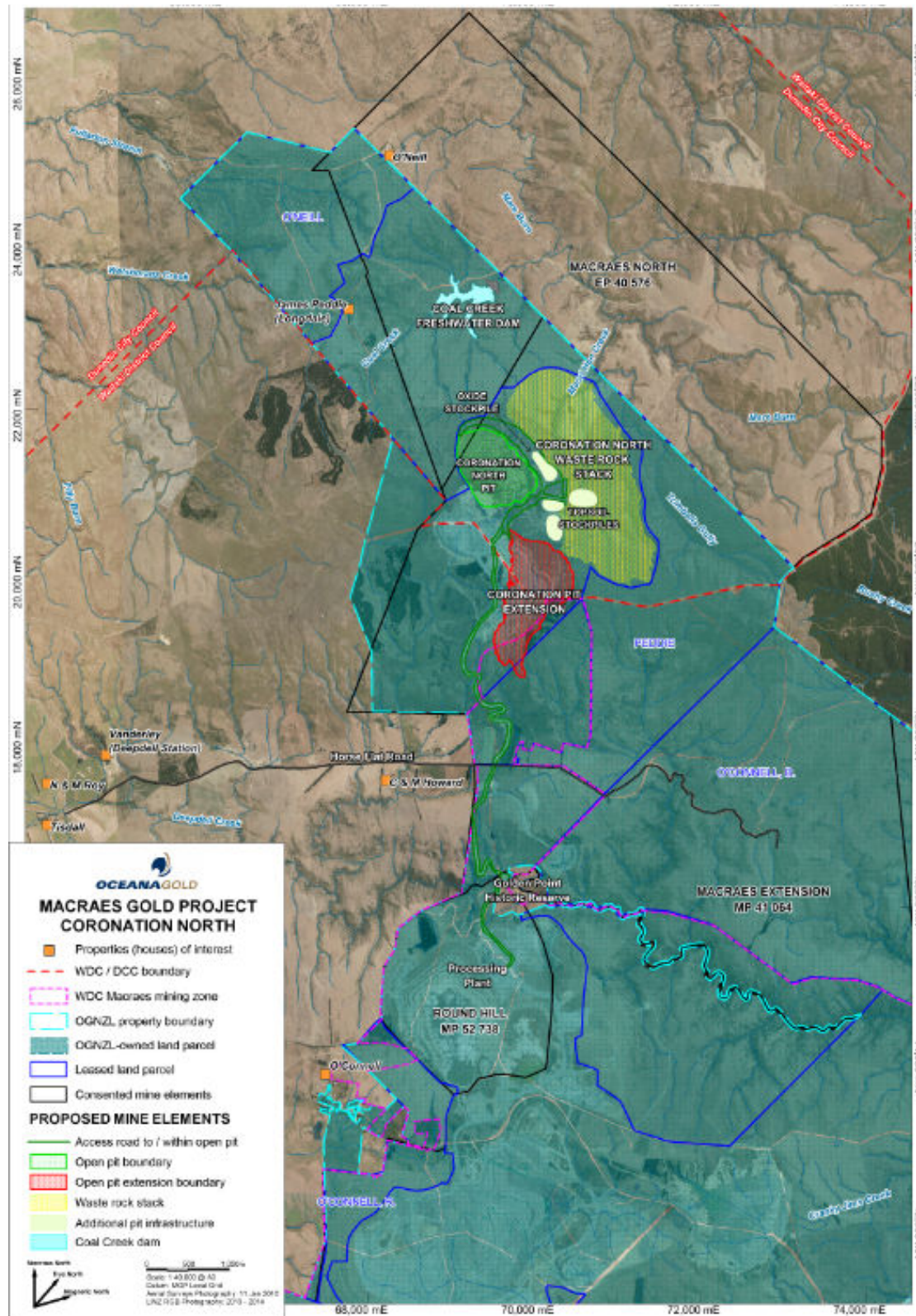
<sup>2</sup> WDC Reference 201.2013.360 and DCC Reference LUC-2013-225

## **PROPOSAL**

13. I do not intend to go into details of the proposal or a description of the surrounding environment, as this will be described in detail by the applicant and related witnesses. However, in summary, the proposed Coronation mining operation would involve the following:
- i. The existing consented Coronation Pit would be increased from a total area of about 62 hectares up to 85 hectares. It is expected total ore recovery would be approximately 8.5 million tonnes, up from 5 million tonnes. This is called Coronation Extension Pit and is shaded red on **Figure 1**. (A large-scale A3 map which shows the footprints and labels clearly is attached in the AEE.);
  - ii. A new open pit would be developed. Coronation North Pit would cover up to 63 hectares and is estimated to contain approximately 9 million tonnes of ore. The pit is shaded in green;
  - iii. A new waste rock stack would be constructed to the north-east of the existing Coronation Waste Rock Stack. The total volume of waste rock stack would be up to 280 million tonnes and would cover up to 230 hectares. The maximum height will be 695mRL. This is called the Coronation North Waste Rock Stack and is shaded in yellow;
  - iv. The existing Coronation Waste Rock Stack would not be constructed to the fully consented extent. The total volume of waste rock stack would reduce from a currently consented 94 million tonnes to approximately 29 million tonnes with an area of approximately 41 hectares. This represents a reduction of 64 hectares in area. The consented maximum height of the Coronation Waste Rock Stack will remain at 730 mRL. The disturbed land is seen on the map to the north-west of the Coronation Pit;
  - v. All water from the Coronation North Pit and Coronation North Waste Rock Stack and any overflow from the Coronation Pit lake would be directed to the Mare Burn catchment, a tributary of the Taieri River;
  - vi. A freshwater dam may be constructed within the Coal Creek catchment. The proposed dam would consist of an embankment with an approximate height of 27m. The dam would hold about 685 million litres of water

when at capacity with a footprint of 9.3ha. The dam would provide a constant water supply downstream, of about 5 litres per second, to supplement naturally occurring low flows in Coal Creek and Mare Burn for water quality purposes. This is called the Coal Creek FreshWater Dam and is shaded blue on the map in **Figure 1**;

- vii. The existing haul road would be extended by about 2km to the north to reach the Coronation North Pit.
- viii. The existing Coronation Project landuse consent conditions require the unformed Matheson Road to be realigned around the consented Coronation pit and waste rock stack so that an unformed public access (15 metres wide) is restored once mining operations cease. Since the footprints of the Coronation North Pit and Coronation North Waste Rock Stack overlap the consented features Oceana Gold are proposing to identify an alternative route for the realigned Matheson Road.
- ix. The ore would continue to be hauled from the pits to the Macraes processing plant via the existing haul road across Horse Flat Road and along the Golden Point Road alignment to the processing plant as shown on the map. In all other respects, the roading for the proposal would remain the same as for the consented Coronation project.
- x. New temporary buildings (including toilet facilities and crib room) may be established adjacent to the Coronation North Pit. Temporary buildings located by Coronation Pit would remain.
- xi. The portable diesel storage and refuelling facility installed adjacent to Coronation Pit would remain.
- xii. Mining operations would continue to occur 24 hours a day, seven days a week.
- xiii. On closure, buildings and other temporary structures would be removed, silt ponds would be decommissioned and likely become stock water ponds, the haul road would be decommissioned and rehabilitated.
- xiv. On the completion of mining and rehabilitation Golden Point Road will be reopened for public access.



**Figure 1:** Plan showing the footprints of the Proposed Coronation North Project. This Plan shows the haul road in green running down to Horse Flat Road and across past the Golden Point Historic Reserve (managed by DoC) and onto the processing plant. Source: OGL.

14. The overburden from the pit would be trucked and deposited on the proposed adjoining waste rock stack. The waste rock stack construction methodology would follow that used elsewhere: unoxidised rock forms the bulk and core of the waste rock stack which is then covered in a layer of oxidized (weathered) rock followed by a layer of subsoil/topsoil. The stacks are raised in approximately 20 metre lifts with slopes generally no steeper than 30 degrees to the horizontal. Cross-flow drainage berms below each lift are constructed to drain runoff from the profile.
15. The waste rock stacks and other disturbed areas are typically re-vegetated using a mix of ryegrass, cocksfoot and red and white clovers. Fertilizer is also applied. However, the AEE states that the area will be rehabilitated with both the use of native plants and exotic pasture that is compatible with the existing vegetation patterns on the site. With respect to native plants, the existing resource consent includes a condition that requires the preparation of an Ecological Management Plan and this Plan is to include detailed methods by which to rehabilitate planting of disturbed land with species including *Chionochloa rigida* subsp. *rigida* (narrow-leaved snow tussock), *Festuca nz* and *Poa cita*.
16. The original Coronation pit was predicted to slowly fill with water and take some 19 to 38 years before over-flowing and discharging into the Mare Burn. It is now predicted some 160 years for the pit extension to fill with water due to the increased pit volume and surface area. The Coronation North pit is predicted to take some 400 years to fill with water which is presumably due to the fact that it is located on the apex of the ridge and so has no catchment inflow.
17. As an aside, there is also a small basalt quarry operated periodically by OGL located near the end of Horse Flat Road. That part of Horse Flat Road from the intersection with Golden Point Road to the quarry has been deemed a road construction zone by WDC under the Local Government Act. This is to enable over-dimension quarry trucks to use Horse Flat Road until the turn-off with Golden Point Road where they presumably use the existing haul road.

### **APPLICATIONS RECEIVED**

18. The application was received on 26 May and receipted by the Councils on the 8 June 2016. The Councils requested further information on the 21 June 2016. The information was received on the 29 June 2016 and the application was then notified on 3 August 2013. The submission period closed on 19 August 2016. After reviewing the submissions the Council requested further information again on 21 June 2016 which was received 29 June 2016. The response to the RFI (which includes the questions) is attached in **Annexure B**.

