



Project Martha

Decisions Report of the Project Martha Hearings Panel

To be read in conjunction with the conditions for:

- Hauraki District Council land use consent LUSE
202.2018.00000857.001
- Hauraki District Council subdivision consent SUBD
201.2018.00000857.001
- Waikato Regional Council consents
- Schedule One – Common conditions for the Hauraki
District Council and the Waikato Regional Council

**Decisions following the hearing of applications to the Hauraki District Council and
the Waikato Regional Council for resource consents under the
Resource Management Act 1991**

Proposal

To establish Project Martha, a mining operation at Waihi beneath the existing open pit, including remedying the north wall failure in the pit, and seeking a range of associated resource consents as described below.

The resource consents are **GRANTED** subject to conditions for the reasons herein.

Application numbers:	<u>Hauraki District Council</u> LUSE-202.2018.00000857.001 SUBD-201.2018.00000857.001 <u>Waikato Regional Council</u> AUTH124859.01.03 AUTH139551.01.01 AUTH139551.02.01 AUTH139551.03.01 AUTH139551.04.01 AUTH139551.05.01 AUTH139551.06.01 AUTH139551.07.01 AUTH139551.08.01 AUTH139551.09.01 AUTH139551.10.01 AUTH139551.11.01 AUTH139551.12.01
Site address:	Martha Pit locality off Moresby Avenue at Waihi
Applicant:	Oceana Gold (New Zealand) Limited
Hearing commissioners:	Alan Watson Rob van Voorthuysen Antoine Coffin
In attendance:	Steve Rice, hearing advisor

Appearances:**For the Applicant:**

Stephen Christensen, legal counsel
Bernie O'Leary, General Manager
Kerry Watson, Iwi issues
Sioban Hartwell, water management
Ian Boothroyd, aquatic ecology
Ian Jenkins, geochemistry
Chris Simpson, groundwater
Trevor Matuschka, ground settlement
Mike Sandy, underground geotechnical
Tim Sullivan, pit geotechnical
Donna Fisher, company liaison
Kit Wilson, social impacts and property
Rhys Girvan, landscape and visual
Prue Harwood, air discharges
Rod Clough heritage and archaeology
Ian Carlisle, transportation
Kathy Mason, management plans and monitoring
John Heilig, blasting and vibration
John Kyle, planning
Richard Turner, planning and conditions

For the Submitters:

Neil Fisher
Samantha Muir
Lance Lapwood
Andrew Kuizinas
Ferg and Sandra Cumming
Mark Hutchins
Kris Stevens
Fabian Hartley
Tracey and Jamie Taylor
Robert Theron
Mark Lilly
Gus van der Straak
Waihi Community Forum – Belinda Heath, Bhavesh Ranchhod
Heritage New Zealand – Rebecca Vertongen – tabled statement of evidence
Erich Schmidt
New Zealand Transport Agency – Joy Morse, Robert Swears
Malcolm Coleman
Maurice and Penelope Joy
Fish and Game – Adam Daniel, Anna Sinitenie
Michael Moskal

	<p>GOLD FM - Glenis Gentil Forest and Bird – Rebecca Stirnemann Te Kupenga O Ngāti Hako Inc – Pauline Clarkin</p> <p>For the Councils: <u>Hauraki District Council</u> Andrew Green, legal counsel Lukas de Haast, traffic engineer Peter Fuller, geotechnical engineer Cameron McKenzie, vibration and blasting expert Dave Burton, planner Mark Buttimore, project manager <u>Waikato Regional Council</u> Jonathan Caldwell, air discharges Ngairie Phillips, aquatic ecologist Sheryl Roa, Principal Advisor, Consents</p>
Hearing dates:	12, 13, 15, 19 and 20 November 2018.
Commissioners’ site and locality visits:	11,14 and 19 November 2018.
Hearing closed:	23 November 2018.

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Appendix One Conditions of the Resource Consents

1 Introduction

- [01] These two decisions are made on behalf of the Hauraki District Council (**HDC**) and the Waikato District Council (**WRC**) by Independent Hearing Commissioners Alan Watson, Rob van Voorthuysen and Antoine Coffin, appointed and acting under delegated authority in accordance with sections 34 and 34A of the Resource Management Act 1991 (**RMA**). The applicant is Oceana Gold (New Zealand) Limited (**OGNZL** or **the applicant**).
- [02] There were two separate groups of applications, to the HDC and to the WRC, that are associated with the proposal to build and operate Project Martha which incorporates a cutback on the north wall of the existing Martha Pit and a new underground mine at Waihi.
- [03] This decisions report contains the findings from our deliberations on the two suites of applications to the HDC and the WRC respectively for resource consents and has been prepared in accordance with section 113 of the RMA.
- [04] The applications were jointly publicly notified on 16 August 2018. The HDC also served notice on what it considered affected persons, resulting in notice to some 1,030 property owners and 250 occupiers and further, to some 250 tenants in the town centre. The submissions received are referred to below.

2 The Applications

- [05] Two applications were made to the HDC regarding Project Martha as follows:
- a) Land use consent application for all mining and mining operations that are involved in Project Martha; and
 - b) A subdivision consent application to accommodate the realignment of Bulltown Road/Cambridge Road that is required to enable the Martha Pit to be extended to remedy the north wall failure.
- [06] In addition, a number of applications for necessary regional consents were made to the WRC. These include:
- a) Additional dewatering to provide for the Martha Underground Mine;
 - b) Placement of backfill including Cement Aggregate Fill (CAF) material into the Martha Underground Mine;
 - c) Take surface water from the Ohinemuri River to flood the pit and underground mine workings;
 - d) Discharge overflow water from the pit to the Mangatoetoe Stream;
 - e) Discharge limestone to the pit lake; and
 - f) Various structures, vegetation removal and associated other associated consents.
- [07] We note that the applicant holds consents for a number of these matters, but new consents are required to accommodate the changes that Project Martha brings to current works.

[08] The regional applications were jointly notified with the land use and subdivision applications. The HDC is the lead authority for the application processing.

3 Overview of Project Martha

[09] Project Martha comprises two key components:

- a) The Martha Underground Mine which involves new underground mining beneath the Martha Pit and a vein of ore (Rex Orebody) located nearby to the south east of the pit; and
- b) The Phase 4 Cutback which generally comprises a small extension to the north of the Martha Pit to remedy the failure of the north wall in a manner that:
 - will enable the pit walls to be left in a stable and safe condition at the completion of mining; and
 - restores access to the remaining consented ore reserves in the pit that have been rendered inaccessible by the failure of the north wall. The applicant intends to recommence open pit mining once the Phase 4 Cutback has been completed to the stage that the pit haul road can be re-established and operations can recommence.

[10] The intention is that the two key components of Project Martha will run concurrently, but with the mining of the Rex vein being completed by the end of Year 3, i.e. early in the underground programme.

[11] The applicant advises that Project Martha will extend the life of mining in Waihi by approximately 12 years and that the economic gains will average approximately \$73m per year over that time.

[12] Project Martha will require between 250 and 350 full time employees and in addition between 50 and 100 contractors will be required for the project. Much of the existing underground workforce at the Correnso underground mine / Slevin Underground Project Area (SUPA) as well as other OGNZL employees are likely to transfer to Project Martha as these other projects are completed. The north wall stripping will not commence until Year 3 and that cutback will take some five years before the pit is restored to enable opencast mining of ore in the pit to recommence.

[13] Project Martha relies on the use of currently consented infrastructure to transport, process, store and dispose of material extracted during Project Martha. Access to the Martha Underground Mine (including Rex) is via the existing Favona mine portal and the tunnels connecting through the Trio, Correnso and SUPA underground mines and the Martha Drill Drive Project (**MDDP**) drives under the south wall of the pit. New surface works that will be part of the Martha Underground Mine will include a fresh air portal, a return air portal and a return air ventilation shaft, all of which are to be established within the Martha Pit (they will break through the pit wall deep in the pit).

[14] New portals are also to be established around the south wall of the pit to provide direct access to the Martha Underground Mine from within the pit. The positioning of these access portals is not confirmed as yet. The Phase 4 Cutback and the Martha Underground Mine will provide some 4.5m tonnes of ore which is more than the remaining tailings capacity at the current end of life of the mine. Towards that time OGNZL will need to make some choices as to which parts of the project (pit and underground) are to be given preference for completion.

[15] Details of the proposed works are set out below.

3.1 Martha Pit North Wall Cutback (MP4) and Reopening of the Pit

[16] The following is a summary of the Martha Pit dimensions comparing the pit as at the expiry of mining licence ML 32 2388 (2017) and as proposed for Project Martha. The north wall cutback will result in some 2.6ha of land being added to the pit area; all but 0.08ha of which is within the current consented boundaries (i.e. former ML 32 2388; now a permitted activity in the Martha Mine Zone (**MMZ**) of the Hauraki District Plan and the Extended Martha Mineral Area (**EMMA**) land use consent).

[17] With the failure on the north wall, a large volume of material was deposited onto the lower section of the pit such that the current bottom of the pit (with debris cover) is approximately 920mRL. Immediately prior to the failure, the pit depth was some 885mRL (mine datum has the current land surface at approximately 1120mRL with the depth of the mine being measured relative to that).

Approximate Measurement	Expired ML Value	MP4 Value
Pit area (ha)	51.1	51 ¹
Pit depth (m)	275	275 ^{1,2}
Pit depth consented (mine datum mRL)	890	875
Pit length x breadth (m)	960 x 770	960 x 770 ¹
Total waste rock volume (bcm)	40 million	48 million
Approximate Measurement	Expired ML Value	MP4 Value
Total ore processed (t)	30 million	31 million
Total tailings (m ³)	28 million	29 million

NOTES: 1 Relative dimensions depend on points from and to which measurements are taken. These remain effectively unchanged as a result of Phase 4 Cutback.

2 The level of the north wall crest is reduced with the proposed mining, so while the reduced level of the pit floor is lower the pit depth remains relatively unaffected.

3.2 Martha Underground Mine

- [18] The north wall cutback and development of MP4 is to potentially occur in parallel with two types of underground mining:
- a) Extraction of the previously unmined Rex lode which lies to the south of the Martha Pit rim and previously unmined parts of Martha, Edward, Empire, Royal, Welcome and Mary lodes, and
 - b) Remnant mining of some wall skins of unfilled historical stopes and some skins and backfill of old historic filled stopes in Martha, Empire, Edward and Royal lodes. These mainly lie beneath the central part of Martha Pit, beneath the base of the north wall and under its east and south walls.
- [19] Underground mining will extend to about 600m below surface and require dewatering to 500mRL, some 270m below the current water level. Mining in Rex and Royal lodes will have their upper levels closest to the surface, with Rex being about 90m below surface and the top of Royal workings being within about 60m of the surface below the pit south rim. Both lodes are on the south side of Martha Pit and closest to the central part of Waihi.
- [20] Access to the underground will initially be via the Favona portal but after the haulroad in Martha Pit is re-established and the underground mine develops, two additional portals are to be developed in the south wall of the pit for both access and ventilation, as well as a return-air ventilation shaft.
- [21] About half of the current resource will be mined in virgin ground with a bottom-up sequence by the Avoca method or its modified version which have been widely used to date at Waihi. Remnant mining will likely involve the remote extraction of stope walls and backfill using a side-ring method or some variant thereof and will progress downwards. It is currently proposed to mine about 30% of the resource with this method with the remainder from in-ore development.
- [22] All mined stope voids are to be backfilled either with rockfill as is currently used underground at Waihi or cemented aggregate fill (**CAF**) where greater backfill strength and stiffness (and hence greater overall structural competence) are required.

