

WAIHI NORTH PROJECT - PROPOSED CONDITIONS FOR THE WAIKATO REGIONAL COUNCIL

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GENERAL CONDITIONS WHICH APPLY TO ALL WAIKATO REGIONAL COUNCIL CONSENTS

[Note – the ‘comment’ column has been provided for guidance and interpretation purposes only, and is not proposed to form part of the consent conditions]

EXERCISE OF CONSENTS

	Condition	Comment
G1	No later than 20 working days prior to the first exercise of any consent, the Consent Holder must advise the Waikato Regional Council in writing of the date upon which the consent will first be exercised.	

EROSION AND SEDIMENT CONTROL

G2	Conditions G3 – G17 apply to land disturbance and works within watercourses in Areas 2, 5, 6 and 7, where the area is not subject to permanent stormwater management infrastructure. They do not apply to land disturbance in areas which are isolated from waterbodies and adjacent land using permanent diversion drains, silt ponds, collection ponds and / or other permanent mine water management infrastructure.	
G3	Where works are undertaken within any watercourse in Areas 2, 5, 6 and 7, where the area is not subject to permanent stormwater management infrastructure, the Consent Holder must establish and maintain erosion and sediment control measures that are: <ul style="list-style-type: none"> a. Consistent with Waikato Regional Council Technical Report No. 2009/02 Erosion and Sediment Control Guidelines for Soil Disturbing Activities, January 2009 (TR2009/02) or any subsequent version of those guidelines (in which case the latter version prevails).; and b. In accordance with Erosion and Sediment Control Assessment Report by Southern Skies. 	
G4	To minimise erosion, the Consent Holder must ensure, to the greatest extent practicable, that all clean water run-off from stabilised surfaces including catchment areas up gradient of the site is diverted away from the exposed areas via a stabilised system.	
G5	The Consent Holder must ensure that all run-off from areas where soil disturbance has occurred is treated by sediment retention structures prior to discharge, in accordance with any Site Specific Erosion and Sediment Control Plan (SSESCP) required by	



	Condition G13. These structures are to be fully operational before soil disturbance in the relevant Area commences.	
G6	The works authorised by this consent must not cause increases in upstream or down stream flows which cause flooding on adjacent land.	
G7	All earthmoving machinery, and ancillary equipment must be operated in a manner which ensures spillages of fuel, oil and similar contaminants are prevented to the greatest extent practicable. Refuelling and lubrication activities must be carried out a distance from any water body, ephemeral water body, or overland flow path, that is sufficient to ensure that any spillage can be contained and not enter surface water.	
G7a	The storage of nitrogen-based explosives must be at a distance from any water body, ephemeral water body or overland flow path, that is sufficient to ensure that any spillage can be contained and not enter surface water. Any permanent storage facility for nitrogen-based explosives must prevent any loss of nitrogenous compounds to groundwater.	
G8	The Consent Holder must ensure that all mobile and non-fixed plant, equipment and machinery used for surface activities in Area 1 is cleaned prior to being transported to the Area to ensure that all seed and plant matter has been removed. Cleaning must be undertaken and documented in accordance with the document titled 'KEEP IT CLEAN - best practice guide #A16' produced by National Pest Control Agencies, ISBN 978-1-877474-54-5, June 2013 or any subsequent version of the guide (in which case the latter version prevails).	
G9	All disturbed or cut vegetation, soil or debris must be placed in a position where it will not enter, nor cause erosion of, any water body.	
Chemical Treatment Plan		
G10	Where chemical treatment forms part of the proposed erosion and sediment control measures, the Consent Holder must submit a Chemical Treatment Plan for certification no later than 30 working days prior to commencement of the works concerned. Certification is required to verify that the Chemical Treatment Plan: a. Has been prepared in accordance with the draft Chemical Treatment Plan included as Appendix A of the Southern Skies Erosion and Sediment Control Assessment Report; b. Includes actions, methods, monitoring programmes and trigger levels as appropriate to meet the objectives in Condition G11; and	

Commented [MD1]: Added at request of WRC.