### **SUBMISSIONS**

19. Eight submissions were received by the Councils. No submitter sought that the application be declined outright rather submitters were usually neutral towards the application but sought some issues be addressed and conditions imposed. One submitter MA & VC O'Neill supported the application.
20. The submissions in relation to landuse matters, in summary, are concerned with the following:
- i. A condition is required to ensure a Cultural Impact Assessment ("CIA") is completed and a review condition is required so that any cultural impacts can be addressed, if need be;<sup>1</sup>
  - ii. There is concern about a loss of amenity due to noise and submitters would like to see more consideration from OGL during times when weather conditions make noise from the mine louder;<sup>2, 3, 4</sup>
  - iii. There is a concern about increased traffic on the local roads and especially the school bus route;<sup>2</sup>
  - iv. In response to increased traffic on Horse Flat, Matheson, Longdale and Four Mile roads Councils need to maintain or upgrade roads to an acceptable standard<sup>5, 6</sup>
  - v. Oppose the continuation of roading conditions 13.1 and 13.2 that apply to the existing Coronation consent – this relates to the reinstatement of Golden Point Road between Horse Flat Road 6-months after pit excavations have ceased;<sup>7</sup>

- vi. Question raised about whether the relevant sections of Matheson and Golden Point Road have been stopped or temporarily closed to enable mining or the haul road to occur;<sup>7</sup>
- vii. Some decent rehabilitation is required and back filling of pits;<sup>3</sup>
- viii. There has been a deteriorating standard of rehabilitation currently happening at the mine site and concern that rehabilitation will not be completed in a timely fashion;<sup>6</sup>
- ix. Gorse and broom has increased on OGL land;<sup>6</sup>
- x. OGL recently constructed a new road which is of poor quality;<sup>6</sup>
- xi. The proposed Coronation project is inconsistent with a large number of ecological-related policies in various statutory documents (the submission lists the objectives and policies);<sup>8</sup>
- xii. The application as currently configured does not meet section 5 (2) (c) of the Act, Section 6 (a) and (c) of the Act or Section 7 (c), (d), (f) and (g) of the Act;<sup>8</sup>
- xiii. Appropriate rehabilitation is required with locally sourced native species so as to provide appropriate habitat for other species;<sup>8</sup>
- xiv. Further information is required on the effects of the proposal on native species and ecosystems i.e. lizards and invertebrates;<sup>8</sup>
- xv. Conditions are required to avoid, remedy or mitigate adverse effects and where this is not possible then appropriate compensation or offsets are used to achieve a no net less and preferably a net gain in biodiversity;<sup>8</sup>
- xvi. Conditions should be imposed that require mining footprints to be amended to protect high value natural features;<sup>8</sup>
- xvii. Consent should not be granted until appropriate avoidance or mitigation measures are identified and adopted by the application;<sup>9</sup>
- xviii. An accidental discovery protocol be included as a condition;<sup>9</sup>

<sup>1</sup> Te Rūnanga o Moeraki, Kāti Huirapa ki Puketeraki and Te Rūnanga o Ōtakāou (collectively known as Kāi Tahu)

<sup>2</sup> C.A. & E.M. Howard

<sup>3</sup> M & K O'Connell

<sup>4</sup> DB & Kinney & JW Speight Kinney

<sup>5</sup> MA & VC O'Neill

<sup>6</sup> Macraes Community Incorporated ("MCI")

<sup>7</sup> Mr Neil Roy

<sup>8</sup> Department of Conservation

<sup>9</sup> Heritage New Zealand

21. The O'Neill residence is shown on **Figure 1** (orange square) to the north of the project area. The Howard residence is on south side of Horse Flat Road not far west of the haul road. The Roy residence is near the western margin of the map while the O'Connell residence is to the south by the map legend. **Figure 2** below shows the property and approximate location of the Kinney residence.
22. There was a pre-hearing meeting held with OGL and some of the submitters on the 20<sup>th</sup> September. The minutes of that hearing are attached in the ORC documentation.

### **HISTORY OF THE GOLD MINING OPERATION**

23. The map on page 43 reflects the extent of the gold bearing structure which is called the Hyde-Macraes Shear Zone. Although not the most northerly mine historically, it would be the most northerly mine associated with the current open-cast mining operation. As seen on this map the Shear Zone in fact extends in a north-west, south-east direction. The maps prepared by OGL (Figures 4-1 and 4-2) are orientated along the Macraes-Hyde Shear Zone, thus 'mine north' is 45 degrees west of true north.
24. In December 1990 the open-cast gold mining operation at Macraes Flat began. The operation initially centred on Round Hill pit which has since been backfilled. The mining operation then expanded and over-time focus shifted to Frasers Pit once OGL's predecessor company received its major expansion consents in 1998. Today, Frasers Pit is by far the largest pit and the pit lake is projected to take some 200-250 years to fill before over-flowing into the Waikouaiti River.



**Figure 2:** Plan showing the footprints of the Proposed Coronation North Project and the Kinney landholdings (pink). The approximately location of the residence is shown as a dot on the top left landholding. Source OGL.

25. The haul road up to Horse Flat Road previously gave access to the Deepdell pits. OGL sought and obtained consents to create the Deepdell North and Deepdell South Pits and associated waste rock stacks in 2000. Deepdell North Pit, since backfilled, is located just south of Horse Flat Road while the Deepdell South Pit, still remains with a pit lake forming, is located further south above Golden Point Reserve.

26. The major expansion consent issued in 1998 assumed that the mining at Macraes Flat would cease in 2012. However, it became apparent that the mine life could be extended until approximately 2020 and OGL consequently sought and obtained consents in 2011<sup>3</sup> to continue mining (called the Macraes Phase III Project).
27. The possibility of mining Coronation was signalled in the Macraes Phase III Project although it was on the radar before this with OGL's application to explore the Coronation area being lodged in 2008.
28. The first Coronation consent was issued on May 2014 and the consent was first exercised in July of 2014.

### **STATUTORY CONSIDERATIONS**

29. As shown on **Figure 3** the majority of the proposed pit and waste rock stack footprints are located in the Dunedin City District. The majority of the haul road and gold processing plant is located in the Waitaki District.

#### **Waitaki District Plan**

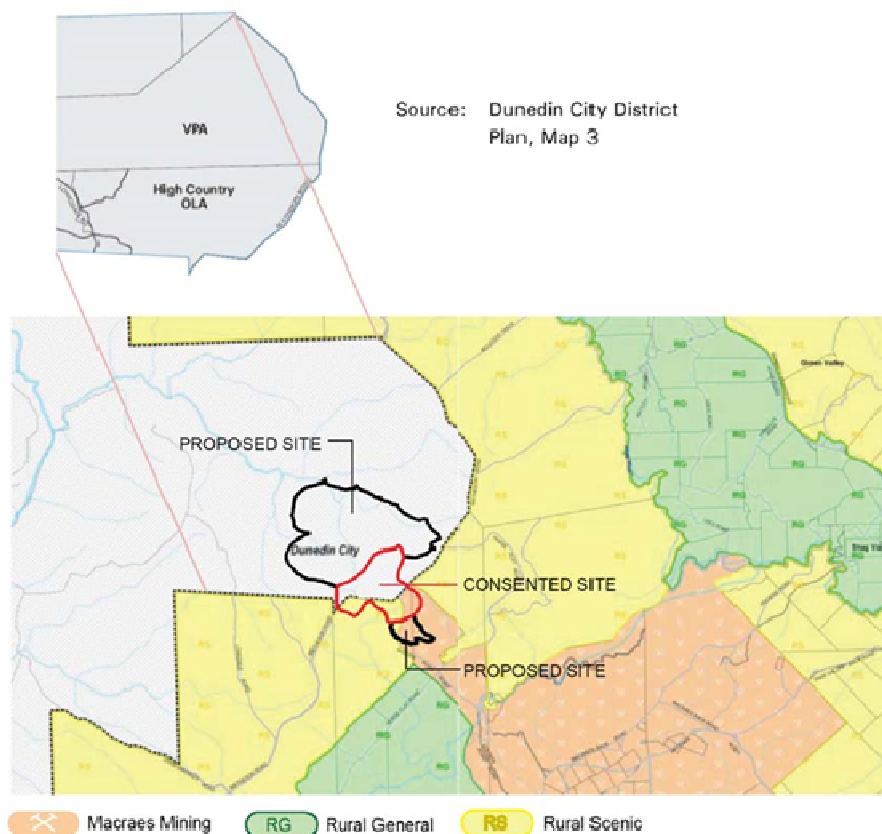
30. Part of the existing waste rock stack and part of the existing pit are located in the Rural Scenic Zone of the Waitaki District Plan ("WDP"). Part of the existing pit and the majority of the extension is located in the Macraes Mining Project Mineral Zone ("Macraes Mining Zone").<sup>4</sup> The haul road running down to Horse Flat Road straddles over the boundary between the Rural Scenic Zone and the Macraes Mining Zone several times before staying within the Macraes Mining Zone through to the processing plant.
31. The definition of mining in the Plan is as follows:  
  
*"means the use of land and buildings for the primary purpose of the extraction, winning, quarrying, excavation, taking and associated processing of minerals and any ancillary activity related to mining but does not include prospecting and exploration."*

---

<sup>3</sup> Some conditions were not confirmed until a 2013 Consent Order

<sup>4</sup> The objectives, policies and rules call it the Macraes Mining Project Mineral Zone while the Planning Maps refer to the area as the Macraes Mining Zone.

32. The activity of mining is classified as a discretionary activity in the Rural Scenic Zone under Rule 4.3.3 (4). In the Macraes Mining Zone the activity of mining itself is a permitted activity (Rule 6.3.1 (7)) although the excavation and construction of any pits, pit margins, waste rock stacks, embankments, tailings impoundments and any other dams, roads and tracks associated with mining is a restricted discretionary activity under Rule 6.3.2 (1).
33. The use and storage of hazardous substances (explosives and diesel) is also captured by Rule 16.1.2 (1) and is classified as a discretionary activity.



**Figure 2. Zoning of the Site**

Source: Waitaki District Plan, Maps 30, 31

**Figure 3:** Plan showing the relevant zones Waitaki District Plans and the Rural Zone of the operative Dunedin City Plan (with the overlays shown separately above) being overlaid with the approximate footprint of the proposed Coronation North Extension and the consented footprint. Source: Hegley Acoustics Ltd, Appendix 13 of the AEE.