3.3 The Application Site

- [23] The site for Project Martha is in central and south east Waihi. Almost all of the site is within the EMMA consent boundary (extended open pit) and the surface facilities/processing/tailings and waste rock disposal area are currently consented and operating. All these areas are zoned Martha Mineral Zone (**MMZ**) in the Hauraki District Plan (**District Plan**). This land is owned by the applicant and by Land Information New Zealand (part of the open pit). There are also areas of HDC land particularly in the south east section of the pit and surrounds (former roads which are not available for use but have not been formally stopped).

- [24] The Rex Orebody which is part of the Martha Underground Mine is located beneath land immediately to the north east of the Waihi town centre. The land under which the Rex lode is located is currently used for playing fields, commercial/housing uses and open space. While the applicant owns some of this area, a range of other owners are involved.
- [25] At the western end of the pit, the site includes an area of land to be used for the pit lake outlet structure. This is owned by the applicant. Access to the Martha Underground Mine (including the Rex Orebody) will be via the existing Favona portal which is located near the ore processing mill. Access tunnels that have been built as part of the Favona, Trio, Correnso and SUPA consented underground mines and the MDDP exploration tunnels will be employed to connect to the Project Martha works. As the land use consents for the Correnso, SUPA and MDDP works expire before the programmed completion of the Project Martha works and the Favona consent is specific to the Favona Mine, these access tunnels are required to be included in the current application. These tunnels extend beneath land used for a range of purposes and which is in a range of ownerships.
- [26] The site also includes land at the north-west wall of the pit where the Phase 4 Cutback is proposed to stabilise and rehabilitate the north wall failure. Small areas of these works, particularly involving road realignment and the building of a noise bund, are outside the Martha Mineral Zone and are zoned Residential and Low Density Residential. In part of these areas the subdivision component of the application is proposed to allow for the realignment of Bulltown Road/Cambridge Road.

4 Activity Status and Consents Sought

- [27] We refer to Table 4.1 of the applicant's assessment of environmental effects (**AEE**) which provides an assessment of the activity status of the various activities that make up Project Martha. We adopt that description and, in addition, provide the following commentary:
- a) The majority of Project Martha requires land use consent as a discretionary activity (underground mining (all areas), mining operations in the MMZ and the Rural Zone, surface mining in the MMZ, removal and demolition of dwellings in the MMZ, use of Favona stockpiles, and use of the batching plant in the Rural Zone).
 - b) Mining operations associated with the Martha Phase 4 Cutback are a non-complying activity in the Residential and Low Density Residential zones (in the small area above the pit's north wall failure). The use and storage of hazardous substances is a non-complying activity in the MMZ.
 - c) The application for subdivision consent for the realignment of Bulltown Road/Cambridge Road is a non-complying activity.
 - d) The use of various existing authorised infrastructure is a permitted activity.

[28] A key consideration is whether the Phase 4 pit works in the Residential and Low Density Residential Zones fall within the definition of “mining operations” (non-complying activity) or are “surface mining” (prohibited activity in these zones). The works include part of the new noise bund and the upper section of the revised pit (the new pit perimeter will be within these zones for a small area). On two counts, we do not consider these works constitute “surface mining”.

[29] We note that “mining operations” in terms of the definition in the District Plan means:

Operations in connection with mining (for any mineral) and shall include the following

(c) the removal of overburden and waste rock, by mechanical or other means

[30] The definition provided in the District Plan for “surface mining” specifically excludes “mining operations” which, as noted, is separately defined. On the basis of these definitions the Phase 4 pit works in the Residential and Low Density zones are “mining operations”, and hence are a **non-complying activity**.

[31] We note further, that these works are required to stabilise the north wall failure notwithstanding whether they constitute (a very small) part of a much larger undertaking that will allow mining to recommence in the pit (removal of failed material, reinstatement of haul roads and infrastructure etc.). The works in the Residential and Low Density Residential zones at the top of the pit can, in this sense, be considered to be stabilisation and rehabilitation works in this area and thus clearly are “mining operations” and not “surface mining”.

[32] In the case of the regional consents we note that Table 4.2 of the AEE details the activity status of the various activities and shows that all are **discretionary activities**.

5 Submissions

[33] The HDC received 240 completed submission forms on the applications for land use and subdivision consents of which 46 were received following the close of submissions¹. The majority of submissions did not distinguish between the parts of the proposal they supported/opposed in stating the reasons for the submission or the outcome sought. However, HDC staff summarised the submissions and calculated that, of the submissions made on the land use consent application, 80% were in support, 14% in opposition, 3% neutral with the remaining 3% ‘not stated’.

¹ The late submissions were accepted in accordance with the decision of the Hearings Panel dated 3 October 2018.

[34] The following are the key issues raised in the submissions received on the land use consent application for the Martha Underground and Phase 4 Pit (many submissions raised more than one issue):

- Economic and employment benefits
- Public good arising from mine operation
- Blasting and vibrations
- Land stability/collapse pit stability
- Heritage
- Accidental discovery of heritage and Maori archaeology
- Property values/ability to sell
- Cultural issues
- Health and wellbeing
- General amenity effects
- Closure and rehabilitation
- Bonding
- Dust – Phase 4 Pit
- Noise
- Noise bund
- Social impacts
- Traffic including traffic issues at Cambridge/Bulltown Road realignment
- Various aspects of consent conditions
- Compliance and implementation/enforcement
- Duration
- General effects
- Lack of information/evidence.

[35] HDC staff also summarised the submissions on the subdivision consent application and calculated that approximately 90% were in support, 4% in opposition, 4% neutral, with the remaining 3% 'not stated'. Specific matters raised in the submissions on the subdivision consent application were:

- Subdivision/road realignment
- Traffic effects
- Utility effects
- General effects
- Heritage.

[36] The WRC received 44 submissions following the notification of the applications of which 20 were in support, 2 not stated, 3 neutral and 19 in opposition. Specific matters raised in the submissions included:

- Benefits to the town, community and individuals
- Iwi considerations
- Impacts from vibration, noise and dust
- Property values
- Accidental discovery of heritage and Maori archaeology
- Effects on fishery values in the Ohinemuri River from the water take
- Management of the pit lake.

6 Site and Locality Visit

[37] We carried out visits to the above ground areas and surrounds, on 11 and 19 November 2018 and underground on 14 November 2018. We were unaccompanied on our first above ground visit, but for security and safety reasons were accompanied on our second above ground visit and our underground visit by a person from OGNZL who was not involved in the hearing of the applications and with their role being only to show us the current mining activity and facilities and the area of the applications.

7 Relevant Statutory Provisions Considered

[38] In accordance with section 104 of the RMA, we have had regard to the relevant statutory provisions including Part 2 and section(s) 104, 104B, 104D, 105, 106, 107 and 108.

8 Relevant Standards, Policy Statements and Plan Provisions Considered

[39] In accordance with sections 104(1)(b)(i)-(vi) of the RMA, we have had regard to the relevant policy statements and plan provisions of the following documents:

- a) National Environmental Standard for Air Quality 2004
- b) National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2011
- c) National Environmental Standard for Sources of Human Drinking Water 2008
- d) National Policy Statement for Freshwater Management 2017
- e) Hauraki Gulf Marine Park Act 2000
- f) New Zealand Coastal Policy Statement 2010
- g) Waikato Regional Policy Statement 2016
- h) Waikato Regional Plan
- i) Hauraki District Plan 2014.

[40] There were no other matters brought to our attention that were considered relevant and reasonably necessary to determine the applications in accordance with section 104(1)(c) of the RMA.

9 Summary of Evidence Heard

[41] The application documents (assessment of effects or AEE) and the supporting technical documents prepared by and on behalf of the applicant were provided to us and we read them. Both Councils' section 42A RMA reports (**section 42A reports**), along with supporting reports from specialists / experts, were circulated prior to the hearing and we also read them. The reports included a full suite of recommended draft conditions for both applications.

[42] The evidence presented at the hearing responded to the issues and concerns identified in the section 42A reports, the applications and the submissions made

on the applications. We do not provide a specific section in this decisions report addressing the evidence but rather the key evidence is summarised as part of our discussion of our findings on the principal issues in contention. In particular, the evidence that has contributed to, or that is determinative of, the decisions we have made on the applications. We consider this is the most effective and useful way of providing the basis for our decisions.

10 Principal Issues in Contention

[43] After analysis of the applications and evidence (including proposed mitigation measures), undertaking the site and locality visits, reviewing the section 42A reports, reviewing the submissions and concluding the hearing process, the proposed activities raise a number of issues for consideration. The principal issues in contention are:

- a) For the Waikato Regional Council consents:
 - the take from the Ohinemuri River that will assist with the post-closure filling of the Martha Pit to form a lake;
 - the structure that will be used to discharge pit lake water to the Mangatoetoe Stream;
 - the groundwater monitoring associated with dewatering the underground portion of Project Martha; and
 - discharges to air from the underground portion of Project Martha and MP4 (the northern pit wall cutback).
- b) For the Hauraki District Council consents:
 - Blasting and vibration effects
 - Geotechnical - Surface stability/settlement effects
 - Maori cultural matters
 - Cultural and historic heritage effects
 - Noise effects
 - Traffic and roading effects
 - Effects on property values
 - Positive effects from the proposal.

[44] We now discuss our main findings on the above principal issues that were in contention.

11 Waikato Regional Council Consents

[45] The applicant has applied for thirteen consents from the WRC.² However, in our view the majority of those applications are uncontroversial and so we focus our attention on four matters:

- a) the take from the Ohinemuri River that will assist with the post-closure filling of the Martha Pit to form a lake;³

² As set out on the first two pages of the Waikato Regional Council – section 42A report authored by Sheryl Roa.

³ Resource Consent Number AUTH139551.05.01

- b) the structure that will be used to discharge pit lake water to the Mangatoetoe Stream;⁴
- c) the groundwater monitoring associated with dewatering the underground portion of Project Martha;⁵ and
- d) discharges to air from the underground portion of Project Martha and MP4 (the northern pit wall cutback).⁶

[46] In all other respects of the applications lodged with the WRC we note the high level of agreement between the applicant and the Council section 42A report author and her technical advisors (both in terms of the potential effects of the activities and the conditions of consent required to appropriately avoid, remedy or mitigate those effects), and the lack of opposition from submitters. Accordingly, as provided for by section 113((3)b) of the RMA, we adopt the applicant's evaluation of those matters and the Council's section 42A report author's assessment of them.

11.1 Ohinemuri River Abstraction

[47] The applicant currently holds Consent 124862 to take and use up to 15,000 cubic metres per day at a maximum rate of 175 litres per second (L/s) from the Ohinemuri River for the purpose of accelerating the filling of the pit lake and the underground workings. The existing consent allows up to 10% of the flow in the river at the point of abstraction to be taken when the flow exceeds twice the MALF⁷. The existing consent does not expire until July 2042.