	c. Satisfies the requirements set out in Condition G12.	
G11	<p>The objectives of the Chemical Treatment Plan are to:</p> <ul style="list-style-type: none"> a. Identify the circumstances where chemical treatment is necessary to enhance the efficacy of sediment retention ponds and decanting earth bunds; and b. Confirm details of the chemical treatment system. 	
G12	<p>The Chemical Treatment Plan must as a minimum, include:</p> <ul style="list-style-type: none"> a. An analysis of site soil reactivity to flocculants; b. Design details of the flocculation system, including within which sediment retention ponds and decanting earth bunds flocculants will be used; c. Monitoring (including pH and any other testing procedures) and maintenance (including post-storm) requirements, including a record keeping system; d. Details of optimum flocculant dosage (including assumptions); and e. Contact details of the person responsible for the operation and maintenance of the flocculation treatment system and the organisational structure to which this person shall report. 	
<i>Site Specific Erosion and Sediment Control Plans</i>		
G13	<p>The Consent Holder must submit a SSESCP for works in each Area specified in Condition G2 for certification under Condition C5 no later than 30 working days prior to commencement of activities in the respective Area.</p> <p>Certification is required to verify that the SSESCP for each Area:</p> <ul style="list-style-type: none"> a. Has been prepared in accordance with the draft Site Specific Erosion and Sediment Control Plan included as Appendix C of the Southern Skies Erosion and Sediment Control Assessment Report; and b. Satisfies the requirements set out in Condition G14. <p><i>Advice Note: Site Specific Erosion and Sediment Control Plans may be submitted for each Area separately or multiple Areas combined.</i></p>	
G14	<p>Each SSESCP must include, as a minimum:</p> <ul style="list-style-type: none"> a. A description of the construction activities to be undertaken; b. The specific erosion and sediment control measures to be implemented to achieve the conditions of this consent, including their location, dimensions and capacity; 	

Commented [MD2]: WRC has proposed two new clauses to be added to this list:

- h. Details of sediment control structures that are managing run-off from PAF materials;
- i. Identification of specific sediment disposal practices for any PAF material within these sediment control structures that receive runoff from PAF materials

These have not been added as they are not necessary as a result of G14 relating to *land disturbance and works within watercourses in Areas 2, 5, 6 and 7, where the area is not subject to permanent stormwater management infrastructure* (refer to condition G2).

The erosion and sediment controls will only be in place to manage surface earthworks, and not be receiving runoff from any PAF materials. Permanent collection ponds will be in place prior to the first deposition of PAF onto the waste rock stack.



	<ul style="list-style-type: none"> c. Supporting calculations and design drawings; d. Catchment boundaries and contour information; e. Location(s) of stabilised entranceway(s); f. Details of temporary and permanent stabilisation; and g. The construction methodology for any stream works within the relevant SSESCP works area. 	
<i>Monitoring and Reporting</i>		
G15	<p>The Consent Holder must ensure that all erosion and sediment control structures are inspected to identify any maintenance requirements, as follows:</p> <ul style="list-style-type: none"> a. On a weekly basis; and b. During the period commencing 24 hours before any forecast rainfall event of 25 mm over the subsequent 24 hours; and c. As soon as practicable following any rainfall event exceeding 25 mm over 24 hours. 	
G16	<p>The Consent Holder must maintain records detailing:</p> <ul style="list-style-type: none"> a. The date, time and results of the inspection undertaken in accordance with Condition G15; and b. The erosion and sediment controls that required maintenance; and c. The date and time when the maintenance was completed. <p>These records must be provided to the Waikato Regional Council within 72 hours of a written request to do so.</p>	
<i>Removal of Erosion and Sediment Control Measures</i>		
G17	<p>Erosion and sediment control measures must only be removed:</p> <ul style="list-style-type: none"> a. Once the corresponding catchment area has been permanently stabilised; or b. When in accordance with a certified SSESCP. 	