34. The Assessment of Environmental Effects (page 21) lists the construction and use of temporary buildings a discretionary activity under temporary buildings Rule 10.1.1 (2). However, I doubt whether this is the case because the definition of mining includes any buildings that are ancillary to mining.
35. During the last hearing an issue arose concerning whether noise from haul trucks was in breach of Rule 6.5.1 and therefore rendered the application a non-complying activity. The reason for the breach was because the haul trucks, which are inherently noisy, move across the boundary between the Macraes Mining Zone and the Rural Scenic Zone (as noted earlier the haul road straddles the boundary between the zones). There was some legal debate over this issue. The Panel in summary decided the following:
- There was a breach of Rule 6.5.1;
  - It was considered to be a “minor technical breach” and was considered to be a potentially perverse outcome and not in line with the thrust of the Plan;
  - That the non-complying aspect of the proposal be unbundled from the other rules in the Plans.
36. The conclusion was therefore the proposed mining activity should be classified as a discretionary activity with the exception of the technical breach of the noise rules at the boundary of the Macraes Mining Zone. OGL did not appeal the decision. I therefore follow this interpretation.

### **Operative Dunedin City District Plan**

37. The mining operation is located within the Rural Zone of the Dunedin City District Plan (“DCDP”). It is also located in landscape management overlay area, called the High Country Outstanding Landscape Area (“HCOLA”) as well as being in a Visually Prominent Area (“VPA”) - see **Figure 3**.
38. The definition of mining in the Plan is as follows:
- “means the use of land and buildings for the primary purpose of the extraction, winning, quarrying, excavation and associated processing of minerals and excludes on-farm extraction of aggregate for the sole purpose of constructing and maintaining access within that farm.”*

39. The activity of mining is classified as a discretionary activity in the Rural Zone under Rule 6.5.6 (v) of the Plan. The mining is also independently captured by the earthworks rules set out in Chapter 17 because the volume of excavation and fill easily exceeds the limits for Landscape Management Areas.
40. There is an indigenous vegetation and fauna interim rule 16.6.2 in the DCDP that captures the clearance or modification of indigenous vegetation over certain areas specified on Map 79. The area limit for Coronation is 5 ha and therefore the proposal is captured by this rule and is classified as a discretionary activity. Likewise the proposal is captured by the earthworks rule that applies to indigenous vegetation and to wetlands and again is classified as a discretionary activity.
41. The use and storage of hazardous substances (explosives and diesel) is also captured by Rule 17.5.4 and is classified as a discretionary activity.
42. The proposal under the DCDP would therefore be classified as a discretionary activity.

#### **Proposed Dunedin City District Plan**

43. Dunedin City Council has notified its proposed second generation district plan (“p2GP”). Hearings are currently being held but no decisions have as yet been released on the Plan.
44. The project area continues to be zoned “Rural” and the web-site planning map notates the area being a “Rural High Country Zone.” This appears to have replaced the operative plan’s HCOLA and VPA described above. My understanding from Council staff is that no submitters have sought the reinstatement of the HCOLA or VPA in this locality. Therefore, I assume considerable weight can be placed on the fact that these overlays are to be removed.
45. Section 1.2 of the p2GP set out the rules that have immediate legal effect. Rule 10.3.2.2 concerns the clearance of indigenous vegetation and sub-clause ii states the maximum area of non-tussock species is 500 m<sup>2</sup> and tussock species is 10,000 m<sup>2</sup>. The ERA report (Appendix 6 of the AEE) provides an estimate of the vegetation types affected by the project. The clearance of both short and tall tussock grasslands would be captured by the rule. The seepage and ephemeral

wetlands and the bluff vegetation easily exceed 500 m<sup>2</sup> in total but I do not know whether individual areas exceed the 500 m<sup>2</sup> threshold. Vegetation clearance not complying with these rules is classified as restricted discretionary activities. The Council's discretion is restricted to the effects on biodiversity under Rule 10.4.3.3.

46. Mining is classified as a Discretionary Activity under Rule 16.3.3.13 and large-scale earthworks are classified as a restricted discretionary activity although I assume these rules do not as yet have any legal effect. Therefore the proposal would be classified as a restricted discretionary activity under the p2GP.
47. On the basis of this approach, the Commissioners firstly need to be satisfied that one of the gateway tests, pursuant to section 104D, are met in relation to noise being generated from the haul trucks i.e.
  - i. The adverse effects of the activity on the environment will be minor; or
  - ii. The application is for an activity that will not be contrary to the objectives and policies of a relevant plan.
48. If the Commissioners are satisfied that either one or both of the two tests under Section 104D are met, then they need to decide whether to grant or refuse the wider application under Section 104 of the Act, and may impose conditions of consent, if granted, under Section 104B (b) of the RMA.
49. In coming to its decision under Section 104 the Commissioners must, subject to Part 2 of the RMA, have regard to:
  - (a) Any actual and potential effects on the environment of allowing the activity; and
  - (b) Any relevant provisions of:
    - (i) a national policy statement;
    - (ii) a New Zealand coastal policy statement;
    - (iii) a regional policy statement or proposed regional policy statement;
    - (iv) a plan or proposed plan; and
  - (c) Any other matter the Commissioners consider relevant and reasonably necessary to determine the application.

50. In terms of Section 104 (1) (c), I do not believe there are any national policy statements relevant to the landuse consent application.<sup>5</sup> Reference is made to the Kāi Tahu ki Otago Natural Resource Management Plan (2005) by the Kāi Tahu Rūnanga although as noted below I do not believe the document in this instance needs discussion.

**Variations to WDC 201.2013.360 and DCC LUC-2013-225**

51. OGL also seeks to change conditions 13.1 and 13.3 of the existing Coronation consent on matters relating to roading. The changes are described on page 22 of the AEE. I note condition 13.3 set out on page 22 is incorrect. Condition 13.3 referred to in the AEE was the one issued by the Council which was subsequently amended by way of a Consent Order. This error has been rectified in the proposed conditions of consent attached in **Annexure A**.
52. To complicate matters further there is a problem with the Consent Order version in any event. The Consent Order accidentally deleted the requirement to reinstate Golden Point Road between Matheson Road and Horse Flat Road. I come back to that issue later on.
53. There was no updated plan provided with the proposed change to condition 13.3. The AEE instead states (page 22) that there was an intention to consult first with Mr Neil Roy on a new alignment for Matheson Road before furnishing it. The Plan of the new alignment is attached at the end of the draft conditions, attached in **Annexure A**.
54. This part of the Application is made under section 127 of the RMA, which in turn references the processes set out under sections 88 to 121. The status of an application under section 127 is a discretionary activity although section 127 makes it clear that it is only the effects of the “change” that are to be considered in terms of the effects both on the environment and on any persons. There is no consideration to be given to the effects of the consented development: that being the wider Coronation north mine development.

---

<sup>5</sup> There is a Proposed National Policy Statement of Indigenous Biodiversity but that is not yet operative.

## **104D ASSESSMENT**

### **Adverse Effects of the Activity on the Environment**

#### **Effects on Maori**

55. The Kāi Tahu Rūnanga have submitted on the application and ask for a condition that enables the Councils to review the conditions after receipt of a CIA, if there is a need to amend or add conditions so as to avoid remedy or mitigate any adverse effects on cultural values and associations. While this type of condition is somewhat unusual it was imposed as condition of the existing Coronation consent and so has been included in the draft conditions attached.
56. The Runaka also seek to introduce a clause to a review condition that also requires a dispute resolution process to be followed in the event of disagreement. Condition 1.7 from Ms St John proposes a dispute resolution process.
57. This matter has come up in previous consents and I have had reservations about introducing such a clause for two reasons. Firstly, the initiation of any review, if required because of the CIA, enables the Runaka to submit on the Review and, in effect, means any outstanding issues can be addressed during the Review process and at a hearing if need be. Secondly, any such conditions on a dispute resolution process would need to be in my view sufficiently prescribed so both parties understood how it would operate.
58. The Runaka may want to respond to the Condition 1.7 proposed by Ms St John although I still consider that a dispute process would be better placed in a Memorandum of Understanding (MOU) between the Runaka and OGL, if such an MOU were to be developed. I am for example unsure how the Councils can be a party to a dispute process when they are the consenting authority.
59. This is a matter that will need further attention at the hearing.

#### **Heritage Matters**

60. The applicant commissioned an archaeological survey, which has been prepared by Origin Consultants. Although the report was called an archaeological survey it does provide an assessment of both the archaeological and heritage values of the subject area. The Report has not been peer reviewed.

61. The survey and associated report appears to be thorough and has identified the various archaeological and heritage sites that may be modified or destroyed as a result of the Coronation project. These are archaeological or heritage sites associated with early mining at Coronation.
62. The report states that the project will have significant effects on the archaeological (mining-related) sites focused around the upper tributaries of Coal Creek, Maori Hen Creek and Trimbells Gully. The features include various alluvial workings and associated water races that were constructed to sluice the gold and also tramways used to transport ore. The features are relatively common at Macraes although the report states that the relatively good condition and interconnectedness of these features increases their rarity value.
63. The report notes that the location of mining operations is constrained by the location of the gold bearing deposits, and because of the scale of the proposal it is not possible to avoid negatively impacting on the features. The report states that the proposed waste rock footprint is to be modified to avoid at least some of the workings within Trimbells Gully and also some rectangular earthworks, which are possibly indicative of foundations for an earlier structure. The report states that the Coal Creek Water Reservoir cannot be relocated nor is it possible to modify the proposed waste rock stack within Maori Hen Creek.
64. The report concludes by saying that OGL staff will enter into discussions with Heritage New Zealand to formulate a suitable mitigation package to offset the impacts on these sites. The report also makes various recommendations on the recording of archaeological sites. As noted earlier, Heritage New Zealand has opposed the application until such time as appropriate measures have put in place to avoid, remedy or mitigate adverse effects.
65. Ms St John in the attached heritage conditions comments that an additional requirement to carry out an archaeological survey of the footprint of the Coal Creek Reservoir footprint should address the concerns of Heritage NZ. The submission from Heritage NZ is broader than just relating to the proposed Coal Creek reservoir; however, I leave this matter to the hearing. My understanding is that the modified footprint of the waste rock stack will be presented to the hearing.

66. OGL also engaged Mr Allingham to assess any possible remains of Maori origin in the project area. Mr Allingham states that Maori use to travel along the ridge in this area to avoid the rough country occupied by the Shag River valley. He notes that some of the well-defined gullies cut into the underlying schist that, in some places, could have provided shelter for Maori. The shelters with most archaeological potential have been marked by him. Again some changes to the eastern boundary of the proposed waste rock stack have been agreed to by OGL to avoid a possible urupa and to avoid a rock shelter.
67. Heritage NZ also seek an accidental discovery protocol be attached as a condition on any consent. From my experience this type of condition is not unusual although it strikes me that there is an element of double jeopardy in that a condition under the RMA is being used to ensure that the requirements of the Heritage New Zealand Pouhere Taonga Act, 2014 are being met. I cannot recollect such a condition being imposed previously on consents for the Macraes operation. This is presumably because there has been a history of detailed archaeological assessments carried out to support consent applications and subsequent ‘authorities’ to modify or destroy an archaeological site have been sought and obtained under Heritage New Zealand Pouhere Taonga Act, 2014. It does not appear that the submission prepared by KTKO Ltd is seeking such a condition in this instance.