[48] The application before us is for a maximum rate of take of the lesser of 270 L/s or 20% of the river flow at the point of abstraction. The applicant considers that over the life of the project the abstraction will average 15,000 cubic metres per day. The increased maximum rate of take will enable the pit lake to fill in around 10 years, as opposed to around 14 years under the existing consent. We are satisfied that this reduction in lake filling time adequately demonstrates a 'need' for the level of abstraction sought, particularly as the pit lake will provide significant amenity benefits for the Waihi community and assist with maintaining pit wall stability.

[49] The first issue of contention we address relates to the abstraction's consent category. The applicant and the WRC section 42A report author contended it was a discretionary activity under Rule 3.3.4.23 of the Waikato Regional Plan (**WRP**). Some submitters contended that it should instead be categorised as a non-complying activity under Rule 3.3.4.26, because they considered it to comprise 'water harvesting'.⁸ We are not persuaded by the submitters' arguments, simply because the abstracted water is to be used to fill the pit and form a lake. It is not

⁴ Resource Consent Number AUTH139551.10.01

⁵ Resource Consent Number AUTH139551.01.01

⁶ Resource Consent Number AUTH124859.01.03

⁷ MALF is the 7-day mean annual low flow.

⁸ Submission #200, Evidence of Anna Sentenie, New Zealand Fish and Game, paragraph 14

being 'harvested' and stored for some subsequent use such as irrigation or stock water supply. We accept the evidence of Council's section 42A report author and John Kyle (planner for the applicant) on this matter.

- [50] We find that the abstraction from the Ohinemuri River is a discretionary activity under Rule 3.3.4.23 of the WRP.
- [51] The next issue of contention concerns the level of river flow at which the abstraction should be required to cease in order to protect aquatic ecosystem health and fishery values.⁹ Some submitters sought that the abstraction cease when the river flow was at the optimum level¹⁰ of habitat for rainbow trout spawning (1400 L/s) during May to September and at the optimum habitat for rainbow trout rearing (1000 L/s) for the remainder of the year.¹¹
- [52] There was also some suggestion from submitters that an abstraction cessation flow in the river should be based on the habitat requirements of torrentfish, but as torrentfish have not been present in the main stem of the Ohinemuri River for at least the last five years¹² we reject that proposition. In that regard, we also note the presence of a historical dam some five kilometres downstream which is a significant barrier to fish passage, including torrentfish. We were advised by the WRC section 42A report author that the dam has no apparent 'owner', it is located on Crown and private land, it is a registered historical site, and (contrary to the assertions of some submitters¹³) the WRC has no plans to provide it with a fish passage structure.
- [53] As noted above, the applicant preferred a cessation flow of twice MALF (equating to 850 L/s), as that provides in excess of 90% of the optimum habitat for rainbow trout spawning and trout rearing. We note and accept the evidence of Ngaire Phillips¹⁴ who told us (based on her analysis of information on the New Zealand Sport Fly Fishing website, the National Angling Survey conducted by NIWA, and an assessment of flow regime requirements for the Waihou River catchment) that the Ohinemuri River trout population has a reasonable level of resilience, despite the fact that it suffers from degraded water quality and very low flows in some years.
- [54] Accordingly, we find that an abstraction cessation flow of twice MALF (850 L/s) is sufficiently protective of the values for which the river is classified in the WRP. In that regard, we note, from the evidence of Ian Boothroyd,¹⁵ that a cessation flow

⁹ The Ohinemuri River is classified under the WRP as both 'Significant Indigenous Fisheries and Fish Habitat' and 'Significant Trout Fisheries and Trout Habitat'.

¹⁰ Based on a study undertaken by Ian Jowett in the Ohinemuri River at the upstream Golden Valley Road Bridge in 2014: *'Flow requirements for fish habitat in the Ohinemuri River, Waihou River and selected tributaries'*, Jowett (2014)

¹¹ Summary of Evidence, Dr Adam Daniel, Auckland Waikato Fish and Game Council, hearing for project Martha:APP139551, 15 November, paragraph 16.

¹² Statement of evidence of Dr Ian Kenneth Grant Boothroyd for Oceana Gold (New Zealand) Limited, 29 October 2018, paragraph 76.

¹³ Including Dr Adam Daniel for Fish and Game.

¹⁴ Statement of Evidence by Dr Ngaire Robyn Phillips on Behalf of Waikato Regional Council, 18 November 2018.

¹⁵ Ibid, Table 1: Suggested flow requirements for selected fish species in the Ohinemuri River (from Jowett 2014), page 13.

of 850 L/s is 200 to 250 L/s higher than the river flow below which trout habitat declines sharply. We conclude that a cessation flow of 850 L/s more than adequately provides for the habitat of trout, which we note to be a RMA section 7 matter to which we must have particular regard.

[55] Out of interest, we note that for a river such as this with a mean flow less than 5 cubic metres per second, the draft National Environmental Standard on Ecological Flows and Water Levels suggests a minimum flow of 90% of MALF, which in this case would only equate to around 380 L/s. Consequently, a cessation take of 850 L/s is arguably very conservative.

[56] A further issue of contention involved the Ohinemuri River water temperature at which abstraction should cease. Trout are vulnerable to high water temperatures and the applicant proposed that abstraction should cease when the river water temperature reaches 25°C, in case the abstraction (and resultant reduced river flow) caused river water temperatures to increase even further. Some submitters appeared to suggest that the abstraction cessation temperature should be set at a lower level, perhaps 19 or 20°C, in order to better protect trout.

[57] We again note and accept the evidence of Dr Phillips who told us (based on a thorough analysis of monitoring results for Ohinemuri River flows and temperatures from both very wet and very dry years) that there is little if any correlation between river water temperature and variations in river flow, and a reduced river flow does not necessarily result in an increase in river water temperature. Dr Phillips stated that a wide range of factors influence the temperature of the Ohinemuri River. On that basis we suggested to Dr Phillips that there was no real merit in imposing a river water temperature cessation condition and she agreed with that suggestion. However, in the Reply submissions the applicant requested that the offered temperature cessation condition be imposed in response to concerns of submitters, and we have obliged.

[58] Another matter of contention related to the imposition of a Riparian Management Plan (**RMP**). Rule 3.3.4.23(4) of the WRP imposes a standard that reads:

“for existing surface takes in catchments exceeding the combined primary and secondary flows in Table 3-5 a Riparian Vegetation Management Plan which meets the requirements of Method 3.3.4.28 shall be provided for the property for which the water is taken and used on and that plan shall specify the location and length of any streams whose riparian margins are to be planted and the proposed timing of that planting”

[59] We note that the RMP would be “for the property for which the water is taken and used on”, which in this case would be the Martha Pit lake. There seems little point

in providing an RMP for the pit lake given the existing requirement for an approved Rehabilitation and Closure Plan which includes extensive amenity planting.¹⁶

[60] Some submitters nevertheless sought additional riparian planting on the Ohinemuri River to 'compensate' or 'offset' for what they perceived to be the adverse effects of the proposed abstraction. In that regard we find any potential adverse effects to be minimal, particularly in light of the river flow and temperature abstraction cessation requirements discussed above. We also note that from 1995 to 2005 the predecessor company to OGNZL undertook extensive riparian planting on both banks of the Ohinemuri River, from the Golden Valley Road Bridge to the SH2 Coronation Bridge, and on both banks of the Ruahorehore Stream. These plantings were voluntary and not a requirement of any consent conditions. Those plantings were more than five kilometres long and involved around 200,000 shrubs and trees.¹⁷ We observed these mature riparian plantings during site visits.

[61] Interestingly, when we queried Adam Daniel from Fish and Game on the length of riparian planting that he thought might 'compensate' for the perceived effects of the abstraction, he suggested that around five kilometres of planting would suffice. That length of riparian planting is already in place and the benefits it provides for shading, water quality, habitat and food for aquatic species have been realised for over 20 years to date and will continue to be realised for another 12 years before the Ohinemuri River abstraction commences. Having had regard to the provisions of the WRP, we find that no RMP is necessary and no additional riparian planting is required to mitigate the effects of the proposed abstraction.

[62] In making that finding we refer to the advice of the WRC reporting officer who noted that in the absence of the applicant owning land adjacent to the Ohinemuri River (we assume that to refer to areas below Coronation Bridge), any condition requiring additional riparian planting would not be able to be monitored or be enforced.¹⁸

[63] The final issue of contention involved the future review of the consent. The abstraction consent is unlikely to be exercised for at least twelve years and we accept, as was suggested by the WRC reporting officer, that it is entirely possible that the MALF for the river may change during that time. Accordingly, we find that a specific review condition is required to enable the Council to review the conditions of consent relating to the cessation of the abstraction occasioned by both river low flows and river water temperature.

11.2 Mangatoetoe Stream Discharge Structure

[64] For the applicant, Dr Boothroyd provided evidence on the likely water quality and aquatic ecology of the pit lake once it was filled. He noted that the existing

¹⁶ AEE, section 2.6.8 and Figure 2.11 therein.

¹⁷ Document tabled in Reply titled "Bridge to Bridge Riparian Planting Project, Newmont Waihi Gold, 2005".

¹⁸ Statement to the Hearing Committee, paragraph 9.

resource consent requires that passage is provided to and from the lake for native fish. He considered that only the hardiest climbers would reach the lake, such as eels and possibly banded kokopu. He did not expect the water quality and habitat within the pit lake to be suitable for trout (which are not climbing fish).¹⁹

[65] We also asked Dr Boothroyd for his view on the potential effects of the pit lake water discharge on the well-being of eels. He confirmed that eels are a hardy species and the water quality parameters were well within the range acceptable for eels.

[66] Accordingly, we wished to be satisfied that the outlet structure from the pit lake to the Mangatoetoe Stream would enable the passage of eels (tuna) up into the lake and back again. In Reply, the applicant provided diagrams of likely stream outlet and lake inlet structures which demonstrated how fish passage (both into and out of the pit lake) could easily be provided for. On that basis we are satisfied that the conditions of consent²⁰ relating to eel passage are capable of practical implementation.

11.3 Groundwater Monitoring

[67] The proposed Martha Underground Mine extends to 500 m RL and so the groundwater level will need to be lowered 200 metres below the currently consented level (700 m RL). The applicant expected groundwater drawdown to be confined to the deeper andesite rock and groundwater levels in the overlying younger volcanic deposits were not expected to be affected, nor were any changes to the shallow groundwater system expected.²¹

[68] Nevertheless, the Council considered that groundwater monitoring was required to ensure that those expectations were realised. Initially the Council section 42A report author proposed the monitoring and reporting of historical and existing groundwater chemistry and levels in the wider Waihi basin for that purpose. The applicant disagreed. We were also of the view that any groundwater monitoring should be limited to likely effects of the consent holder's activities and should not stray into the realm of regional state of the environment monitoring.

[69] It was eventually agreed between the applicant and the section 42A report author that groundwater monitoring should be confined to existing groundwater levels and chemistry (at the time of monitoring) in the deep and shallow aquifers under the Martha Pit and its immediate surrounds.²² We find that to be appropriate.

11.4 Discharges to Air from Underground Mining and MP4

[70] The issues we address here relate to the air that will be vented from the underground mine and the dust that will emanate from the MP4 operations.

¹⁹ Ibid, paragraphs 111 to 113.

²⁰ AUTH139551.10.01 condition 10.