RECEIVING ENVIRONMENT STANDARDS

G18	<p>The discharges authorised by these consents and any associated seepage, in combination with all other discharges authorised for the Consent Holder's mining activities must not exceed the limits set out in Table 1 at monitoring stations MS10 and MS12 (located at approximately NZTM E1853396, N5862419 and NZTM E1853565, N5862345 respectively).</p>	<p>These are the receiving environment standards which sit on OGNZL's existing Waihi mining related resource consents.</p>
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Table 1: Receiving Water Quality Standards for the Ohinemuri River and its Tributaries		
Parameter	Receiving Water Concentration	
g/m ³ unless otherwise stated	Hardness 20 g/m ³ CaCO ₃	Hardness 100 g/m ³ CaCO ₃
pH	6.0 to 9.0	6.0 to 9.0
Suspended solids	For upstream concentrations of less than or equal to 100 g/m ³ the increase must be no greater than 10 g/m ³ . For upstream concentrations of greater than 100 g/m ³ the increase must be no greater than 10%	For upstream concentrations of less than or equal to 100 g/m ³ the increase must be no greater than 10 g/m ³ . For upstream concentrations of greater than 100 g/m ³ the increase must be no greater than 10%
Cyanide (CN _{WAD}) ⁽¹⁾ – in Areas 5 and 7 only	0.093	0.093
Iron	1.0	1.0
Manganese	2.0	2.0
Copper	0.003	0.011
Nickel	0.040	0.160
Zinc	0.027	0.100
Silver ¹	0.00025	0.00028
Total Ammonia	Refer Table 3	Refer Table 3
Antimony	0.030	0.030
Arsenic	0.190	0.190
Mercury	0.000012	0.000012
Cadmium	0.0003	0.001
Chromium (VI)	0.010	0.010
Lead	0.004	0.0025

Notes:

- 1) Site specific criteria derived using US EPA (1985) methodology.
- 2) Monitoring of metals must be based on the soluble test method, defined as the concentration of dissolved metals measured in that fraction which passes through a 0.45 µm filter except for mercury (Hg) which must be based on acid soluble concentrations determined on unfiltered samples.

The Boffa Miskell aquatic ecology assessment has not recommended any changes to these standards.

Commented [MD3]: Amended at request of WRC.

Commented [MD4]: WRC considers the appropriateness of this standard should be reviewed considering a max of 0.073 mg/l was recorded across all sites between 2020 and 2024.

There is no basis for necessitating any change. The existing limit has been in place for the life of the mine, with no recorded effects on in-stream aquatic ecology.



3) Current analytical procedures for mercury have a practical quantification limit ("PQL") of 0.0005 ppm. This PQL is acceptable for the purposes of reporting mercury concentrations. The reporting 'limit' for mercury concentrations must be reviewed annually by the Consent Holder and must be adjusted in line with improvements in analytical technology.

Temp (°C)	0	5	10	15	20	25	30
pH							
6.50	3.0	2.8	2.7	2.5	2.5	2.5	2.4
6.75	3.0	2.8	2.7	2.6	2.5	2.5	2.5
7.00	3.0	2.8	2.7	2.6	2.5	2.5	2.5
7.25	3.0	2.8	2.7	2.6	2.5	2.5	2.5
7.50	3.0	2.8	2.7	2.6	2.5	2.5	2.5
7.75	2.8	2.6	2.5	2.4	2.3	2.3	2.4
8.00	1.82	1.70	1.62	1.57	1.55	1.55	1.59
8.25	1.03	0.97	0.93	0.90	0.90	0.91	0.94
8.50	0.58	0.55	0.53	0.53	0.53	0.55	0.58
8.75	0.34	0.32	0.31	0.31	0.32	0.35	0.38
9.00	0.195	0.189	0.189	0.195	0.21	0.23	0.27

Note: To convert the values to mg/l as nitrogen, multiply by 0.822.

Commented [MD5]: Units added at request of WRC.

AQUATIC ECOLOGY

	<p><i>Advice note: Aquatic ecology is subject to the Aquatic Fauna Salvage and Relocation Plans included in the WUG and Waihi Area Ecology and Landscape Management Plans Condition C4</i></p>	
	Aquatic Ecology Offset	
G19	<p>The Consent Holder must undertake the following ecological offset works:</p> <ul style="list-style-type: none"> a. Riparian restoration of, and the exclusion of stock from, 1,995 m of stream length of Tributaries 1 and 3 at the Willows Road site as shown in the Ecology and Landscape Management Plan (ELMP) referred to in Condition C4; b. Restoration of, and the exclusion of stock from, at least six spring and gully headwaters (at least 80 m in length in total) 	