### **Ecology**

68. The applicant commissioned a terrestrial ecological assessment prepared by ERA Ecology NZ Ltd (“ERA”). It covers an assessment of the vegetation, avifauna and herpetofauna (reptiles and amphibians). The instream communities are assessed by Ryder Consulting and the auditing of this report will be carried out by the ORC. The indigenous vegetation has been mapped and a range of community types have been recorded:
- Riparian herbfield and sedgeland;
  - Basalt contact seepage wetlands;
  - Ephemeral wetlands
  - Seepage wetlands;
  - Short-tussock grassland;

- Narrow-leaved tussock grassland;
  - Bluff vegetation; and
  - Shrubland.
69. The ERA report considered the vegetation to be of:
- High representativeness importance;
  - High rarity importance;
  - High botanical diversity importance (163 indigenous species recorded);
  - Moderate ecological integrity importance (due to approximately 27% of the land area being covered with exotic vegetation).
70. The impacts from the proposal on the vegetation communities was assessed as high both locally and nationally and very high overall (page 150 of the report attached as Appendix 6 to the AEE).
71. The potential impacts on a number of threatened, at risk or rare species were then evaluated separately and the overall project impact was rated from low through to high for a range of species.
72. In response to a further information request ERA carried out further assessment on the avifauna. The response report considers that 29 indigenous species and 21 exotic species have been recorded in the project area. The recovering eastern falcon, the South Island pied oystercatcher and the white-faced heron are now considered unlikely to be present in the project area but there is a possibility of rare visits. Overall ERA considers the ecological importance of the avifauna as being categorised as moderate to low and the overall project impact on these species as now being low (up from very low in the report attached to the AEE).
73. With respect to herpetofauna, three reptile species were recorded in the project area: the skinks *Oligosoma maccanni*, *Oligosoma polychroma* and gecko *Woodworthia* “Otago large.” These species play an ecological role in regulating invertebrate numbers and in dispersing fruit of native plants. The exotic whistling frog *Litoria ewingii* is also recorded. The magnitude of the project’s impact on these species at a local scale and national scale is considered to be moderate and overall a moderate impact.

74. In response to a further information request, ERA carried out a desk-top review on the likely impacts on invertebrates. The response firstly notes it is difficult to carry out assessments for a variety of reasons, including the scarcity of information both from a taxonomic and ecological standpoint, and there are few experts with the requisite skills.
75. ERA states that the project area is likely to contain a diversity of invertebrate species which is probably commensurate with the number, naturalness, and complexity of plant habitats that it contains but the extent of this diversity at the site cannot be evaluated. The presence of rare plant species within the project area may indicate that a number of rare invertebrate species could be present although ERA considers there is little evidence for this.
76. A separate assessment was carried out for the proposed coal creek water storage reservoir (Appendix 7 of the AEE). Despite the much smaller area involved there are five vegetation communities according to ERA which harbour threatened, at risk, and rare species. This is mainly due to the large schist bluff systems in the project area. The bird and herpetofauna communities in this area are considered relatively depauperate with few species at low (bird) or moderate (reptile) population densities. Despite the comparatively small area the overall impact assessments mirrored that for the wider project area.
77. At the time of lodgement of the application the AEE had a general list of measures to avoid, remedy or mitigate various ecological values. An “Impact Management Plan” prepared by ERA was provided to the Council on 9 June 2016. Section 3 summarises the project impacts on ecological features. Section 5 of the report discusses the issues of valuing the loss and notes it is a very difficult exercise. Section 7 of the report details the measures to avoid, remedy, mitigate and compensate for the adverse effects described in Section 3. The beginning of Section 7, somewhat unusually, states that the activities to be undertaken to recompense the predicted ecological impacts are proposed by OGL rather than being recommendations from ERA as such. However in Section 7.5 it implies support of the activities by stating that DOC might consider that there are some equally meritorious mitigation options such as covenanting or purchase of private land.

78. Section 5 of the report notes the difficulty in calculating the value of biodiversity and discusses the concepts of 'like for like' and 'like for unlike.' It then details the value of land approach. It states that in terms of terrestrial ecology a value \$400,000 has been calculated. ERA does not state whether it supports this approach but states it has been used at the Reefton project and appears to adopt it by summarising how this amount would translate into ecological mitigation set out Appendix 1 of the report.
79. The Council appointed Wildland Consultants Ltd to Peer Review the above reports (refer **Annexure C**). A number of experts from Wildlands were involved in the Peer Review. Wildlands carried out a preliminary audit of the ERA Reports contained in the AEE and an Impact Management Plan prepared by ERA and circulated on the 9 June.
80. As a result of the preliminary audit a request for further information was sought from the Councils. OGL replied to the request (refer to **Annexure B**). Wildlands audit completed in September attached in **Annexure C** outlines a range of concerns about the ecological information and the proposed mitigation and environmental compensation. In summary the audit concludes:
- The adverse effects on the indigenous vegetation is major given the number of Threatened, At Risk, and locally rare plants species within the proposed mining footprint;
  - While the work on the vegetation is comprehensive, it still lacks detail on the fauna i.e.
    - The invertebrates have not been adequately accounted for and it is quite likely that invertebrate diversity is high given the high diversity of plant species;
    - The avifauna information presented is limited and therefore unreliable;
    - The lizard information is comprehensive although the significant habitats for each of the lizard species present are not identified and the mitigation proposal is poorly developed.
  - Cumulative effects have not been adequately considered, and in the view of Wildlands these are becoming substantial in terms of the wider mine site and the Macraes Ecological District;

- The nature of mining means the avoidance and remediation of ecological values are largely impossible, which leaves mitigation and compensations as the main methods of addressing adverse effects; and
- The significant potential effects associated with the project warrant significant mitigation and/or compensation;
- The compensation proposed (at the time this report was written) was not considered sufficient and there needs to be legal protection of large areas of similar habitat closer to the affected area, as well as other methods such as rescuing species etc.<sup>6</sup>

81. As summarised earlier, the Department of Conservation also appears to have some fundamental concerns with the proposal.

82. There have been on-going discussions between DOC, OGL and Peer Reviewer (Wildlands). I understand there has been progress at the time of writing this report and I envisage further discussion would be had leading into the hearing. The conditions proposed by Ms St John have left a gap on this issue for now (Condition 15).

### **Landscape**

83. The applicant commissioned a landscape and visual assessment report, which was prepared by Opus. The report is largely a repetition of the report prepared for the earlier Coronation consents with an emphasis on visual rather than landscape effects. The assessment of cumulative effects for example continues focus exclusively on visual effects. The assessment also does not discuss the ecological or heritage findings contained in the ERA or Origin Consultant Reports in the context of effects on the landscape.

84. In essence, the report concludes that the mitigation measures used elsewhere at Macraes will also provide adequate mitigation at the Coronation site i.e.

- Careful design of the form of the waste rock stack to integrate it with the existing landform character of the area;
- Restoration, of the areas disturbed around the margins of the project; and

---

<sup>6</sup> As an aside, I also note that the present mitigation being carried out in Coronation footprint is set out in Annual Ecological Reports, as required under the conditions of consent. Wildlands mentions that it is difficult to follow exactly what mitigation has been completed.

- Removal and restoration of the haul roads used during construction of the project; and
85. The report finishes by noting the proposal is an extension of the previously consented activity and is not unexpected and will be seen in this landscape context as a continuation of the existing mining operation. This argument was also used for the proposed Coronation mine first established on the Taieri Ridge within the context of the wider Macraes mining operation.
86. Mr Barry Knox a landscape architect at DCC Peer Reviewed the landscape and visual assessment (refer **Annexure D**). He considers that the site is now not outstanding, noting that that the p2GP has removed the High Country Outstanding Landscape Area (HCOLA) notation from this part of the Taieri Ridge. The Peer Reviewer however considers whatever professional assessment of this landscape is referenced, there is however very little debate that the values are high.
87. The Peer Reviewer assumes if consents are granted, then the conditions of consent would continue to address the following matters:
- Careful design of the form of the waste rock stack to integrate it with the existing landform character of the area;
  - Progressive rehabilitation of the waste rock stack;
  - Restoration of the areas disturbed around the margins of the project; and
  - Removal and restoration of the haul roads used during closure phase of the Project.
88. The Peer Reviewer considers these measures appear to have been largely effective in mitigating the potential visual effects of the existing waste rock stacks, being the most visible of the mining elements that have so far been constructed as part of the larger Macraes Gold Project although notes the conditions should be adapted, and strengthened if necessary, when applying to Coronation North waste rock stack because the site is in a more sensitive environment.
89. A matter that has come up previously is whether there is need to “lock-down” the design of the proposed waste rock stacks so the proposed design mitigations are readily apparent at the outset. I agree with this approach in principle but it is

difficult to apply because of the unpredictability of the mining schedule, meaning the size of waste rock stacks often change. Therefore, I consider the existing approach of the conditions on the design and rehabilitation of the waste rock stacks are the most pragmatic.

90. However, I recommend one change to the conditions on rehabilitation. One of the conditions on rehabilitation needs to directly link to those rehabilitation-related conditions contained in Condition 15 (Nature Conservation Values).
91. OGL has previously accepted the need to at least replant pockets of waste rock stacks with indigenous vegetation, and this became a method in the Coronation Ecological Management Plan i.e.

*“rehabilitation planting of Disturbed Land with species including Chionochloa rigida subsp. rigida (narrow-leaved now tussock), Festuca nz and Poa cita”*

92. Given this requirement is for rehabilitation and was imposed not only for biodiversity reasons but also for landscape reasons, then I consider the above should be specifically cross-referenced into the rehabilitation conditions. So therefore I recommend the following be inserted (underlined) as follows or similar:

“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 now tussock), Festuca nz and Poa cita. Details of area, density and methods of planting are set out in the Ecological Management Plan required under Condition 15.X”

### **Effects on the Roding Network and on Traffic Safety**

93. OGL commissioned a report on traffic effects, prepared by Carriageway Consulting. The conclusions of this report are that is the roading network can easily cope with any additional traffic associated with mining activities.
94. The submissions from MCI, the Howards and the O’Neills suggest that there has been a substantial increase in traffic on the local roads (Horse Flat, Matheson, Longdale and Four Mile) and MCI assert that the roads are poorly maintained.