²¹ AEE, section 5.7.1.1

²² AUTH139551.01.01 condition 9.

- [71] The material mined at Waihi contains crystalline silica and consequently the dust created during blasting and mechanical operations, such as ore crushing, will contain a proportion of crystalline silica. Fine particles of crystalline silica that are less than 10 microns in diameter, known as respirable crystalline silica (**RCS**), can cause significant adverse human health effects (silicosis) if people are exposed to concentrations above recommended guidelines levels over extended periods of time. This was understandably of concern to some submitters.
- [72] The air from underground mining is forcibly vented to the atmosphere. The applicant advised that the vents will be located within the Martha Pit, more than 130 m below the surrounding ground surface. It was considered that any contaminants in the steam clouds rising from the vents would be dispersed and diluted as the plume travelled downwind and the ambient concentrations of contaminants beyond the boundary of the site, where members of the public may be exposed, would be negligible.
- [73] However, some submitters²³ were concerned that due to the use of exhaust fans (actively aiding plume rise) the resulting plume from the vents would cause contaminants, particularly very fine particulate matter and RCS, to be dispersed to far field locations (perhaps several kilometres away), by-passing the proposed dust deposition gauges and causing adverse human health effects.
- [74] Jonathan Caldwell for the Council addressed this matter.²⁴ His opinion was that active aiding of plume rise would increase the dispersion of air pollutants across a much larger area of Waihi and beyond. That would result in smaller particles remaining airborne for longer such that they would be well diluted at downwind ground locations. On that basis Dr Caldwell considered that the actively aided plume rise would in fact result in a lower level of adverse effects. We accept his expert opinion on that matter.
- [75] On this matter we also note the further evidence of Prue Harwood (air quality expert for the applicant) who advised that previous ambient air monitoring of total suspended particulates²⁵ (**TSP**) had clearly demonstrated that the highest concentrations of TSP were found at sites close to the mine and at more remote locations the concentrations of TSP were indistinguishable from background concentrations.²⁶
- [76] With specific regard to RCS and the monitoring of PM₁₀ for that purpose, Dr Caldwell advised that previous monitoring of the silica content of PM₁₀ sized particles was a conservative approach because, while the silica guidelines related

²³ Including Lance Lapwood.

²⁴ Statement of Evidence of Jonathan Paul Caldwell, 19 November 2018, paragraph 3.4.

²⁵ Particles smaller than 50 microns.

²⁶ Reply submissions, Appendix E.

to PM_{2.5}, the PM₁₀ concentrations of silica would always be higher because PM_{2.5} was a subset of PM₁₀. We accept that advice.

[77] Importantly, we understand that historical ambient air quality monitoring associated with the mine has consistently demonstrated that the concentrations of PM₁₀ and RCS are well within health-based guidelines and standards at all monitored sites.²⁷ We also understand, as does the WRC reporting officer, that when MP4 operations begin the monitoring of particulate matter and RCS will recommence.²⁸ In that regard we note the Air Quality Management Plan must address ambient air monitoring for particulates including their silica content.²⁹

[78] In terms of dust emissions from the proposed MP4 operations, Dr Caldwell noted that the dust deposition gauges are designed to monitor nuisance dust, namely the larger particles that will settle reasonably close to their source. He considered that the proposed TSP gauges on the downwind side of the pit were situated a suitable distance away, bearing in mind that windspeed would have an impact on the dispersion of the dust.³⁰

[79] Dr Caldwell also considered that the additional two optical monitoring gauges proposed for the eastern and western sides of the pit would provide real time monitoring of airborne particulates which could then be related to windspeed and wind direction obtained from the applicant's existing meteorological station.

[80] In overall terms, Dr Caldwell saw no need for additional far field monitoring. We accept his expert opinion on that matter.

[81] On the evidence before us, we find that the venting of air from the underground workings and the emission of dust from the MP4 operations are unlikely to result in adverse effects on public health and that a suitable monitoring regime will be in place to assess and review that situation throughout the duration of Project Martha. We consequently find the conditions of consent for the discharge to air agreed between the applicant and the Council reporting officers to be appropriate. In that regard we note monitoring programme enhancements will be implemented including windspeed monitoring, continuous dust monitoring at two new sites (the optical monitoring gauges referred to by Dr Caldwell), and further emission testing of the air vented from the underground workings during blast events.³¹

11.5 Conditions of Consent

[82] The conditions of consent we have imposed are set out in Appendix One to this decision report. They differ from those offered by the applicant in Reply only with regard to the review of the consent to abstract water from the Ohinemuri River, as discussed above. Accordingly, we are grateful for the assistance of the applicant

²⁷ Ibid, paragraph 40.

²⁸ Statement to the Hearing Committee, paragraph 27.

²⁹ AUTH 124859.01.02 condition 11(iii).

³⁰ Ibid, paragraph 3.7.

³¹ Reply submissions, paragraph 35(c).

and the reporting officers in formulating those conditions for our consideration and resolving their initial differences of opinion on some of the condition wording.

12 Blasting and Vibration Effects

[83] Project Martha will involve the blasting of rock in the underground workings and in the pit that are located beneath or adjacent to residential and commercial areas of the Waihi township. That blasting will cause ground vibration. If vibration levels are sufficiently high, they can cause adverse effects on amenity values and in extreme cases, damage to buildings and other structures.

[84] Mining and associated blasting is not a new activity in Waihi. Mining activity has occurred here since at least 1868.³² Operations at the Martha Pit commenced in 1987 and have operated relatively continuously until 2015. Underground mining involving blasting is subject to a number of existing resource consents and conditions.³³

[85] At the conclusion of the hearing, the applicant and the HDC reporting officers had agreed on a suite of blasting and vibration conditions³⁴ that mirrored those previously imposed on the Favona, Trio, Correnso and Slevin Underground mines, which in turn matched the permitted activity standards in the Martha Mineral Zone of the District Plan. Given this 'roll over' or continuation of existing tried and tested blasting and vibration controls, there are few matters that are necessary for us to address.

[86] In that regard we note that of the 256 submitters only seven opposing the applications appeared to express concerns regarding vibration from either the underground operation or MP4, only one appeared at the hearing,³⁵ and none called any expert evidence. In our view that illustrates a rather low level of community concern.

[87] Nevertheless, in terms of avoiding potential adverse effects, we note that the peak particle velocity for all blasts (other than maintenance or safety blasts) must not to exceed 5mm/s for 95% of monitored events and as an additional precaution, separate average peak particle velocity limits are set for development blasts and production blasts. We understand that these limits reflect the dual requirements of permitting a mining operation that implements best engineering practices whilst protecting the amenity of persons within the community, as well as producing a set of criteria that can be appropriately administered by the HDC.³⁶

[88] The 5mm/s for 95% of monitored events vibration limit is colloquially known as the 'residential amenity limit'. As part of Project Martha the Rex ore body will be mined

32 Clough and Associates. Historical and Archaeological Background Report. May 2018. Appendix K, Part 1, p.12

33 Favona Underground Mine, Trio Underground Mine, Correnso Underground Mine, Slevin Underground mine.

34 HDC land use consent – conditions 28 to 56.

35 Submitter #198 Gold FM

36 Statement of evidence of DR John Heilig for Oceana Gold (New Zealand) Limited, 28th October 2018, paragraph 12.

under a part of Waihi township that contains commercial buildings. Some submitters³⁷ sought that the 'residential amenity limit' and associated Amenity Effects Programme (AEP)³⁸ payments should also apply to commercial properties.

[89] In response, we firstly note that we are unable to impose an extended AEP consent condition because the AEP is offered by the applicant on an *Augier* basis and the District Plan does not contain any financial contribution provisions that would enable us to otherwise impose the AEP under sections 108(9) and (10) of the RMA. Secondly, we accept the advice of the applicant that non-residential properties generally have a less sensitive use and because of the nature of the part of Waihi overlying the Rex ore body (containing a mix of residential and commercial properties) the 'residential amenity limit' effectively limits the level of vibration that commercial buildings will receive.³⁹

[90] A few submitters⁴⁰ were concerned about the timeliness of the public reporting of vibration monitoring results. We note that the conditions of the current HDC land use consent require the vibration results to be reported in a timely manner.⁴¹ The evidence of the applicant was that OGNZL strives to report the results of each blast within a minute or two of the blast occurring, but at times the communications and remote monitoring system used means a delay of a few hours occurs.⁴² We understand, from the evidence, that the applicant has looked at various options for improving real time reporting with electronically linking blasts and monitoring, however there were significant safety concerns.⁴³ We were satisfied by the approach of the applicant in this matter and not persuaded that vibration constitutes an adverse effect of significance.

[91] At the hearing we heard from Glenis Gentil, a co-owner⁴⁴ of Gold FM, who was concerned about the potential for vibration induced regenerated noise to adversely affect the radio station's recording and broadcasting activities. Much was made of comparisons with a recent case involving Media Works and the City Rail Link project in Auckland where similar concerns were debated. No expert evidence was produced in support of those concerns by Ms Gentil. In response, John Heilig (the applicant's vibration expert) advised that regenerated noise arises where vibration induces momentary deflections in building elements, such as walls, floors and ceilings. That is usually caused by mechanically induced vibrations from nearby heavy machinery over a period of tens of minutes. In this case, the blasting vibrations will last for a maximum period of 18 seconds and Dr Heilig is confident that regenerated noise will not impact the Gold FM broadcast quality. He also set

³⁷ Including the Waihi Community Forum.

³⁸ The AEP is a volunteered initiative whereby the consent holder makes six monthly payments to residential property owners or occupiers receiving two or more blast events resulting in vibration exceeding 1.5mm/s.

³⁹ Reply submissions, paragraph 42.

⁴⁰ Including Erich Schmidt.

⁴¹ Condition 34(e).

⁴² Reply submissions, paragraph 43.

⁴³ Reply submissions, paragraph 44.

⁴⁴ Glenis Gentil

out important differences between Media Works in Auckland and Gold FM in Waihi.⁴⁵

[92] We accept Dr Heilig's expert opinion on these matters and note that even if he is incorrect, the HDC land use consent has a detailed section 128 RMA review condition that incorporates direct reference to the data obtained from fixed and roving vibration monitors and all reports required under the consent, including vibration complaints monitoring and reporting.⁴⁶ This will enable the Gold FM situation to be reviewed and addressed should nuisance regenerated noise actually occur in the future.

[93] There are two more blasting and vibration issues that we wish to comment on. The first involves the relocated historic Cornish Pumphouse. In the application, no specific vibration limits were proposed to apply to the pumphouse. In the section 42A report a vibration limit of 25mm/s at frequencies in the range 20 to 30 Hz for that structure was proposed to ensure that blast induced vibrations do not cause damage to the structure (consistent with the EMMA consent conditions. By the conclusion of the hearing the applicant's and the HDC's technical advisors had instead agreed that a preferable approach was to undertake initial and thereafter five yearly structural integrity surveys of the pumphouse, with any vibration induced damage to be made good by the consent holder. We endorse that approach as it more directly addresses and remedies the potential adverse effect of concern.