	<p>within the headwaters of Tributary 3 at the Willows Road site as shown in the ELMP referred to in Condition C4;</p> <p>c. Developing 2,765 metres of new stream channel with ecological functionality in the areas shown in the ELMP referred to in Condition C4; and</p> <p>d. Riparian restoration of 7,646 metres of stream length shown in the ELMP referred to in Condition C4, including the new stream channel required by (d) above, over an average width of 20 m (which can be spread across one or both banks).</p> <p><i>Advice Note: Collectively these areas are referred to as the Aquatic Ecology Offset Areas.</i></p>	
Diversion Design		
G20	<p>Stream diversion and enhancement measures must be consistent with Type 1, Type 2 or Type 3 diversions shown in the Stream Diversion and Development Plan provided within the ELMP referred to in Condition C2 and incorporate the following design elements:</p> <p>a. Stream diversions are to convey clean water, or surface water treated to remove silt (i.e., uncontaminated by construction or operational activities);</p> <p>b. The design of the diversion channels must create a range of stable microhabitats for fish and invertebrates, including stable pool habitats and gravel and cobble habitat, sufficient to achieve a level of stream function equivalent to that predicted through the mitigation calculations set out in the Boffa Miskell Freshwater Ecological Assessment;</p> <p>c. The diversion channel around TSF3 and the NRS must allow the passage of migrating eels and other native fish with climbing abilities;</p> <p>d. Riparian vegetation should extend to at least 10 m either side (where this occurs on land owned by the Consent Holder) of the channel and must include low-growing species with overhanging cover in accordance with the Stream Enhancement Riparian Planting Plan provided within the ELMP;</p> <p>e. Where possible, diversions should be constructed prior to the reclamation of the original channel;</p> <p>f. Where a diversion is required but it is not possible to replicate the existing habitat value (such as the upper reaches of the Ruahorehore Stream Tributary diversion channel) or where construction is taking place, then a clean water cut off drain must be created;</p>	

Commented [MD6]: Specific reference to this plan added in at the request of WRC.

Commented [MD7]: Specific reference to the plan added in at the request of WRC.



	g. The diversion around TSF3 must include provision for a 1.2 ha wetland to the east of the TSF3.	
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PLANTING AREAS

<i>Advice Note: Planting is subject to the Residual Effects Offset Plan and Planting Plan included in the Waihi Area Ecology and Landscape Management Plan</i>		
G21	Subject to Condition G22, the Consent Holder must undertake the planting identified in Figures A and B in Attachment 1 and the Table in Attachment 2 .	
G22	<p>Should there be a delay in the completion of planting reflected in the timeframe set out in the ELMP due to:</p> <ul style="list-style-type: none"> a. The availability of suitable seedlings; or b. Natural conditions resulting in poor seed production, or poor seed condition, or otherwise adversely affects seedling propagation for indigenous plant species; <p>The Consent Holder must provide the Waikato Regional Council with an amended timeframe within which pioneer and enrichment planting must occur. This timeframe must not exceed four planting seasons. The Consent Holder must complete the planting as soon as reasonably possible within the agreed timeframe and must inform the Waikato Regional Council when planting is complete.</p>	
G23	Where early ecological benefits can be obtained from excluding stock or carrying out riparian planting ahead of stream diversion work occurring, the Consent Holder must identify these measures and must demonstrate to the Waikato Regional Council how these measures can be implemented ahead of the diversion work, without later being compromised by that work. Those early works must be implemented <u>no later than the planting season that precedes the diversion work being commenced</u> , as far as is practicable.	
G24	<p>All planting required to be undertaken under Condition G21 must:</p> <ul style="list-style-type: none"> a. Use plants which are ecosourced from the Coromandel or Bay of Plenty Ecological Region; and b. Use seed collected locally and germinated and raised at a New Zealand Plant Producers Incorporated (NZPPI)-accredited nursery or from a suitable alternative community-based nursery. 	
G25	All planting required to be undertaken under Condition G21 must be regularly maintained, including regular releasing of plants from weeds and replacement of plants that do not survive. Any species	

Commented [MD8]: WRC has recommended that this should occur earlier than the season immediately prior to the diversion work commencing.