Carriageway Consulting acknowledge that when traffic flows are very, small changes in landuse can have disproportionate effects on the volumes. However, the report maintains the volumes of traffic recorded are commensurate with the rural nature of the roads.

95. I assume the average daily count shown on the table in the Carriageway report includes the ancillary traffic associated with Coronation mine. That being the case, the numbers are low in absolute terms. Notwithstanding, it might be useful if Carriageway Consulting completed a more thorough examination of these local roads to determine whether there are any parts that need work on them despite the low traffic numbers involved. The results of this work could be factored in the Council's roading maintenance programme if it was considered necessary.
96. The issue of mine-related traffic on the school bus has been raised. Users unfamiliar with the roads may not factor this in when driving to and from the mine-site. I think the suggestion that the company keep staff and contractors informed of the school bus route and its hours of operation through its safety plans has merit and I note that a comment attached to Condition13 by Ms St John states that OGL is committed to this.
97. I now discuss the issues raised by Mr Roy. Mr Roy's long-standing concern, in essence, has been the on-going closure of Golden Point, between Horse Flat Road and Golden Point Historic Reserve, to the public in favour of OGL so it can be used as a haul road. He is also wants to ensure that any roads or paper roads that need to be stopped for permanent features such as pits or waste rock stacks are being vested on alternative alignments elsewhere.
98. Golden Point Road between Horse Flat Road and Golden Point Reserve has had a history of being opened and closed to the public.<sup>7</sup> It was initially closed and widened so it could be used as the haul road route between the Deepdell pits and the processing plant during the early 2000s. Golden Point Road was then re-opened to the public. This was achieved by segregating part of the haul road off for public use. The rest of the haul road was not rehabilitated because OGL envisaged it might be used again for mining in the Coronation area, or possibly

---

<sup>7</sup> I understand it was deemed a road construction zone by WDC under the Local Government Act.

again in the Deepdell mine area if gold prices were sufficiently high to warrant these pits being re-opened.

99. As part of its assessment during the application to the first Coronation consent, OGL commissioned a report by Traffic Design Group to assess the effects on the proposal on the traffic network at the time. The report considered that the closure of the section of Golden Point Road between Horse Flat Road and the Golden Point Road intersection with the Historic Reserve would have a negligible effect on the transportation network because of the low numbers of public that use the road.
100. The report recommended the haul road and Horse Flat Road intersection is located on a rise to enable safe intersection sight distances. It also recommended various signage to alert users of Horse Flat Road of the impending crossing.
101. During my site visit to Coronation in June, the haul road was in operation. There were gates in place each side of Horse Flat Road and an attendant in place which I understand opens the gate for a vehicle using Horse Flat Road when it is safe to do so.
102. Mr Roy's submission to this application states that at no time since 2014 has there been any application pursuant to the Local Government Act for stopping or temporary closure of the affected parts of these roads. He also notes that the suggestion that the Public Works Act could be used for road stopping has not been substantiated.
103. This is a matter which is complicated not least because different statutes are involved. While there are road stopping or closure procedures under the LGA or Public Works Act, the RMA is relevant because the loss of use of these roads by the public can be considered an 'effect' on the environment. I am limiting my assessment to the latter.
104. Notwithstanding, I will firstly at least try to explain the reasons for this on-going dispute on that part of Golden Point Road between Horse Flat Road and the Golden Point Historic Reserve.
105. Prior to mining in this area the current haul road was a formed gravel road maintained by the Council and used by the public. As explained above, OGL received resource consents to mine the Deepdell and now the Coronation area

which was predicated on using this section of road as a haul road. In essence, Mr Roy's contention is that OGL (or WDC) have not over the years used the LGA correctly to close the road.

106. The position of OGL, as I understand it, is that the current haul road alignment is in fact on land owned by OGL and Golden Point Road is to the north of the haul road alignment. Therefore OGL are not intending to 'close' this part of Golden Point Road because in its view it does not need to. Instead, at the end of mining the company will vest the haul road alignment with the Waitaki District Council and reinstate to standards set out in proposed Condition 13.2
107. As I understand the alignment on the survey plan would never be suitable for a road and so the Council will end up with two roads unless it subsequently decides to stop the existing paper road eventually under the LGA.
108. OGL are intending to stop that portion of Matheson Road and Golden Point Road from Matheson Road down to Horse Flat Road using the Public Works Act and re-establish these roads on the new alignments.<sup>8</sup>
109. Turning to the actual or potential effects under the RMA, and as described earlier, Carriageway Consulting discusses the issue (para 7.1.4) stating that Golden Point Road between Horse Flat Road and processing plant<sup>9</sup> may be closed to the public, and this arrangement will be extended for a further two years. It states that traffic volumes on this part of the roading network prior to this restriction were extremely low and Horse Flat Road provides a suitable alternative route for any driver (noting that these will likely be limited to people living or working in the immediate area).
110. Although the discussion is rather cursory and there is no guarantee that mining will cease in two years, I agree that the use of road between Horse Flat Road and the Reserve would have been, and would continue to be, very low. The only other option, if the consent is to be granted, is to construct a public road more or less parallel with the haul road. I do not know whether this is feasible given the physiography of the land but in any event given the low usage of this road I believe this would be an unreasonable imposition.

---

<sup>8</sup> Although the haul road down to Horse Flat Road more or less follows the paper road

<sup>9</sup> Which is incorrect – it is closed between Horse Flat Road and the Reserve

111. However, I consider Carriageway Consulting should address this issue more thoroughly in evidence to the Panel.
112. Given those parts of Matheson Road and Golden Point Road have always been unformed paper roads I assume that the effects caused from the loss of public access to them would be negligible for the duration of mining.
113. Turning to the proposed conditions, I understand that the new alignment for Matheson Road has been presented to Mr Roy by OGL although I am unsure whether he agrees to it.
114. Condition 13 proposed by OGL include three main changes to that in the existing Coronation consent i.e.
  - a. First, the problem with the Consent Order has been rectified by reintroducing the requirement to vest with the Council Golden Point Road between Matheson Road and Horse Flat Road. However, OGL now propose to vest the haul road alignment rather than an alignment to the east;
  - b. Second OGL propose to vest the unformed road (as a fine weather four wheel drive track) after rehabilitation has been completed rather than 6-months after pit excavations have been completed; and
  - c. Third, existing Condition 13.4 was not considered necessary for this consent because it will remain in the existing Coronation consent.
97. My comments on these changes are as follows. With respect to first point this is welcomed because it would rectify the mistake in the Consent Order discussed earlier, and would presumably mean the Court would not need to be approached to amend the condition attached to the Coronation consent.
97. With respect to the second point, the proposal to vest the roads after rehabilitation is completed rather after pit excavation is completed is significant given there are no time frames on when rehabilitation is to be completed. Potentially these roads would not be required to be vested in the Council for many years, decades even. That said, the reinstatement of the roads could still be prolonged if final completion of the pit were to be delayed.
97. The machinery fleet used for rehabilitation is not large and consists of machinery that does not require a haul road. In my view I think a fixed time frame would be the best option as it would provide certainty for everyone

concerned. However, I accept that the time frame will need to be workable for OGL given issues such as vesting require Overseas Investment Office approval. I assume OGL will address this further at the hearing.

97. In terms of third point, OGL have not included the following condition that is in the Coronation consent:

*“The consent holder shall provide unformed pedestrian access that generally follows the orange line south of Horse Flat Road shown on “Coronation Project October 2013 WDC/DD LUC Consents Map 1” annexed.”*

97. Even though the above remains a condition on the existing Coronation consent I think the clause would be appropriate in this consent as well as a ‘belts and braces’ approach.

#### **Noise and Vibration Effects**

115. The applicant commissioned a noise assessment study, which was prepared by Hegley Acoustics. The report has not been peer reviewed. The report in essence has used a digital terrain model combined with sound power levels of various machines to generate predicted noise contours.
116. The report states that the highest predicted noise level experienced at the notional boundary of the closest neighbouring dwelling is 29dBA L<sub>10</sub> which is well within lower night time noise limit of 40dBA L<sub>10</sub> (or LAeq) as set out in the WDP, DCDP and p2GP. Figure 11 in the Report shows the modelled noise contours and the level of 29dBA L<sub>10</sub> at the Howard residence is generated from haul trucks using the haul road. The noise at the O’Connell residence according to Figure 11 is exposed to a noise level of less than 20 dBAL<sub>10</sub> and the Kinney residence less again.
117. The report acknowledges that noise from the mining may be heard when outside late at night when the background noise is lowest but even under these conditions there will be no adverse noise effects for the neighbours, and if the wind is above approximately 2m/s then mine noise will not be heard. I assume the O’Connell and Kinney residences have a direct line-of-sight and therefore can hear the mining activities in certain conditions when background noise is low. Nevertheless assuming the modelling predictions are reasonably accurate

then in the context of the allowable limits under the Plans I consider that any adverse effects are likely to be negligible.

118. MCI comment that bulldozers were recently working on the road at night and this woke residents in nearby houses although it does not state which nearby houses. I am unsure whether this was a one-off event that was not accounted for in the model.<sup>10</sup> This is for the applicant to comment on.
119. The Howards acknowledge that acoustic treatment work has been carried out, as required under the conditions of the existing Coronation consent although they would like the company to be more considerate during times when weather conditions make the noise from the mine louder.
120. As discussed earlier, I have recommended that the non-compliance of Rule 6.5.1, applying at the boundary of the Macraes Mining Zone, be unbundled from the other activities. In the context of noise from haul trucks and on the basis of the report from Hegley Acoustics it would appear that the effects from noise is no more than minor and would comply with first threshold test under section 104D.
121. The applicant also commissioned an assessment on the effects of vibration caused by blasting. The report was prepared by techNick Consulting Pty Ltd.
122. The conclusion is that the effects of vibration and blasting are well within the limits defined by AS/NZ Standard 2187.2 (2006) at the Howard's residence and at Longdale Station.
123. ORC engaged Tonkin & Taylor to carry out an assessment of vibration from mining. Tonkin and Taylor conclude that the vibration and airblast levels should be below expected limits at the Howard's residence but recommend a vibration monitoring plan be prepared. No submitters raised issues on vibration.
124. Condition 9 attached in **Annexure A** requires the consent holder to prepare a noise, airblast and vibration monitoring plan. The condition needs to be read in conjunction with Condition 7 that sets out the blasting and vibration limits. I recommend some minor changes to ensure that the plan applies to the

---

<sup>10</sup> Condition 8 attached in **Annexure A** applies to both construction and operation activities.