[94] Secondly, with the proposed MP4 operation there was concern from the HDC's technical advisor (but not from any submitters as far as we are aware) about the potential risk posed by 'fly rock' (bits of rock that are sent flying by surface blasts in the pit). By the conclusion of the hearing the applicant's and the HDC's technical advisor had agree that this potential adverse effect should be addressed by way of a risk assessment undertaken prior to pit blasting recommencing. At our suggestion, the technical advisors jointly developed a list of relevant and material factors that this risk assessment should include, and these factors were specified in a new condition of consent,⁴⁷ with further details to be contained in the mandatory Vibration Management Plan. We find that to be an appropriately prudent and precautionary approach.

[95] On the basis of the above commentary and the conditions of consent, we consider the effects from blasting and vibration are addressed and sufficiently mitigated.

13 Geotechnical - Surface Stability/Settlement Effects

[96] We heard evidence from witnesses for the applicant in which they addressed the investigations they had carried out for the purpose of the application and particularly, in relation to issues of surface stability and settlement.

⁴⁵ Further evidence of Dr John Heilig, Appendix G of Reply submissions.

⁴⁶ HDC land use consent – conditions 123 and 45(g) and (h).

⁴⁷ Ibid, condition 34A.

- [97] Chris Simpson noted that groundwater inflow will occur beneath the current mined depth but that further deepening of the de-watering level was not expected to result in effects significantly beyond what was already being experienced. He did however recommend additional monitoring to assess these areas but apart from that localised drawdown did not see that there would be any other effects due to the proposed de-watering for Project Martha. Trevor Matuschka noted the ground water lowering would be to RL 500m, approximately 200m below the existing consented dewatering level to RL 700m for the Correnso mine. He referred, as had Mr Simpson, to some 30 years of monitoring records which indicated a strong correlation between groundwater level and settlement. Dr Matuschka was of the view that any settlements arising from the proposed dewatering would be acceptable, noting he expected most settlement to occur within the andesite rock mass well below the ground surface rather than in the overlying (shallower) younger volcanic deposits or surficial soils. The latter is where differential settlement (or 'tilt') can occur, and where there is normally a concern for buildings and buried services. He similarly recommended conditions of consent to monitor the situation.
- [98] Tim Sullivan addressed the stability of the Martha Pit walls in the context of the Martha Phase 4 Pit (**MP4**) and the Martha Underground Mine. He explained that MP4 was a cut back at a flatter slope than the previous pit wall to stabilise the north wall failure and there was nothing unique or special in the planned cutback. The Void Management Plan (**VMP**) is a recommended condition to address the need to fill any open stopes that are encountered during the works. Michael Sandy noted that monitoring and a VMP would confirm whether any disturbance had occurred from creating the stopes. The VMP would require review and certification by the Council. Mr Sandy pointed out that the mining methods being proposed had also been successfully used in the Favona, Trio and Correnso mines.
- [99] The geotechnical and surface stability configurations associated with MP4 and the underground mine along with the groundwater assessment and the surface settlement assessment had been reviewed on behalf of HDC by Peter Fuller. His overall finding from the review of the technical reports was they were *"all of the highest standard possible given the current preliminary status of the proposed underground mining part of the project"*⁴⁸ and that they *"are comprehensive and provide sound technical support of the Application"*.
- [100] Dr Fuller identified three matters of disagreement between himself and some of the applicant's experts as being:
- The essential need for old open historic stope voids within 30m of the MP4 pit base (presumed to be the pit toe) to be backfilled with CAF;
 - The requirement to commence mining the first remnant stope at the top of the historic stope; and

⁴⁸ Peter Fuller, Review of Ground Stability and Surface Settlement Aspects, for HDC, pages 4 and 19.

- The requirement for any new lodes to be mined between those included in the application to be investigated for their impact on stability to the satisfaction of the HDC prior to that mining commencing.

[101] These three points of disagreement were able to be discussed during the hearing with the following results:

- Agreement was reached that any form of backfill (not just CAF) will be beneficial in limiting displacement at the toe of MP4 and a proactive approach was agreed which would see backfilling done from the base of the pit and agreement on recommended consent Condition 70a accordingly.
- The matter of prior backfilling unfilled historic voids before starting any adjacent remnant stoping was addressed by a recommended consent Condition 71b.
- Agreement was reached that with the preliminary conceptual stage of underground mining, it has not been possible to assess the specific need for separation pillars to ensure regional scale stability. It was mutually agreed that this matter would be addressed as part of the VMP by a combination of recommended consent Conditions 72g and 72h.

[102] The conclusion was that the application of backfill in old unfilled stope voids and all new stopes created as part of Project Martha will ensure that stability underground is properly controlled and hence that the underground operations will not affect the stability of the surface. Further, it is predicted that the south east wall of the MP4 pit will experience mining induced settlement from the underground mine but from past monitoring of wall movements and experience, the magnitude of these has been assessed to not lead to any pit wall failure of any consequence, nor will it adversely affect either the operation of the mine or long term pit stability.

[103] We concur with the advice of Dr Fuller noting the reliance on the current underground and surface stability related conditions for the consented underground mining and development at Waihi. Experience has shown compliance has been achieved with those conditions and similarly, in respect of proposed consent Conditions 70 to 75 as drafted, we could reasonably expect that surface stability for Project Martha will be maintained. This is particularly important given the stability related concerns expressed by some submitters. We see those concerns being addressed by the recommended consent Conditions 71a and 71b relating to the placement of backfill in all stopes.

[104] Further, the VMP will provide for situations whereby a previously unknown stope void may be encountered with the VMP requiring to be certified by the HDC before any underground mining commences. Submitters raised concerns relating to the likelihood of another north wall failure occurring. We see that concern being addressed by the detailed examination of ground conditions in the north wall and behind the cut back wall position, with that analysis showing the cut back wall to

be stable. Further assurance of that will result from the early filling of unfilled stope voids.

[105] In all the circumstances, and from the evidence presented and the experience gained from the existing mining operations at Waihi, we find that the geotechnical issues relating particularly to surface stability and settlement are satisfactorily addressed.

14 Māori Cultural Matters

[106] Some seven iwi and hapū have been identified as parties who may be affected by the proposals.⁴⁹ These include Ngāti Hako, Ngāti Maru, Ngai Tai ki Tamaki, Ngāti Rahiri Tumutumu, Ngāti Tara Tokanui, Ngāti Tamatera and Ngāti Whanaunga. These iwi and hapū are represented by a range of iwi authorities, tribal rūnanga and individuals.⁵⁰ All of these groups have been notified of the applications before us.

[107] An Iwi Liaison Group (**ILG**) has been established previously as part of the Correnso consents.⁵¹ The ILG meets every six months and is kept apprised of mining activities, implementation of a cultural awareness programme, the ongoing development of a cultural balance monitoring plan, environmental monitoring results and other matters raised by the ILG.⁵² We understand that Ngāti Hako were instrumental in establishing the ILG.

[108] Many of these activities have been ‘rolled over’ by the applicant in the draft consent conditions before us. In this regard we have accepted these conditions for the most part, with some amendments to provide more certainty and clarity. With regard to the Cultural Balance Monitoring Plan, we now call this the Cultural Balance Plan, as there does not appear to be a monitoring component in the plan. We also note Ms Pauline Clarkin’s preference that the word “balance” be included in the title for that Plan.

[109] Te Kūpenga o Ngāti Hako, the iwi authority for Ngāti Hako were the only iwi or hapū group to make submissions on the applications for resource consent before us. They opposed the applications and wished for the consents to be declined.

[110] The submission from Te Kūpenga o Ngāti Hako to the HDC consents seeks to both honour the maunga of Pukewā and allow the maunga to rest. The submission to the WRC consents is concerned with the effects on the mauri of Ōhinemuri and the waters of the area. We will discuss these matters further below. Ms Clarkin, the manager of Te Kūpenga o Ngāti Hako, prepared their submissions and presented evidence at the hearing.⁵³

⁴⁹ Waikato Regional Council section 42A report, section 6, page 13

⁵⁰ Ibid.

⁵¹ Correnso Underground Mine Conditions of Consent Oct 2013, conditions 63, 64, 65

⁵² Correnso Underground Mine Conditions of Consent, condition 65

⁵³ Submitter #185 Te Kupenga o Ngāti Hako Inc.

[111] At the hearing the traditional name of the mountain that occupied the location of the Martha Pit was rendered with a range of pronunciations and dialectal intonations among witnesses and experts. We asked Ms Clarkin to clarify this for us. We now understand the traditional name of the mountain is Puke-wā and the meaning of the name is derived from Puke (hill) and wā (time and space). Wā also describes the sparkling qualities of quartz. In her evidence she also refers to Pukewā as the maunga (mountain).

14.1 The Mauri of Ōhinemuri

[112] The one issue raised by Te Kūpenga o Ngāti Hako in their submission to the WRC consents was ‘the direct effect on the mauri of Ōhinemuri [River] and the waters of the area’.

[113] In her evidence Ms Clarkin recommends the development of a plan that enhances tuna (eel) and other native species in the Ōhinemuri. She saw this as a positive step towards addressing issues of the mauri of the water.⁵⁴ She expressed her concern for the sustainability of the water take for filling the pit and whether the water take consent could be reviewed prior to it first being exercised in around twelve years. We find that to be appropriate and discuss and recommend an approach on this point at paragraph [63] of this decision.

[114] The Panel has also considered the potential effects of the filled lake pit on eels. Dr Boothroyd and Ian Jenkins for the applicant confirmed for us that the range of water quality attributes in the lake would be well within the tolerable levels for eels. The Panel also asked if the lake would be suitable for eel habitat and how would eels (both juvenile and adult) move in and out of the lake. As we discussed in relation to the Mangatoetoe Stream discharge structure in paragraphs [64] to [66] of this decision, as part of the applicant’s Reply submissions⁵⁵ we were provided with drawings of the lake outlet structure that would facilitate eel passage.⁵⁶

[115] The applicant in response to these concerns has provided conditions, agreed by Ngāti Hako, that give more detail to the contents of the Cultural Balance Plan. These include:

- a) Recommendations and solutions to enhance tuna habitat and abundance in the area;
- b) Consideration of options that may avoid the need for active water treatment of the pit lake; and
- c) Recommendations to support kaitiaki capacity.

[116] That approach was supported by Sheryl Roa, the WRC reporting officer. We are satisfied that these proffered conditions satisfactorily address Ngāti Hako concerns related to the mauri of Ohinemuri.

⁵⁴ Evidence of Pauline Clarkin, paragraph 13.

⁵⁵ Appendix D to the Reply submissions.

⁵⁶ Memo from Sioban Hartwell to Kathy Mason with 2 sketch plans of pit lake overflow pipe, inlet and outlet structures (attached). 19 November 2018. (Appendix D to right of reply).

14.2 The Mauri of Pukewā

[117] Ms Clarkin articulated very clearly for the Panel the deep sense of loss and grievance as a result of historic mining that has taken the maunga Pukewā and turned it into tailings and a deep pit. She explained the origin story for stones, rocks, sand and minerals, in particular the tradition of Pūtoto (the god of magma).⁵⁷ Ms Clarkin stated that there is an inherent responsibility to ensure that reciprocity or balance is achieved. She described a number of projects that are being undertaken by Ngāti Hako to give substance to the development of a Cultural Balance Plan to provide this balance. Ngāti Hako were looking for the time and space to bring balance back to Pukewā and restore the mauri of the whenua (land).⁵⁸ Ms Clarkin stated that the maintenance of mauri is carried out by kaitiaki.