The riparian planting is subject to time limits already. These have been included in the offset calculations and are considered to be sufficient. If it is practical, OGNZL will bring forward riparian planting, but this will be subject to plant availability and operational requirements and as such cannot be controlled by a condition.



	<p>that consistently fails must be replaced with an alternative similar species listed as suitable for that purpose in the ELMP.</p> <p>Maintenance must continue until at least 70 percent stream canopy shade success is achieved, except where this planting is carried out adjacent to the Ruahorehore Stream and the Ohinemuri River, in which case the required shade success requirement will be determined by an ecological assessment of canopy health to the satisfaction of the Waikato Regional Council.</p>	
<i>Access and Protection</i>		
G26	<p>Except as provided for in Condition G27, stream diversions or loss of stream extent in Areas 5, 6 and 7 must not occur until the Waikato Regional Council has been provided with written confirmation that the Consent Holder has entered into legal agreements and/or holds other authorisations necessary to allow entry onto land to carry out, continue and maintain all Aquatic Offset measures required by Condition G19.</p> <p>The written confirmation must describe any specific legal arrangements and the land to which they apply, being land purchase, agreement providing for covenanting or similar registered title instruments that have been entered into to provide the planted and retired areas to be retained in perpetuity.</p> <p>This condition only applies to privately owned land and does not apply to land owned or administered by the Department of Conservation or any other public agency.</p>	This condition recognises that the Aquatic Offset required for Areas 5, 6 and 7 requires access to land not owned or under the direct control of OGNZL.
G27	<p>In the event that, despite best endeavours:</p> <ol style="list-style-type: none"> 1 The Consent Holder is unable to secure for any given area(s) the legal agreements and/or other authorisations specified in Condition G26: or 2 A planting area identified in Condition G21 proves to be non-viable for any other reasons: <ol style="list-style-type: none"> a. The Consent Holder must identify alternative area(s) for riparian planting which have been assessed by a suitably qualified and experienced ecologist (the Ecologist) to be of equal or greater ecological value to the area(s) for which access could not be secured; and b. The Consent Holder must provide a written report to the Waikato Regional Council which sets out details of the replacement area(s), including; <ol style="list-style-type: none"> i. the ownership and legal title of the land; ii. the existing ecological condition; iii. the proposed enhancement works; and 	



	<p>iv. a statement from the Ecologist demonstrating that the ecological values of the Aquatic Offset of the replacement area(s) are of equal or greater ecological value to the area(s) for which access could not be secured; and</p> <p>c. Stream diversions or loss of stream extent in Areas 5, 6 and 7 must not commence until the Waikato Regional Council has agreed in writing that the ecological values of the Aquatic Offset of the replacement area(s) are of equal or greater ecological value to the area(s) for which access could not be secured; and</p> <p>d. Condition G21 applies to the new area(s) as if they were those they are intended to replace.</p>	
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REPLACEMENT OF WATER SUPPLIES

G28	<p>If, based on the balance of probabilities and the evidence available to it, the Waikato Regional Council determines that activities authorised by this consent are adversely affecting any lawfully established stock, domestic or other water supplies, the Consent Holder must, at its own cost, provide an alternative equivalent water supply, to the satisfaction of Waikato Regional Council, within 12 hours of being directed to do so by the Waikato Regional Council.</p>	
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WAIHI AREA WATER QUALITY MANAGEMENT PLAN