Coronation North project i.e. amend condition 9.1 and insert a new condition 9.2:

“9.1 Prior to exercise of this consent, the consent holder shall prepare a ~~update the~~ Noise, Airblast and Vibration Monitoring Plan.

9.2 The Noise, Airblast and Vibration Monitoring Plan for this consent may be combined with any Noise, Airblast and Vibration Monitoring Plan required by any other consent held by the consent holder for mining operations at Macraes Flat.”

### **Stability of Proposed Coronation Waste Rock Stack**

125. The applicant commissioned a number of geo-technical assessments from Pells Sullivan Meynink. Tonkin and Taylor were engaged by the ORC to Peer Review the stability assessments of the proposed waste rock stack. The Peer Review Report, which is attached to the s42A Report prepared by ORC, concludes that the design inputs and methods used to analyse the stability of the waste rock stack are considered reasonable and consistent with those adopted elsewhere at the Macraes mine. The conditions of the existing Coronation should remain in the consent, and have been attached in **Annexure A**. No submitters raised any specific issues on this matter.

### **Hazardous Substances**

126. OGL propose to store and use explosives and diesel at the Coronation site. OGL and its contractors have on-going experience in both the handling and storage of explosive materials and I cannot foresee any issues at this site.
127. An above ground 60,000 litre, double-skinned temporary storage tank is located at the mine site and will be removed after mining has been completed. The refuelling of vehicles will generally be undertaken from the storage tank or from a mobile service tank.
128. The DCDP discretionary activity rule also includes the following statement below the rule:

*“In addition to an assessment of effects as contained in the Fourth Schedule of the Act, the Council will require applicants to prepare a site management plan and an emergency response plan to be submitted with any application for resource consent required under this rule.”*

129. Although in my opinion the above cannot be a legal requirement, it is providing a strong direction for an applicant to prepare these plans. At the last hearing an emergency response plan was attached to evidence presented by OGL and I assume this would not have changed appreciably.

### **Progressive Rehabilitation**

130. MCI and the O'Connell's are concerned that there has been a deteriorating standard of rehabilitation currently happening at the mine site and there is concern that rehabilitation will not be completed in a timely fashion at the Coronation site.
131. This matter was raised at the last Coronation hearing as well. Given the comparative sensitivity of the site and the defined nature of the project, including a projected mining operation of three years, I suggested a time frame could be imposed on pit excavation and site de-commissioning, which include the completion of rehabilitation, if the Commissioners were of a mind to grant the consents. OGL opposed the time limit on the basis that the schedule of mining can be influenced by factors beyond the control of the company, including gold price, stormwater failures and equipment failures. No time limits were imposed.
132. Another approach would be to include more prescriptive conditions on rehabilitation rather than the narrative ones attached. That in all probability would be opposed by the company on the grounds of needing flexibility to manage its operation. Rehabilitation is specifically bonded for under the consent conditions and so this presumably incentivises the completion of rehabilitation to an extent.<sup>11</sup> There is also a requirement for three yearly reviews of how soil and vegetation is performing after rehabilitation.

### **Concluding Comments on Adverse Effects**

133. In my view the adverse effects of the activity on the existing environment at Coronation are significant because of the scale of the activity and the high ecological, heritage and landscape values being affected.

---

<sup>11</sup> That said I do not know how the rehabilitation is being verified as being completed and thereby being released from the bond requirements.

## **Objectives and Policies of the Relevant Plan**

### **Operative Dunedin City District Plan (DCDP) and the Proposed Second Generation Plan (p2GP)**

#### **Introduction**

134. The overall structure of the p2GP is similar to that of the DCDP. The proposed and operative plans contain:
- Chapters with ‘over-arching’ objectives and policies;
  - Chapters with zoned based policies; and
  - Chapters with objectives and policies on specific resources or values, including relevantly chapters on landscapes, biodiversity and on heritage.
135. The p2GP however has split the Rural Zone into seven separate zones although the primary reason for the split appears to be for descriptive purposes rather than differences in policy direction. Chapter 6 (Rural Zones) still contains objectives, policies and rules that apply to all the Rural Zones whereas Appendix 7 provides a description of the resources and values for each of the Rural Zones.
136. The proposed project area, as described earlier, is located in the High Country Rural Zone. Appendix 7 in summary describes the zone as being:

*“This highly significant and visible high country area contains distinctive and rugged ridges, and is centred around the Strath Taieri plain. It is characterised by strongly defined landform and minimal influence of human elements. The scale is large and expansive. Although much of the area is grazed and managed under an extensive pastoral regime, the vegetative cover, in the main, retains its natural patterns and character.*

*The landscape is highly coherent with rock outcrops creating particular interest. The skyline in many places is dramatic on account of these. The rugged character of the landform and the large scale of this landscape combine to create an effect which is distinctively Central Otago.*

#### *Values*

- a. *Large scale, open, expansive character. Highly coherent natural landform under an apparently largely unmodified grassland vegetative cover. The zone covers a high country area distinctive for Dunedin.*
- b. *Unique landforms, reminiscent of Central Otago. These include the Rock & Pillar Range (Patearoa), the Lammerlaw Range, the Lammermoor Range and elevated sections of the Taieri Ridge. Rock outcrops and tors are distinctive features.*

- c. *Predominantly pastoral landuse including intact scrub and snow tussock vegetation sequences progressing to subalpine herbfields, as well as some modified grasslands.*
  - d. *Takata Whenua values. Historic Māori trail across Taieri Ridge.*
  - e. *Limited visual impact of human imposed elements such as tracks, buildings and exotic tree plantings. The relative visual dominance of the natural landscape elements over these is a fundamental characteristic.*
  - f. *Human made elements which emphasise local character and contribute to visual quality, e.g. stone buildings, rock fence posts.”*
137. The description for the High Country Outstanding Landscape Area (HCOLA) is largely similar in the operative plan.
138. OGL has a number of submissions on the p2GP, including a submission that seeks that the subject area be rezoned for mining purposes and a submission seeking acknowledgement of the current mining in Appendix 7 described above. OGL has also supported the removal of the HCOLA. Hearings on these submissions have yet to be decided on and therefore only limited weight can be placed on the p2GP. That said, I understand from DCC staff that there are no submissions seeking the reinstatement of the HCOLA<sup>12</sup> or VPA and therefore full weight presumably can be given to the removal of these overlays.

#### Zoning Policies

139. Chapter 6 of the DCDP sets out the objectives and policies for the Rural Zone. The objectives seek to maintain the ability of the land resource to meet the needs of future generations<sup>13</sup> and to maintain and enhance the amenity values associated with the character of the rural area.<sup>14</sup>
140. In order to meet the objectives, the post-mining footprint, broadly speaking, would need to be rehabilitated in a manner that meets the needs of future generations and the mining operation and post-mining footprint would need to meet the expected amenity values for the area.
141. There is limited guidance from the policies because they focus on primary production matters although Policy 6.3.11 (page 6:20) provides for other activities appropriate in the Rural Zone if adverse effects can be avoided,

---

<sup>12</sup> Now called Outstanding Natural Landscape (ONL)

<sup>13</sup> Objective 6.2.1 (Page 6:10)

<sup>14</sup> Objective 6.2.2 (Page 6:10)

remedied or mitigated. The explanation refers to activities associated with the mineral resource.

142. Chapter 16 (Rural Zones) of the p2GP contains objects that seek to minimise conflict between activities in the Rural Zone<sup>15</sup> and to maintain or enhance rural activities and amenity values, which in terms of rural character relevantly includes maintaining or enhancing significant areas of indigenous vegetation and habitats for indigenous fauna and the other elements set out in Appendix 7 (described earlier).<sup>16</sup>
143. The policies only allow mining where adverse effects on the amenity of residential activities will be avoided or mitigated<sup>17</sup> and where there are no significant adverse effects from large scale development on rural character and visual amenity.<sup>18</sup>
144. The usage of the words “only allow” in these policies is unusual. I take it to mean the equivalence of the more conventional word “avoid” which makes sense under Policy 16.2.3.5 but less so under Policy 16.2.2.5.
145. The effect of this proposal on rural character in my opinion is significant primarily because of the scale of the project and the loss of significant flora in particular. Whether the proposal is completely contrary to (i.e. cuts across) the policy is dependent on the proposed mitigation (including rehabilitation) and environmental compensation.

#### Manawhenua

146. Chapter 5 (Manawhenua) of the DCDP contain policies on the need to consult with Manawhenua<sup>19</sup> and on avoiding, remedying or mitigating any adverse effects on waahi taoka resulting from landuse activities.<sup>20</sup> Chapter 2 (Strategic Directions) of the p2GP also states that effective and meaningful engagement with Manawhenua should occur at appropriate stages of the resource

---

<sup>15</sup> Objective 16.2.2 (Page 16:4)

<sup>16</sup> Objective 16.2.3 (Page 16:5)

<sup>17</sup> Policy 16.2.2.5 (Page 16:4)

<sup>18</sup> Policy 16.2.3.5 (Page 16:5)

<sup>19</sup> Policy 5.3.1 (Page 5:7)

<sup>20</sup> Policy 5.3.5 (Page 5:8)

management process which includes encouraging early consultation with applicants.<sup>21</sup>

147. It is acknowledged that Maori have an association with the area as a transportation route as set out in the report by Brian Allingham. I anticipate the CIA would examine and evaluate these policies in more detail against the proposal.