[118] In response to these concerns the applicant and Ngāti Hako have agreed to more specific contents in the Cultural Balance Plan that provide:

- a) A statement of the issues in regard to which cultural balance needs to be restored;
- b) Recommendations to support kaitiaki.⁵⁹

[119] Ngāti Hako also seeks more certainty on the closure of the mine at Pukewā. The Panel understands that the current mining activity has some 12 months of capacity, and the proposed Project Martha mining activity (if granted) would yield a further 12 years⁶⁰. The applicant is also seeking a consent to fill the lake pit including the underground mine shafts to be exercised upon completion of the mining activity.

[120] The Panel does not have the mandate to impose a time limit on mining at Pukewā. Rather the Panel can impose conditions of consent including the imposition of a fixed duration for the land use consents required from the HDC for Project Martha. We note that course of action was not recommended by the HDC reporting officer Mr Burton and nor was it offered by the applicant. Towards the conclusion of the hearing counsel for the applicant urged us not to impose a fixed duration on the HDC land use consents because it was not inconceivable that, given the vagaries of underground mining, Project Martha may encounter unforeseen delays and operating within a fixed duration consent could consequently prove problematic. We understand those concerns and we find that there is a reasonable level of certainty regarding the likely tenure of mining activity at Martha and we do not consider it necessary to impose a fixed duration on the land use consents.

[121] The question of an Iwi 'active observer' or a 'specialist' being part of the proposed Peer Review Panel was also addressed at the hearing. The key issues were whether an active observer served a meaningful purpose and who would the active observer report to. We heard the views of Mr Burton for HDC, Ms Roa for

⁵⁷ Evidence of Pauline Clarkin, paragraph 8.

⁵⁸ Evidence of Pauline Clarkin, paragraph 4.

⁵⁹ Cultural Balance Plan conditions, Appendix J of Right of Reply.

⁶⁰ Applications for Resource Consents and Assessment of Environmental Effects, 25 May 2018, Section 1.1, pp1-2.

WRC, the applicant and Ms Clarkin for Ngāti Hako. There appeared to be consensus that an 'active observer' nominated by the Iwi Advisory Group would be appropriate. We accept this view and have reflected this position in the conditions.

14.3 Cultural and Historic Heritage Effects

[122] There are no places within the area affected by Project Martha listed on the New Zealand Heritage List / Rārangī Kōrero and no heritage items or sites of significance to Māori listed in the District Plan. Prior to assessments conducted by heritage consultants Clough and Associates, there had been no archaeological sites recorded within the project area.

[123] As a result of investigations for these applications a possible pre-1900 villa at 12 Cambridge Road (T13/928) and the relic underground features of the Martha Mine (T13/926) are the only recorded historic heritage sites within the project area, having been recorded. These latter historical workings comprise an extensive complex of 19th and early 20th century drives, shafts, tailings and a network of tunnels.

14.4 Villa at 12 Cambridge Road

[124] Rod Clough considered the villa T13/928 to have moderate historic heritage / archaeological value based on the criteria discussed in his technical report.⁶¹ Although villas are relatively common site types nationally and regionally, locally they are representative of the early development of Waihi as a township and together they form a group of places representing this theme. The villa has potential to provide information on early inhabitants of the town through archaeological study of the building and associated subsurface features or artefacts that may be present. Dr Clough further explained that when compared to other places already included in the District Plan heritage inventory, and without further information as to historical associations, the villa might be marginally equivalent to a Category C item but was unlikely to reach the threshold for higher categories.⁶²

[125] The villa will be affected by redesign of the road network adjacent to the Martha Pit. Dr Clough recommended that the villa at 12 Cambridge Road should be relocated within Waihi Township rather than demolished, to retain its historic heritage values (if it were to be demolished detailed investigation and recording would be required under the conditions of an Authority from HNZPT). The applicant offered consent conditions to this affect and we have included them in the conditions of the subdivision consent.

⁶¹ Clough & Associates. Historic Heritage Assessment, May 2018, Appendix K, Part 2, pages 48-49

⁶² Evidence of Dr Clough, paragraph 33.

14.5 Historic Mine Workings

- [126] Dr Clough thought there was a possibility of encountering underground archaeological remains associated with the old Martha Mine workings (T13/926) as part of the Martha Underground Mine. Further research and modelling was conducted and it was found that the majority of the pre-1900 historical workings have already been destroyed by the excavation of the current pit. According to Dr Clough, the Martha Underground Mine will not intersect the remaining pre-1900 historic workings.⁶³ Nevertheless, he has recommended a range of measures including recovery of artefacts, undertaking a photographic record and laser scanning of any pre-1900 workings should they be encountered. These conditions as offered by the applicant have been included in the land use consent.
- [127] There were no submissions or evidence provided at the hearing to the contrary.
- [128] Heritage New Zealand Pouhere Taonga (**HNZPT**) were the only submitter on historic heritage matters. They did not appear at the hearings, instead providing us with legal submissions. HNZPT sought conditions of consent that provided for an accidental discovery protocol and an advice note regarding requirements under the Heritage New Zealand Pouhere Taonga Act 2014.
- [129] At the end of the hearing the applicant and Council reporting officers provided a set of conditions including an agreed accidental discovery protocol and advice notes. We are confident that the conditions are consistent with the HNZPT request.

14.6 Sites of Significance to Māori

- [130] As mentioned above there are no sites of significance to Māori scheduled in the District Plan. The District Plan was recently reviewed in 2014. Regardless, Ms Clarkin described the significant value of Pukewā maunga in the traditions of Ngāti Hako and as mentioned above the historical legacy of losing the mountain to mining activity.
- [131] During the hearing it became clear that there was a potential policy tension between the Mining Zone which provides for mining activity at Martha and cultural heritage policies in the District Plan and the Regional Policy Statement.
- [132] In particular the Panel sought the views of the expert planners of the applicant and the Councils with regard to the provisions in Chapter 6.1 of the District Plan which seek to protect sites of significance to Māori ((including Objective 3(a)(ii) *Avoid a reduction of historical, cultural and spiritual values associated with sites of significance to Maori*) and the zone-based provisions in Chapter 5 which address the role of mining in Waihi, and provide direction on how its effects on the environment, including on residential amenity values, are to be managed.

⁶³ Evidence of Dr Clough, paragraphs 36-37.

[133] We note the evidence of Dave Burton for HDC and the comprehensive assessment of John Kyle for the applicant.⁶⁴ We also note the considerable agreement between the planners and accept their view that:

- a) Pukewā is a site of significance to Ngāti Hako that has been significantly affected by historic mining. The values held by Ngāti Hako will endure;
- b) The provisions of the District Plan should be read as a whole rather than individually;
- c) The applicant is undertaking and proposes a range of measures that seek to engage with tangata whenua, enhance and restore the mauri of Pukewā; and
- d) Mining activities are not contrary to the objectives and policies of the Martha Mineral Zone.

[134] The applicant's submission was that a holistic view needed to be employed given the current nature of Pukewā and the existence of a working mine. We accept this view and the evidence provided by Messrs Burton and Kyle, and we find that the provisions in Chapter 6.1 of the District Plan do not constitute a barrier to the granting of consent. Importantly, we note that at the hearing Ms Clarkin for Ngāti Hako was constructive in working with the applicant to agree on suitable conditions that sought to give meaning to the role of kaitiaki and develop and implement a plan to achieve a cultural balance whilst Ngāti Hako maintain a 'respectful opposition' to mining.

15 Noise Effects

[135] Noise from the proposed works is expected to be generated from the construction of a bund at the pit rim on the north wall, the realignment of Bulltown Road and Cambridge Road, and the mining activities (excavation, remediation and mining) on and in the vicinity of the northern pit wall.

[136] Nevil Hegley had advised the applicant regarding these matters and in evidence for the hearing stated that it is unlikely there would be a change in the noise currently received in the neighbouring areas. He referred to the compliance monitoring that had been carried out from the start of the mining which had been shown to be accurate and to give reliable results meaning that a high degree of confidence could be taken for the noise predictions. That monitoring would continue for Project Martha. The noise level is expected to be 50dB Leq at the most exposed locations of properties that are not owned by the applicant. This is the noise limit with which permitted activities in the residential zones must comply under the District Plan.

[137] We noted, from advice by the reporting planner Mr Burton, that the proposed noise conditions did not require the results of monitoring and complaints to be reported to HDC and an additional condition has been included (Condition 26A) within the consent to require it. Also, that five residential properties located close to the

⁶⁴ Evidence of John Kyle, paragraphs 47-69.

proposed realignment of Bulltown Road and Cambridge Road and to the north wall of the pit are now all owned by OGNZL.

[138] We find the noise situation to be acceptable for the local residents.

16 Traffic and Roding Effects

[139] The issues related to:

- a) The realignment of Bulltown/Cambridge Road.
- b) The SH25 (Barry Road) access to the Martha Pit.
- c) The impacts of traffic at the intersection of SH2 and Baxter Road.

[140] The realignment of Bulltown Road and Cambridge Road is to provide for the cutback of the pit and to enable the construction of the new noise bund. This, and other matters, were addressed for the applicant by Ian Carlisle in evidence at the hearing. The safety for users of the roads, both motorists and pedestrians, was a concern by submitters but it was largely agreed during the hearing that a narrower formed width of the carriageway was an appropriate manner to address such concerns. That would discourage fast moving traffic and also provide the opportunity for some pedestrian amenity to be included in the design. We have addressed that matter with a condition accordingly, that condition requiring the width of the formed realigned road to taper from the eastern portion of Cambridge Road (near to the corner) to the top of Bulltown Road and to include a pedestrian crossing point and a refuge (Condition 29 of the subdivision consent). We are of the view that the traffic route will not be materially affected and as such, that the effects of the realignment will be minimal.

[141] The vehicular access to the pit from Kenny Street includes the use of a right-turn lane for westbound traffic turning right into the mine area. This existing access to and from the mine area was shown to meet the relevant safety standards and further, the road safety record did not indicate any difficulties with this access. Mr Carlisle stated⁶⁵ there would be an increase in traffic movements at the Barry Road access but the number of traffic movements would be less than was experienced during earlier phases of mining. From the evidence, and our visit to the area of the access, we find there to be no difficulties with the use of this existing access as part of Project Martha. We note that the speed limit on this part of SH25 (Barry Road) is 50kph thereby limiting the potential for any adverse traffic impacts.

[142] The effects of the proposal on the operation of the intersection of Baxter Road and SH2 is an important consideration should it be proposed to use that route for the importation of fill as part of the proposal. Access to the underground workings and the processing area is predominantly from Baxter Road, which in turn is accessed from SH2. That intersection is to the south of Waihi and within a 100kph speed zone. The available sight distances meet the Austroads⁶⁶ safe intersection sight distances. There are no right turn lanes for traffic accessing Baxter Road from the

⁶⁵ Evidence of Ian Carlisle, 19 October 2018, paragraph 12.

⁶⁶ Ibid, para 26 and noting that Austroads are reference guidelines for both HDC and NZTA.

south but, as pointed out by Mr Carlisle there is a widened shoulder opposite Baxter Road to assist northbound traffic and a deceleration lane on the SH to assist southbound traffic turning into Baxter Road. We were able to observe these features from our site and locality visits.