G29	<p>The Consent Holder must submit a Waihi Area Water Quality Management Plan for certification under Condition C5 no later than 30 working days prior to commencement of activities in any of Areas 2,3,5,6 and 7.</p> <p>Certification is required to verify that the Waihi Area Water Quality Management Plan:</p> <p>a. Includes actions, methods, monitoring programmes and trigger levels as appropriate to meet the objective in Condition G30; and</p> <p>b. Satisfies the requirements in Condition G31</p> <p><i>Advice note: The Waihi Area Water Quality Management Plan may be merged with the existing water management plan for Waihi operations</i></p>	
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G30	<p>The objective of the Waihi Area Water Quality Management Plan is to identify all sources of discharges to water in Areas 2,3,5,6 and 7 and set out:</p> <ol style="list-style-type: none"> The actions and methods required to minimise and mitigate adverse effects on the receiving water, water users, or aquatic biota; The monitoring programmes and trigger levels required to ensure the best practicable options are being utilised to minimise and mitigate adverse effects on the receiving water, water users, or aquatic biota; and To describe how the Waikato Regional Council is able to determine that the activity is being undertaken in a manner which appropriately avoids or remedies any more than minor effects on the receiving water, water users, or aquatic biota. 	
G31	<p>The Waihi Area Water Quality Management Plan must include, as a minimum:</p> <ol style="list-style-type: none"> A description of the water management system to be implemented to meet the requirements of Condition G30, with emphasis on management of stormwater and water requiring treatment in the Water Treatment Plant; A description of measures to be adopted to meet the conditions of [insert reference to consent numbers for all consents related to the Waihi North water management system], and to ensure that any impacts on receiving waters are minimised; A contingency plan describing how any unauthorised discharges will be managed so as to remedy or mitigate potential adverse effects on water; and A monitoring programme designed to define site discharge quality and receiving water quality, and to assess the effects of discharges on the receiving waters, including compliance with Condition G18. The monitoring programme should address monitoring methods, parameters, site locations, and calibration and maintenance of monitoring equipment. 	
<i>Review of the Waihi Area Water Quality Management Plan</i>		
G32	<p>The Waihi Area Water Quality Management Plan must be reviewed at least annually by the Consent Holder to ascertain whether any amendments are required in order to ensure ongoing compliance with Condition G30.</p> <p>Any required amendments must be made in accordance with Condition C8.</p>	



WAIHI DRINKING WATER SUPPLY

G33	In the event of any system failure in Area 2 that could result in adverse effects on the quality of water at the Hauraki District Council water supply extraction points (identified in the Hauraki District Council water permits), no later than 24 hours after the occurrence the Consent Holder shall notify the Hauraki District Council (as the consent holder) and Waikato Regional Council (as the consent authority) that a system failure has occurred.	
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Commented [MD9]: Added at request of WRC

CONSENT REVIEW

G34	<p>Pursuant to sections 128(1)(a)(i) and (iii) of the Resource Management Act 1991, the Waikato Regional Council may, within one month of the second anniversary of the commencement of this consent and every 24 months thereafter, or on receipt of any of the reports required by this consent, review the conditions of these consents for the following purposes:</p> <ul style="list-style-type: none">a. To review the effectiveness of the conditions of this consent in avoiding, remedying or mitigating any adverse effects on the environment that may arise from the exercise of this consent, and if necessary to avoid, remedy or mitigate such effects by way of further or amended conditions. In deciding to undertake a review and where further or amended conditions are deemed necessary, the Waikato Regional Council must have regard to all of the information contained in the reports required under the conditions of this consent; orb. To address any adverse effects on the environment which have arisen as a result of the exercise of this consent that were not anticipated at the time of commencement of the consent; orc. To review the adequacy of, and necessity for, any of the monitoring programmes, management plans of strategies that are part of the conditions of this consent. <p>Any review under this condition must, in addition to the matters set out in the Resource Management Act 1991, also recognise and provide for the purpose of the Fast-track Approvals Act 2024.</p>	
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**RESOURCE CONSENTS WHICH APPLY TO ACTIVITIES UNDERTAKEN IN
ALL AREAS**



AIR DISCHARGE

CONSENT TYPE AND ACTIVITIES AUTHORISED	RMA S15	To discharge contaminants to air from all activities associated with the Waihi North Project.
LOCATION	All Areas	
TERM	35 years	
LAPSE PERIOD	10 years	

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
ALL.A.1	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
ALL.A.2	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent.	
	General Requirements	
ALL.A.3	There must be no particulate matter or (including odour) in any discharge to air that gives rise to objectionable adverse effects (as defined in Section 6.4 of the Waikato Regional Plan) at or beyond the boundary of the subject property shown as Area's 1, 2, 3, 5, 6 and 7 of Attachment 1 (Waihi North Project Areas) in Schedule 1 .	
ALL.A.4	Condition ALL.A.3 does not apply to any property or site that is: <ul style="list-style-type: none"> a. Owned by the Consent Holder or a related company and exclusively occupied by the consent holder or leased and exclusively occupied by the consent holder; or b. Owned by a third party which is subject to either a registered covenant or a written agreement (a copy of which is provided to the Waikato Regional Council) whereby air quality effects on the property caused by activities authorised under this consent are not to be taken into account for monitoring and compliance purposes. 	