#### Landscapes

148. As discussed earlier, the project area is located within the HCOLA as well as being located in a VPA overlay of the DCDP.
149. The first landscape objective is to ensure that the city's outstanding natural features and landscapes<sup>22</sup> are protected and the associated policy requires the identification and protection of the important characteristics of these outstanding landscapes.<sup>23</sup> The explanation however also acknowledges that policy is not intended to stop all (landscape) change from occurring but rather to ensure any development is able to be integrated into the landscape without any adverse effects resulting on the landscape character and quality.
150. There is firstly a brief discussion on the character of the HCOLA and then a list of those features and characteristics to be protected including the high coherent natural landforms and the apparently large grassland vegetation cover etc.<sup>24</sup> A number of threats to the visual quality of these landscapes has also been listed, including the inappropriate siting and scale of tracks and other excavations as well as other threats such as removal of areas of indigenous vegetation.
151. As discussed earlier, the p2GP has removed the HCOLA and the VPA from the subject area. If the overlay had remained the mining would only have been allowed under proposed Policy 10.2.5.6 if the adverse on the values of the ONL were insignificant (c.f. Policy 16.2.2.5 described earlier).
152. To conclude, Coronation operation is located in an area that has high landscape values identified in both Plans. The policies in the DCDP seek to protect the

---

<sup>21</sup> Policy 2.5.1.2 (Page 2:108)

<sup>22</sup> Objective 14.3.1 (Page 14:5)

<sup>23</sup> Policy 14.3.1 (Page 14:7)

<sup>24</sup> Section 14.5.1 (b), pages 14:13 and 14:14

characteristics associated with HCOLA whereas the policy in the p2GP seeks to avoid significant adverse effects on rural character, which is defined in the objective and in Appendix 7.

#### Biodiversity

153. Chapter 16 of the DCDP (Indigenous Vegetation and Fauna) contains objectives that:
- Seek to enhance indigenous biodiversity, ecosystem integrity, and natural character through the retention of remaining areas of indigenous vegetation and habitats of indigenous fauna;<sup>25</sup> and
  - Recognise and provide for the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna.<sup>26</sup>
154. The policies seeking to achieve the first objective are concerned with encouraging the retention of these remaining areas, and to raise the level of public awareness. The policy to achieve the second objective is directive because it seeks to avoid the effects of landuse activities where these effects may compromise the protection of area of significant indigenous vegetation and significant habitats of indigenous fauna.<sup>27</sup>
155. The Peer Reviewer states that significant mitigation and environmental compensation would be required given the effects are significant. In essence the proposed mix of mitigation, offsetting and environmental compensation would determine whether this policy is met.
156. Chapter 10 (Natural Environment) of the p2GP contains a number of relevant policies under an objective which is to maintain or enhance indigenous vegetation and habitats of indigenous fauna.<sup>28</sup> Mining is only allowed where there is certainty that indigenous vegetation will be restored on land where it existed before the activity commenced.<sup>29</sup>

---

<sup>25</sup> Objective 16.2.1 (Page 16:3)

<sup>26</sup> Objective 16.2.2 (Page 16:3)

<sup>27</sup> Policy 16.3.3 (Page 16:4)

<sup>28</sup> Objective 10.2.1 (Page 15:3)

<sup>29</sup> Policy 10.2.1.7

157. Unlike the term “rehabilitation” the term “restored” means returning to the previous state. In my opinion this policy could not be achieved with the scale of mining proposed and nature of the vegetation communities that would be lost.
158. Furthermore, I do not consider that the proposal could achieve Policy 10.2.1.3 (Page 10:3) given that the policy seeks to limit indigenous vegetation clearance in rural zones to a size that avoids adverse effects on the biodiversity values of the area of indigenous vegetation; or, if avoidance is not possible, then ensure adverse effects are no more than minor.
159. The degree to which the proposal cuts across the first policy on restoration is dependent on the degree of direct mitigation and offsetting aspects of the proposal (rather than off-site environmental compensation).

#### Heritage

160. The DCDP provides limited policy guidance on heritage matters. There is a broad policy under Chapter 4 (Sustainability) that seeks to provide for the protection of natural and physical resources of the City commensurate with their local, regional, or national importance and the explanation to the policy refers to archaeological sites.<sup>30</sup>
161. Chapter 2 (Strategic Directions) of the p2GP includes an objective and policies on heritage but these are focused on the protection of identified heritage buildings and structures. Chapter 13 (Heritage) of the p2GP contains objectives and policies that are again focused on scheduled heritage buildings and structures. With respect to archaeological sites the objective states that Dunedin’s archaeological sites are to be protected from inappropriate development and use<sup>31</sup> but the policy is considerably narrower by requiring an archaeological authority to be obtained.<sup>32</sup> The explanation states the p2GP proposes to alert land and building owners to their responsibilities under the Heritage New Zealand Pouhere Taonga Act 2014 rather than duplicating the authority process by requiring additional resource consents for work that may disturb archaeological sites.

---

<sup>30</sup> Policy 4.3.4 (Page 4:8)

<sup>31</sup> Objective 13.2.4 (Page 13:8)

<sup>32</sup> Policy 13.2.4.1 (Page 13:8)

## **Operative Waitaki District Plan**

162. Part II, Chapter 16 (Rural), Section 16.7 addresses mineral extraction. Mineral extraction is anticipated generally provided adverse effects are avoided remedied or mitigated<sup>33</sup> and to ensure the land is rehabilitated sufficiently to enable establishment of activities appropriate to the area.<sup>34</sup>
163. As discussed earlier, the proposed Coronation mining operation is located in both the Macraes Mining Zone and Rural Scenic Zone under WDP. There is a specific policy that provides for the mining zone at Macraes Flat in recognition of the scale and intensity of the operation but while ensuring that adverse effects are avoided, remedied or mitigated.<sup>35</sup>
164. The zone statement for the Rural Scenic Zone states that this zone has particular visual amenity associated with the dominance of open-space vistas and landforms and the lack of intensive subdivision and landuse and the overall absence of buildings and structures. Nevertheless, the policies still anticipate that mineral extraction operations may occur in the Rural Zones provided an assessment is completed on the sensitivity of the area and degree to which adverse effects are avoided, remedied or mitigated.<sup>36</sup> The 'landscape' policies under the Plan seek to manage landscape change in the Rural Scenic Zone in a manner that maintains the overall character of the significant landscapes which forms the basis of the visual amenity of this zone.<sup>37</sup> The explanation notes that on-going landuse changes may occur provided it is appropriately managed.<sup>38</sup> There are also policies on the management of earthworks and vegetation clearance i.e.
- Encourage earthworks away from visually sensitive areas and where practicable towards the edges of the land and vegetation patterns;
  - Earthworks, where possible should be restored and finished to a contour sympathetic to the surrounding physiography and should where possible be revegetated with a cover appropriate to the site and setting; and

---

<sup>33</sup> Policies 16.7.2.1 and 2 (Page 133)

<sup>34</sup> Policy 16.7.2.4 (Page 133)

<sup>35</sup> Policy 16.7.2.3 (Page 133)

<sup>36</sup> Policy 16.7.2.6.3 (Page 133)

<sup>37</sup> Policy 16.8.3 (4), page 135

<sup>38</sup> Explanation and Reasons, page 138

- Use and development take into account the effects of indigenous vegetation clearance.<sup>39</sup>
165. In summary, the policies anticipate mining to occur subject to avoiding, remedying or mitigating adverse effects but there is further emphasis in the Rural Scenic Zone on managing activities in a manner that maintains overall landscape character.
166. In terms of biodiversity, the WDP has basically the same policy approach as the DCDP. The first objective seeks to maintain biological diversity, nature conservation values and ecosystem functioning by protecting Section 6 (c) areas and maintaining other areas with particular nature conservation values.<sup>40</sup> The second objective focuses on the maintenance or enhancement of the quality of water, wetlands, and rivers and their margins and the protection of them from inappropriate development.<sup>41</sup>
167. Areas identified as containing significant indigenous vegetation or significant habitats of indigenous fauna are to be protected.<sup>42</sup> There is also a general policy that seeks to manage landuse effects for other areas that contain conservation values in terms of maintaining connectivity and providing important habitat for species reliant on patchworks of indigenous vegetation (e.g. birds and lizards).<sup>43</sup>
168. There are also other policies including those seeking to manage the effects of use and development on the natural character of wetlands, rivers, and lakes and their margins, and noting that the Council takes the opportunity to promote the retention of indigenous vegetation and habitat when considering resource consent applications.<sup>44</sup>
169. In terms of culture and heritage the WDP Part II, Chapter 1 (Takata Whenua Values) recognises that Kāi Tahu Whanui has manawhenua of lands within the district.
170. The objective for heritage under the WDP is seeking the conservation and enhancement of the heritage values of the District, including historic places,

---

<sup>39</sup> Policy 16.8.3 (6) (f), (h), (i)

<sup>40</sup> Objective 16.9.2.1 (Page 141)

<sup>41</sup> Objective 16.9.2.2 (Page 141)

<sup>42</sup> Policy 16.9.3 (Page 141)

<sup>43</sup> Policy 16.9.3.4 (Page 142)

<sup>44</sup> Policy 16.9.37, 9 and 10 (Page 143)

waahi tapu sites, and archaeological sites, in order that the character and history of the District can be preserved and managed.<sup>45</sup> The associated policies are however narrower in scope and focus mainly on identifying and protecting important heritage items in the District Plan. There are no heritage items listed in Appendix B of the District Plan that are proposed to be modified at Coronation.

171. The second policy seeks to ensure that through the implementation of appropriate procedures within the Council's administration, all development and building proposals in the vicinity of recorded waahi tapu and archaeological sites are notified to the takata whenua and to the N.Z. Historic Places Trust, in accordance with the then Historic Places Act 1993, in order to enable the implementation of the archaeological provisions of that Act.
172. This policy is not entirely clear but suggests that where the Council understands that a development may be in the vicinity of recorded archaeological sites then both the takata whenua and the (renamed) Heritage New Zealand should be notified.<sup>46</sup> OGL has consulted with takata whenua and the AEE states that the authorisations under the Heritage New Zealand Pouhere Taonga Act, 2014 will be required to destroy or modify the sites within the footprint prior to mining commencing.