[143] NZTA had concerns for this intersection and were represented at the hearing by Joy Morse and Robert Swears. NZTA had advised⁶⁷ that back to back right turn bays are proposed to be installed at the staggered intersection of SH2 with Baxter Road and Crean Road (on the western side of SH2) within a year. However, there was still concern should the aggregate required for filling be sourced from somewhere other than the Waitawheta Quarry (on McLean Road) or should trucks longer than 11m be used to transport the aggregate from the Waitawheta Quarry to the site. That planned upgrade of the intersection would not be able to accommodate trucks over 11m in length.

[144] Mr Swears sought the relevant condition, Condition 104, be amended to require the applicant/consent holder to demonstrate to the Council that the proposed haulage route(s) would accommodate the proposed vehicle configurations without the vehicles crossing the centrelines and/or edge lines of the roads that comprise the haulage route. If not, and if the haulage route included a State Highway, the Council would need to be provided with written confirmation from NZTA that it accepted the proposed route. We appreciate the road safety concerns of NZTA in this respect but do not consider we can impose a condition of consent that effectively requires the approval of a third party. It is also the case that the applicant has not confirmed the need, at this time, for aggregate to be sourced from anywhere other than the Waitawheta Quarry. We accept the advice of Mr Burton for the Council that a condition be included that allows for a review of the traffic related conditions of consent to be initiated if the proposed alternative haulage route cannot accommodate the proposed vehicle configurations. Condition 123d refers to this matter.

[145] Otherwise there are conditions (Conditions 105 to 109) that acknowledge the limitations of that intersection without an upgrade and requiring certification by Council and/or consultation with NZTA as appropriate. Those traffic related conditions on the consent take account of traffic considerations that were referred to in the submission by NZTA and its evidence at the hearing.

[146] We find from the above, that traffic related effects are satisfactorily dealt with, and with the conditions of consent, mean that the adverse effects are avoided or mitigated to be minor.

17 Effects on Property Values

[147] The approach to dealing with the effects on property values by way of various measures was raised by a number of submitters. These various measures include

⁶⁷ Ibid, paragraph 13.

the We Break We Pay programme, the Amenity Effects Programme (**AEP**), the Streets Ahead programme, property purchase and the Top Up Policy. Some of these have been included as part of earlier consents on an *Augier* basis, where the Council is not able to impose those measures as conditions of consent but rather, they have been included on the basis of being offered by the applicant. The AEP, Streets Ahead programme and the Top Up policy are measures that are not able to be included as consent conditions without being offered by the applicant.

- [148] Kit Wilson explained the various measures in evidence, those including the We Break We Pay programme by which any complaints are investigated, and any damage rectified in accordance with the advice of a third party if necessary. Conditions 55 and 56 refer to those programmes.
- [149] The AEP payment regime does not seek to minimise the effects of mining on property prices. This is not considered to be an environmental effect and we are therefore not able to impose that measure as a consent condition. The AEP is more in the nature of a compensatory payment for amenity disturbance from vibration caused by blasting. The AEP is however offered as a consent condition by the applicant (Condition 35) but is not to be extended to include commercial properties, as sought by the Waihi Community Forum (**WCF**). As we discussed in section 12 of this decision report, we find, from the evidence, that there are residential dwellings in parts of the commercial town centre, sometimes as part of the same building, and further, that there will be a measure of protection from vibration on those properties by the controls/conditions that apply in the adjoining residential zone. So, we do not agree that the AEP should be extended but accept the applicant's offer of it applying to residential properties in the application area.
- [150] Similarly, the Streets Ahead programme operated by the applicant as part of other activities, and as sought by the WCF to apply to this project, is not to mitigate a demonstrated effect of Project Martha and would need to be offered by the applicant, despite its apparent success. It was explained by Mr Wilson to be compensation rather than a mitigation measure and designed to enhance a neighbourhood rather than apply to individual properties.
- [151] The property purchase programme conditions (Conditions 84 to 98) provide for properties immediately above the Rex Orebody but not those properties beyond as sought by WCF and Michael Moskal. Heather Ross also raised concerns for property damage, seeking compensation rather than property purchase. We heard the evidence from the parties but find agreement with Mr Burton⁶⁸ that it not be extended given the limited time duration of mining in the Rex Orebody and the residential properties being on one side (to the south east). These features differentiate this project from the Correnso mine which is surrounded by residential properties and has operated for a considerably longer period. We note too, that

⁶⁸ William David Burton, Synopsis of Technical Report and Response to Evidence, 19 November 2018, paragraphs 63 to 66.

there is always the opportunity to approach OGNZL, in the event that problems arise that may necessitate property purchase.

[152] As noted above, the Top Up policy, which is intended to maintain property values, cannot be imposed as a condition of consent as it is not regarded as an environmental effect. We note the success of the policy as part of other projects and OGNZL has offered to apply it to properties in the vicinity of the Rex orebody and the Phase 4 pit perimeter, within 100m from the proposed north wall noise bund.

[153] From the above, we consider the applicant has addressed the effects on property values in a manner which takes due account of potential impacts and similar to the approach taken with other mining projects at Waihi.

18 Positive Effects from the Proposal

[154] Mining plays a significant role in the economy of Waihi and in the welfare of the residents. The proposal will enable the continuation of existing mining activity and the retention of the local employment and businesses it supports, as well as the various initiatives the applicant supports in the community. This was evidenced by the many submissions from the community in support of the proposal.

[155] The benefits for employment and economic activity were summarised in the evidence of Shamubeel Eaquab⁶⁹ and David Fougere⁷⁰ who described how the majority of the community have an understanding of the benefits the mining brings to the area.

[156] We find that the proposal will provide for the continuation of those benefits.

19 The Statutory Planning Documents

[157] We adopt the commentaries in the respective section 42A reports by Ms Roa and Mr Burton in concluding that the provisions of the relevant national environmental standards and national policy statements (listed in section 8 above), the Hauraki Gulf Marine Park Act and the NZ Coastal Policy Statement are met by the proposal.

[158] The relevant provisions of the **Hauraki District Plan** were addressed in the assessments of effects on the environment (**AEE**) reports included with the applications, in the HDC's section 42A report by Mr Burton and in evidence from John Kyle, for the applicant. We adopt that part of the section 42A report for the purposes of this discussion in this decisions report, in accordance with section 113(3) of the RMA.

⁶⁹ Evidence of Shamubeel Eaquab

⁷⁰ Evidence of David Fougere

[159] In terms of an overall assessment of Project Martha in relation to the relevant objectives and policies contained in the Residential, Low Density Residential and the Martha Mineral zones, we find agreement with Mr Burton that⁷¹:

- The proposed encroachments of mining operations (Phase 4 Cutback and noise bund) into both the Residential and the Low Density Residential zones are small in scale/area with relatively few privately owned dwellings affected.
- The proposed encroachments into the Residential and the Low Density Residential zones are on the fringe of the existing Martha Pit, which is a major existing feature in the immediately locality.
- Objectives and policies are included in the Residential and the Low Density Residential zones, and in other parts of the District Plan, to ensure best practice design and operations (via consent conditions) to ensure that the health, safety and amenity of adjacent residents can be maintained.
- The proposed Phase 4 Cutback works are, at least partly, aimed at rehabilitating the north wall of the Martha Pit, an outcome that would be desirable and in keeping with the approved Closure and Rehabilitation Plan.
- Continued utilisation of the mineral resource with associated social and economic benefits would be consistent with the objectives and policies of the MMZ.

[160] Overall, and given the imposition of appropriate land use and subdivision consent conditions, Project Martha will not be inconsistent with the objectives and policies of the HDP.

[161] In coming to that conclusion, we are mindful that there is a conflict in the District Plan insofar as whilst the objectives seek to provide for the people and community of Waihi by *inter alia*, recognising the significance of mining to the social and economic well-being of its residents, there are also objectives and policies that seek to recognise and protect sites of significance to Maori by implementing policies that include avoiding the reduction of historical, cultural and spiritual values associated with sites of significance to Maori.

[162] The evidence was, and it appeared to be commonly accepted, that Pukewa is a site of significance to Māori, that it lies within the Martha Mineral Zone and that the earlier excavation of the Martha Pit has clearly resulted in significant adverse effects on the Māori values associated with it. Mr Kyle provided a helpful view on this matter in which he deferred to tangata whenua to say how the proposal will affect the values that are important to them and went on to state ⁷²:

“In my opinion there is something of a tension in the District Plan between the enabling approach taken in the Martha Mineral Zone and the fact that Pukewa is so substantially affected by it. It appears to me that OGNZL has approached the partnership with Ngati Hako in good faith and there are methods that are being discussed between them that could achieve some restoration of Pukewa’s mauri now, as well as providing the

⁷¹ HDC section 42A report, page 41, paragraph 5.

⁷² Evidence of John Kyle, 29 October 2018, paragraph 66.

opportunity to bring some closure to the issue so it is not passed on to the next generation. In the long term, it would also seem that if the methods outlined by Mr Watson were accepted and implemented this brings with it the opportunity to ultimately restore or enhance Pukewa's mauri through appropriate rehabilitation and re-engagement of tangata whenua with the area."

- [163] We are thankful for the informative manner in which Pauline Clarkin presented evidence on behalf of Te Kupenga O Ngati Hako which addressed the concerns of Māori and the initiatives that had taken place to see their involvement in these projects. However, she was clear on the desire to see the closure of mining in Pūkewa and pointed out that was needed to meet earlier promises that it would occur. They had been waiting for it for some 15 years.
- [164] We understand and appreciate those views and to the extent we believe we are able, have addressed them above in our discussion on "The Mauri of Pukewa". We believe we are adopting a practical approach in dealing with the inherent tension between these District Plan provisions and further, in providing for a further period of mining in this particular part of Waihi for a further period of some 12 years. We are further of the view that some balance needs to be struck in dealing with planning provisions that are of a competing nature and whilst we may not reach an agreed position with Ms Clarkin, we nevertheless believe we are striking a reasonable balance in the circumstances applying to this current proposal in this part of Waihi.
- [165] We have addressed this consideration in the conditions of consent that include the appointment of an independent observer to the Peer Review Panel that operates as part of the consent conditions for this proposal and other mining related activities at Waihi.
- [166] We find that the applications are not contrary to the objectives and policies of the District Plan when considered holistically. The cultural effects of the mining activity are managed by the specific provisions of the MMZ enabling mining activity, together with the comprehensive mitigation measures in the conditions, and collaboration between Te Kupenga o Ngāti Hako and OGNZL. In this respect too, we note the support to this view provided in the evidence of Mr Kyle and in the section 42A report by Mr Burton. We acknowledge the legal advice received at the hearing from Andrew Green in relation to this matter.
- [167] The relevant provisions of the **Waikato Regional Policy Statement (WRPS) and of the Waikato Regional Plan (WRP)** were assessed in the assessments of effects on the environment (**AEE**) reports included with the applications, in the WRC's section 42A report by Ms Roa and in evidence from John Kyle, for the applicant. We adopt that part of the section 42A report for the purposes of this discussion in this decisions report, in accordance with section 113(3) of the RMA.
- [168] The activities for which resource consents are sought are:

- To discharge contaminants into the air relating to all activities within the Golden Link Project Area - (change to conditions of current consent).
- To take groundwater including geothermal water, associated with the dewatering of the Martha Pit and associated underground workings including the Martha Underground Mine.
- To place ore, waste rock, topsoil and tramp material to land within and adjacent to the Martha Pit, including stock piled material and material for the creation of noise bunds.
- To remove vegetation and carry out earthworks and contouring of land for mining, mining operations and post mining operations (including for rehabilitation purposes) associated with Project Martha.
- To place rock and concrete aggregate fill into land in the Martha Underground Mine.
- To take water from the Ohinemuri River to flood the Martha Pit and associated underground mine workings.
- To discharge surface water from the Ohinemuri River and treated water from the Water Treatment Plant into the Martha Pit on completion of mining for the purposes of flooding the underground mine workings to accelerate the filling of the pit lake.
- To discharge limestone into the pit lake.
- To discharge overflow from the lake via an outlet structure and channel to the Mangatoetoe Stream.
- To construct and use an intake structure in the Ohinemuri River.
- To construct and use an outlet structure in the Mangatoetoe Stream.
- To temporarily divert ground water during the construction of the outlet structure in the Mangatoetoe Stream.
- To temporarily discharge groundwater, diverted during the construction of the pit lake outlet, into the Mangatoetoe Stream.