Commented [MD10]: Amended at request of WRC.

Commented [MD11]: Amended at request of WRC.



	Condition	Comment
ALL.A.5	If any non-compliance with the conditions of this consent occurs, the Consent Holder must notify the Waikato Regional Council as soon as practicable and no later than 5 working days after the Consent Holder becomes aware that the event has occurred.	
ALL.A.6	<p>The Consent Holder must provide a written report to the Waikato Regional Council within five days of being notified by the Waikato Regional Council that a discharge to air has resulted in an objectionable effect at or beyond the boundary of land that is under the control of the Consent Holder. The report must specify:</p> <ol style="list-style-type: none"> The cause or likely cause of the event and any factors that influenced its severity; The nature and timing of any measures implemented by the Consent Holder to avoid, remedy or mitigate any adverse effects; and The steps proposed to be taken in future to prevent recurrence of similar events. 	
ALL.A.7	The Consent Holder must implement the measures set out in Condition ALL.A.6 c, and any additional measures required by the Waikato Regional Council, to the satisfaction of the Waikato Regional Council.	
ALL.A.8	Vehicle wheel washing facilities must be provided at the entrances to the mine related work sites from public roads. The wheel washing facilities must be well maintained and must be used by all soiled vehicles exiting the site as required, to minimise the tracking of particulate matter off-site.	
ALL.A.9	Access roads to the mine related work sites (excluding internal access roads) must be bitumen sealed (or to an equivalent standard approved by Waikato Regional Council). Sealing must take place as soon as practicable upon exercise of this consent and/or as part of any access road construction that is required. Sealed surfaces must be kept as clean and free of accumulations of dust as practicable.	
ALL.A.10	All embankments, batters and other bare surfaces created through earthworks must be managed to minimise particulate emissions and revegetated as soon as reasonably practicable.	
ALL.A.11	Stockpiles must be managed to minimise particulate. Methods may include but are not limited to: covering, grassing, sheltering from prevailing winds, or wetting down.	
ALL.A.12	Exposed yard surfaces and roadways must be kept damp as necessary to minimise particulate discharges to air, including during non-work hours.	
ALL.A.13	No chemical dust suppressants or additives may be used without prior written approval from the Waikato Regional Council.	



	Condition	Comment
	Processing Plant - Air Discharge	
ALL.A.14	The Consent Holder must not process ore from the Gladstone Open Pit until a mercury retort oven has been installed and commissioned for use in the Processing Plant.	
ALL.A.15	The Consent Holder must not operate any part of the gold recovery process (from electrowinning to carbon regeneration) without the associated emission control equipment being fully operational and functioning correctly.	
ALL.A.16	<ul style="list-style-type: none"> a. The discharges to air from the electrowinning circuit must occur via a stack of at least 8 m above local ground level. b. The discharges to air from the oven and furnace must occur via a stack of at least 8.5 m above local ground level. c. The discharges to air from the carbon regeneration area must occur via a stack of at least 12.5 m above local ground level. 	These are the discharge parameters used in the Beca report modelling.
ALL.A.17	The Consent Holder must not process more than 2.25 million tonnes of ore at the Processing Plant in any 12 month period. No more than 0.611 million tonnes of the ore processed in any 12 month period shall be derived from the Gladstone Open Pit.	Compliance with this limit is needed to ensure the ambient air quality meets the relevant health based guideline for annual ambient mercury concentrations.
ALL.A.18	<p>The combined mercury mass emitted from the sources listed in Condition ALL.A.16 over a 12 month period must be included in the annual monitoring report required by Condition ALL.A.26.</p> <p>If the combined mercury mass of the emitted mercury rate exceeds 131.4 kilograms for the year, the Consent Holder must specify within the annual monitoring report the actions that will be taken to reduce site mercury emissions and the timeframes within which these actions will be implemented.</p> <p><i>Advice Note: The annual mass mercury emission rate will be calculated from the operation information required by Condition ALL.A.19, and the emission testing required by Condition ALL.A.21.</i></p>	
	Monitoring Processing Plant Air Discharge	
ALL.A.19	For each type of ore processed by the Processing Plant, the Consent Holder must maintain a record of the following:	