#### **Other Policies in the DCDP, p2GP and the WDP**

173. There are no open space or recreation policies that are particularly relevant to the proposal. Contributions for open space and recreation were taken in an earlier mining expansion consent and because the proposal does not result in any further demand on open space and recreation facilities for any Council then no additional contribution is necessary.
174. The issue of seismic risk has been addressed and according to experts can be addressed through conditions of consent. Therefore the proposal is consistent with the policies in the Plans.
175. All plans promote the safe and efficient use of the District's transportation infrastructure as well as seeking to avoid, remedy or mitigate the

---

<sup>45</sup> Objective 2.3.1 (A), page 19

<sup>46</sup> Policy 2.3.2 (2), page 19

effects on the environment resulting from the development of the network. As noted earlier, there issues of traffic safety have been raised by submitters although Carriageway Consulting considers the increase in traffic is minor and well within the carrying capacity of the road. There is also the issue of the closure of the formed road (Golden Point Road) between Horse Flat Road and the Historic Reserve. As discussed earlier, the closure of Golden Point Road is unlikely to be detrimental to the local transportation network given the road usage is low and there are alternatives to get to the Golden Point Historic Reserve.

176. There are also objectives and policies in the plans that broadly seek to avoid or mitigate adverse environmental effects arising from storage, manufacture, transportation and disposal of hazardous substances, having regard to the sensitivity of the environment in question.<sup>47</sup> The use or storage of hazardous substances is limited to explosives and diesel and should not be an issue providing adequate mitigation measures are in place.

### **Conclusion**

177. Based on the material I have read, the application is neutral to a good number of the objectives and policies in the Plans. The objectives and policies relating to ecological values and to a lesser extent landscape and heritage values are the most significant for this application in my opinion; and the proposal is either inconsistent or contrary to a number these objectives and policies. The degree to which the proposal cuts across these particular policies will be dependent on the proposed mitigation, offsetting and environmental compensation.

## **104ASSESSMENT**

### **Actual or Potential Effects on the Environment of Allowing the Activity**

178. The RMA defines the term “effect” as including:
- i. Any positive or adverse effect; and
  - ii. Any temporary or permanent effect; and
  - iii. Any past, present, or future effect; and

---

<sup>47</sup> Objective 12.2.2, page 81 and Policy 12.2.3 (2), pages 82 of WDP, and Objective 17.2.2, page 17:6 and Policy 17.3.8, page 17:10 of DCDP, Policy 9.2.2.11 of p2GP (Page 9:1).

- iv. Any cumulative effect which arises over time or in combination with other effects, regardless of the scale, intensity, duration, or frequency of the effect, and also includes:
  - v. Any potential effect of high probability; and
  - vi. Any potential effect of low probability which has a high potential impact.
179. I have already set out an assessment of the adverse effects of the activity on the environment based on the information to date and the evaluation of the Peer Reviewers. In terms of positive effects, the applicant commissioned an economic assessment, which was prepared by Brown Copeland (March 2013). It concludes that the Coronation project adds a year to the overall mine life at Macraes and with it consequential economic and employment benefits to the region.
180. There have been no submissions specifically on economic matters.
181. No peer review was carried out on this report but it is noted that the same author prepared an economic assessment of the Macraes Phase III project and the peer review at that time agreed with the overall findings of the author. There is therefore no reason to disagree with the general conclusions in this report on the Coronation North project.
182. The decision-maker needs to evaluate all effects, including cumulative effects, as part of reaching an overall decision. It is not appropriate to form any conclusions from this report in terms of cumulative effects because such assessment also involves air, water and geotechnical matters being discussed by the ORC Peer Reviewers. Nevertheless, to conclude this section regarding effects I observe the following below:
- The wider community will receive social and economic benefits from the extension of mine life;
  - The ‘operational effects’ such as noise, vibration and lighting and the use of hazardous substances appear to be manageable and should be able to be adequately addressed through conditions of consent; and
  - The effects on landscape and ecology are likely to be significant given the location and the scale of the proposed mining operation and therefore the

rehabilitation, mitigation, remediation and compensatory condition require particular attention should this consent be granted.

### **Relevant Statutory Provisions**

183. I have already discussed the relevant objective and policies of the WDP and DCDP in some detail and I will not repeat here. The only other statutory document of particular relevance to this report is the Regional Policy Statement (“RPS”). The operative RPS is under Review and the decisions on the Review have just been released. As a consequence the proposed RPS can be given more weight.
184. The operative Regional Policy Statement seeks diversification of the use of land resources in Otago<sup>48</sup> and one form of land use is mining. The RPS recognises that mineral deposits are a finite resource and consideration needs to be given to preserve access to such deposits.<sup>49</sup> The RPS also contains a range of objectives and policies about managing the effects of activities on the environment.
185. The proposed RPS continues to recognise the functional needs of mineral exploration, extraction and processing activities to locate where the resource exists. However, it is notable that preference is given to avoiding these activities, relevantly, in areas of significant indigenous vegetation and significant habitats of indigenous fauna and places or areas containing significant historic heritage.<sup>50</sup>
186. The proposed RPS also contains a policy that seeks to minimise adverse effects of mineral exploration, extraction and processing activities by again giving preference to avoiding significant indigenous vegetation and significant habitats of indigenous fauna and places or areas containing significant historic heritage etc. Where avoidance is not possible the policy then states that any significant adverse effects are to be avoided on those values in the area. It also includes a clause enabling consideration of offsetting for residual adverse effects.<sup>51</sup>

---

<sup>48</sup> Policy 5.5.4 (Page 55)

<sup>49</sup> Policy 5.5.8 (Page 58)

<sup>50</sup> Policy 5.3.5 (Page 77)

<sup>51</sup> Policy 5.4.8 (Page 82)

187. The proposed RPS also contains a specific policy on offsetting.<sup>52</sup> Notably the policy states that any offsetting should ensure there is no loss of rare or vulnerable species. It therefore difficult to see how the proposal can achieve the above described policies unless there is for example substantial rescuing and translocation of the rare or vulnerable species into other appropriate habitat. The final package of mitigation etc. is likely to determine the degree to which the proposal cuts across these policies.

### **Part II of the Act**

188. Any decision of the Commissioners is subject to the provisions of Part II of the Act.

### **Section 7**

189. Section 7 states that in achieving the purpose of the RMA, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to a range of matters, i.e

*“(a) kaitiakitanga:*

*(aa) the ethic of stewardship:*

*(b) the efficient use and development of natural and physical resources:*

*(ba) the efficiency of the end use of energy:*

*(c) the maintenance and enhancement of amenity values:*

*(d) intrinsic values of ecosystems:*

*(e) repealed.*

*(f) maintenance and enhancement of the quality of the environment:*

*(g) any finite characteristics of natural and physical resources:*

*(h) the protection of the habitat of trout and salmon:*

*(i) the effects of climate change:*

*(j) the benefits to be derived from the use and development of renewable energy.”*

190. The applicant has had regard to these matters when preparing the AEE and the above matters have been addressed in one form or another in this report. It is reasonable to conclude that the proposal would represent an efficient use of resources under Section (7) (b) because the plans anticipate mining in the rural

---

<sup>52</sup> Policy 5.4.6 (Page 81)

zones generally, part of the site is located in a dedicated mining zone under the WDP, and otherwise the subject area is comparatively near the existing mining operation.

191. With respect to Section 7 (c) the definition of amenity values “*means those natural or physical qualities and characteristics of an area that contribute to people’s appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes*”. The amenity in the Macraes area has been significantly changed with the mining operation although the proposed Coronation site is relatively remote and elevated from the rest of the mine site. The vista looking southwards back onto the mine site emphasises the scale of the current mining operation but once across the ridgeline the vistas in the other directions are dominated by open spaces and vegetation patterns associated with extensive farming.
192. The effects of noise have been raised. However, the evidence is that the noise levels while at times noticeable should not be significant.
193. Section 7 (f) focuses on the quality of natural or physical resources, rather than people’s appreciation of them. In this regard, the site of the proposed Coronation mining operation has high landscape values but certainly not unique to the wider rural area of both districts.

## **Section 6**

194. Section 6 states that in achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance i.e.:
  - “(a) *The preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:*
  - (b) *The protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development:*
  - (c) *The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna:*
  - (d) *The maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers:*

- (e) *The relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga.*
- (f) *The protection of historic heritage from inappropriate subdivision, use, and development.*
- (g) *The protection of recognised customary activities.”*

- 195. Sections 6 (a) is relevant and the loss of habitat associated with a number of wetlands and how the loss of the wetlands are to be offset is still an issue at the time of writing this report. Likewise Section 6 (c) applies and in short the proposal is yet to sufficiently demonstrate how the actual or potential adverse effects on significant indigenous vegetation or significant habitats of indigenous fauna are to be mitigated offset or compensated for.
- 196. Sections 6 (b) is now not considered relevant.
- 197. It is unknown at this time whether Section 6 (e) is relevant because a CIA has not been completed, nevertheless it has been accepted that this can be examined at a later date.
- 198. Section 6 (f) is also relevant. There will be a loss of historic heritage through a loss of early mining heritage. This is a matter that is an outstanding matter that will need to be addressed at the hearing.

## **Section 5**

- 199. The purpose of this Act is to promote the sustainable management of natural and physical resources. The Act goes on to define “sustainable management” as meaning:

*“managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety while –*

- (a) *Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and*
- (b) *Safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and*
- (c) *Avoiding, remedying, or mitigating any adverse effects of activities on the environment.”*

200. Ultimately, the proposed Coronation North proposal must achieve the purpose of the Act which is to promote the sustainable management of natural and physical resources.
201. There is nothing inherent in the policies or rules of the DCDP, p2GP or the WDP that activity discourages mining from the proposal area. Rather consideration needs to be given on a case-by-case basis. The proposal is an extension to the existing authorised mining at Coronation. Given mining is now occurring on the ridge it can be argued from a landscape perspective that the 'first cut is the deepest.' However, on the other hand there are on-going cumulative effects occurring with respect to heritage, landscape values but more particularly ecological values. The Commissioners need to determine whether the actual or potential adverse effects of this proposal, including cumulative effects, have been appropriately avoided, remedied or mitigated and the end-of-mine-life rehabilitation is appropriate to the area in order for the proposal to achieve the purpose of the RMA.

### **CONCLUSION**

202. The Panel must exercise its discretion whether or not to grant the consents under Section 104B of the RMA.
203. There are still outstanding matters that need to be addressed particularly with respect to ecological and heritage matters.
204. Draft conditions provided by Ms St John and contained in **Annexure A** are helpful and I concur with many of them.
205. A revised set of conditions incorporating the above, and any other matters, will continue to be examined and may be produced at the hearing.

ANDREW PURVES PLANNING & RESOURCE MANAGEMENT LTD



A M PURVES

5 October 2016