[169] As noted earlier in this decision report, all the activities are discretionary activities in the WRP. We note, as stated in the section 42A report⁷³, that submitters' concerns have where possible and practicable been addressed by consent conditions.

[170] We agree and adopt the views expressed in the section 42A report that recommend Iwi be represented as an active observer on the Peer Review Group as better acknowledging the role of tangata whenua as kaitiaki and further, finding that the proposal is not inconsistent with the objectives and outcomes in the Hauraki Iwi Environmental Plan (Whaia te Mahere Taio a Hauraki). It was also concluded in the section 42A report that the proposal is in accord with the other relevant statutory planning documents, with sections 105 and 107 RMA and Part 2 RMA, subject to the recommended conditions of the consents and with those views being supported by the evidence from the applicant at the hearing.

⁷³ WRC section 42A report, section 6.2, paragraph 15.

[171] We find the activities for which regional consents are sought to be consistent with the regional planning documents.

20 Section 104D of the RMA

[172] As we have noted above, parts of the applications to the HDC are to be dealt with as non-complying activities and in that respect, there are more stringent statutory “tests” to meet before passing onto the considerations of section 104.

[173] From the evidence, we find that section 104D is met because the applications are for an activity that will not be contrary to the objectives and policies of the District Plan, as we have discussed above. Neither of the planning witnesses for the applicant (Mr Kyle) or HDC (Mr Burton) concluded that the first “test”, being that the adverse effects of the activity on the environment will be minor, was met and we would have difficulty concluding this test was met based on the evidence received. The legal submissions for the applicant also did not advance an opinion on the adverse effects limb (section 104D(1)(a)), focusing instead on meeting section 104D(1)(b) which refers to a proposal not being contrary to (we note that ‘contrary to’ contemplates being opposed in nature, different to, or opposite to⁷⁴) the objectives and policies of the District Plan.

[174] However, only one of the tests is required to be met, as we find it is, to be able to pass onto the section 104 evaluation of the applications to HDC. We have addressed section 104 in the preceding sections of this decisions report, those covering the actual and potential effects on the environment, offsetting or compensatory measures and relevant provisions of the planning instruments.

21 Sections 105 & 107 and Section 106 of the RMA

[175] We record that we have had regard to these sections of the RMA and find there are no reasons that arise from those considerations that lead us to conclude the respective regional and district resource consents sought cannot be granted.

22 Part 2 of the RMA

[176] Decisions on resource consent applications are made “subject to Part 2 of the Act”. However, recent Court decisions have seen debate on the application of Part 2 to resource consent decisions. In this respect, we have had regard to the earlier High Court decision⁷⁵ but more particularly to the very recent Court of Appeal decision⁷⁶, which is the current determination in this matter. For this reason, we make a brief assessment of Part 2 matters below.

[177] In relation to section 5, the Purpose of the Act, we find that the present applications will help the applicant and the community of Waihi to meet their social and

⁷⁴ *NZ Rail Ltd v Marlborough DC* [1994] NZRMA 70 HC.

⁷⁵ *RJ Davidson Family Trust v Marlborough DC* NZ High Court 52

⁷⁶ *RJ Davidson Family Trust v Marlborough DC* [2018] NZCA 316

economic needs and that the conditions on which the consents are granted will avoid or mitigate the actual and potential adverse effects of the proposal.

[178] In relation to section 6 and 7 matters we find that the key matters relate to the relationship of Māori and their culture and traditions with ancestral lands, water, sites, waahi tapu and other taonga and, to the efficient use and development of natural and physical resources, the quality of the environment and amenity values and the intrinsic value of ecosystems. These matters have all been addressed in the applications and through the hearing and discussed by us earlier in this decision report. In particular, the cultural considerations are addressed by the conditions on which the consents are granted, and by the applicant agreeing to the conditions discussed with Ms Clarkson and the Panel during the hearing.

[179] In relation to section 8, we note the meaningful and concerted effort of the applicant to engage with tangata whenua before during and after the applications for the consents before us. We note the partnership with Te Kupenga o Ngāti Hako in the existing operations of the mines and the conditions of existing consents.

23 The Submitters

[180] We have had regard to all the matters raised in the submissions to the applications for resource consent (land use and subdivision), even though we have not referred specifically to each submitter in this decision report. Where appropriate reference is made to submissions, or parts of submissions, in our assessment of the issues of contention to assist submitters to see generally how we have had regard to the matters raised, or where not. We acknowledge the submissions, both opposing and supporting the proposal and have, to the extent we consider appropriate, provided for the concerns of opposing submitters where these are not otherwise already covered by details of the applications.

24 The Subdivision Application

[181] Aspects of the associated subdivision consent application have been discussed earlier in this decision report regarding the land use consent to enable the development of the proposed Project Martha. Both the land use consent component and the subdivision component have been assessed as non-complying activities.

[182] The proposed subdivision involves subdividing three existing allotments at the corner of Cambridge Road and Bulltown Road into two new lots with one of the newly created lots being vested in the Council as road to be used to accommodate the realignment of Bulltown Road and Cambridge Road in the vicinity of the proposed Phase 4 Cutback. It was comprehensively reported upon by Mr Burton in his section 42A report.

[183] As we have earlier stated, many submitters lodged their submissions in respect of both the land use and subdivision applications rather than separately. This meant

it was not an easy task to separate the submissions that relate to each application. However, analysis by the Council's section 42A report writer showed that of the submissions received on the subdivision consent application, approximately 90% were in support, 4% in opposition, 4% neutral with the remaining 3% "not stated".

[184] We have had regard to the matters raised in these submissions and find that the concerns raised in opposition can be addressed by way of the conditions we include as part of consent to the subdivision. In this respect:

- The traffic effects associated with the realigned road are addressed with the narrowing of the road carriageway and a safe pedestrian crossing point;
- Powerco's concerns are addressed by way of an Advice Note on the consent;
- The concerns of HNZPT are addressed with the conditions of the associated land use consent taking account of the heritage qualities of the villa at 12 Cambridge Road along with an accidental discovery protocol being included as a condition of the subdivision consent; and
- Measures to mitigate potential adverse effects in relation to noise, dust and traffic disruption are dealt with by the requirement for a construction management plan attaching to the subdivision consent that is to be certified by the Council.

[185] Otherwise, the proposed subdivision does not conflict with any of the provisions of the District Plan or other relevant planning instruments. We find that it is consistent with the purpose and principles of the RMA, as included at Part 2 of that legislation.

[186] In conclusion and, based on the advice in the section 42A report and the evidence from the hearing, we conclude that the adverse effects on the environment will be minor and that the proposal is for an activity that will not be contrary to the objectives and policies of the HDP.

25 Terms of the Consents

[187] We agree to the lapse dates, commencement dates and duration for the regional consents as sought by OGNZL and these details are included in the individual consents below.

[188] For the district land use and subdivision consents, the standard 5 year lapse date applies (section 125 RMA) with there being no stated duration or expiry date (section 123 RMA) for the consents. The matter of the duration for the land use consent was raised in the section 42A report, was not raised by any submitter nor discussed in any detail at the hearing. The applicant has proposed there be no expiry date. A defined period from the commencement of the consent could be considered but there would be issues with the Martha Pit activities given that the former Mining Licence provisions are now permitted activities in the District Plan and the EMMA land use consent is to be carried into the District Plan on its expiry in 2019. In the circumstances we leave the duration as unlimited, in the knowledge too, that 12 years is the expected life of the mining activity now consented.

26 Conditions of Consent

[189] The conditions of the consents were largely agreed between the applicant and the respective Councils' officers at the conclusion of the hearing. Those conditions included agreement with a number of the points raised by submitters. We acknowledge the input of Richard Turner to the conditions, in responding to changes needed to the drafts and how various effects are addressed in the conditions.

[190] The consent conditions associated with Project Martha are long and complex. It is conceivable that the schedules of conditions attached to our decision report contain errors of a grammatical or cross-referencing nature. Accordingly, should the applicant or either of the two Councils identify any minor mistakes or defects in the attached conditions, then we are prepared to issue an amended schedule of conditions under section 133A of the RMA correcting any such matters. Consequently, any minor mistakes or defects in the conditions should be brought to our attention prior to the end of the 20 working day period specified in section 133A.

27 The Decisions

[191] That pursuant to sections 104, 104B and 104D of the Resource Management Act 1991, the **Hauraki District Council grants consent** to the applications for land use consent for mining and mining operations that are involved in Project Martha at Waihi and for subdivision consent to accommodate the realignment of Bulltown Road and Cambridge Road that is required to enable the Martha Pit to be extended to remedy the north wall failure subject to the conditions below and for the following reasons.

[192] That pursuant to sections 104 and 104B of the Resource Management Act 1991, the **Waikato Regional Council grants** consent to the applications for a number of activities associated with a new underground mine and the rehabilitation of the north wall of the open pit, being part of Project Martha at Waihi, subject to the conditions included in the individual consents below and for the following reasons.

28 Main Reasons for the Decisions

[193] The reasons for these decisions are included in the above decisions report and can be summarised as being:

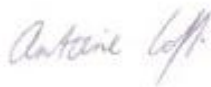
- a) The environment in terms of which the applications for Project Martha and the associated subdivision are to be assessed currently includes open pit and underground mining activities which have occurred at Waihi for many years.
- b) Project Martha will provide on-going economic and employment benefits to Waihi and the surrounding area.
- c) The adverse effects on the amenity of the locality can be managed and contained to a level that is acceptable to the community by the conditions of the consents.

- d) Project Martha is not contrary to the objectives and policies of the Hauraki District Plan and is in accord with all the relevant statutory documents.
- e) The regional consents sought that are associated with Project Martha are all consistent with the provisions of the Waikato Regional Plan and with the Waikato Regional Policy Statement.
- f) Project Martha, the associated subdivision and the regional consents that are required for it are all consistent with the purpose and principles of the RMA, as included at Part 2 of the Act.

Signed by the Commissioners:



Alan Watson (Chairperson)



Antoine Coffin



Rob van Voorthuysen

Dated 12 December 2018