	Condition	Comment
	<p>a. The amount of each ore type processed per year;</p> <p>b. The number of hours per year that each of the following emission sources are operated for each ore type:</p> <ul style="list-style-type: none"> i. The electrowinning circuit; ii. The oven and furnace; and iii. The carbon regeneration area. <p>The findings of the records must be included in the annual monitoring report required by Condition ALL.A.26.</p>	
ALL.A.20	A representative sample of any ore derived from the Gladstone Open Pit which is being processed in the Processing Plant must be collected at least once per month and sent to an IANZ accredited laboratory for analysis for mercury content as a percent by weight.	
ALL.A.21	<p>a. Emission testing of the discharges from the sources listed in Condition ALL.A.16 must be conducted:</p> <ul style="list-style-type: none"> i. Twice per year for the first five years following commencement of this consent and then annually thereafter; and ii. Within one month of the Consent Holder commencing processing ore from any new source, including the Gladstone Open Pit and Wharekirauponga Underground Mine; <p>b. The emission testing must be undertaken in accordance with USEPA Method 29 or an equivalent method approved by the Waikato Regional Council.</p> <p>c. The emission testing must be carried out by a suitably qualified professional with appropriate independent accreditation for the methods required for testing.</p> <p>d. The air contaminants included in the testing must, as a minimum, include:</p> <ul style="list-style-type: none"> i. mercury; ii. arsenic; iii. cadmium; iv. chromium; v. nickel; and vi. lead. <p>e. The mercury content of the ore being processed at the time of testing must be recorded.</p> <p>f. The findings of the emission testing must be included in the annual monitoring report required by Condition ALL.A.26, with the mass discharge and discharge concentration of each contaminant</p>	The Consent Holder must report on the results of the testing in the annual monitoring report required by Condition ALL.A.26.



	Condition	Comment
	<p>reported. The discharge concentration results must be corrected to 0°C, 101.325 kPa and a dry gas basis.</p> <p>g. The testing of emission from the processing of different ore must be sufficient to enable an annual mass mercury emission rate to be calculated.</p>	
	Air Quality Management Plan	
ALL.A.22	<p>Other than Area 3, for each Area described in Condition C1(b) the Consent Holder must submit an Air Quality Management Plan for certification under Condition C5 no later than 30 working days prior to the commencement of activities in the respective Area.</p> <p>Certification is required to verify that the Air Quality Management Plan:</p> <ol style="list-style-type: none"> Includes actions, methods, monitoring programmes and trigger levels as appropriate to meet the objectives in Condition ALL.A.23; and Satisfies the requirements in Condition ALL.A.24. <p><i>Advice note: Air Quality Management Plans may be submitted for each Area separately or multiple Areas combined.</i></p>	
ALL.A.23	<p>The objectives of the Air Quality Management Plan are to identify all sources of discharges to air and set out:</p> <ol style="list-style-type: none"> The measures required to mitigate dust emissions from all operations; Management of point and non-point source air emissions required to protect human health and the environment; Measures required to ensure that emissions are within Workplace Exposure Standards and are not objectionable or offensive; Protocols to monitor areas of community concern, respond to complaints and non-compliances and to communicate mitigation undertaken; and Best practicable options to minimise and mitigate adverse effects of discharges to air. 	
ALL.A.24	<p>The Air Quality Management Plan must include, as a minimum:</p> <ol style="list-style-type: none"> Details of the site operation and maintenance practices to be implemented to meet the requirements of Condition ALL.A.23 and to ensure that emissions from stockpiles, unsealed roadways, the Processing Plant, rock stacks and tailings storage facilities are minimised to the greatest extent practicable; An ambient air monitoring programme for deposited particulate matter (DP), total suspended particulate (TSP), particulate matter 	

Commented [MD12]: Corrected reference error. C1(i) refers to the mine site areas.



	Condition	Comment									
	<p>smaller than ten microns (PM₁₀) and particle size distribution studies (including silica content) <u>including the type of particulate and meteorology monitoring instruments to be used, their installation, calibration and maintenance and reference to the relevant Australia and New Zealand Standards for meteorological and particulate monitoring.</u></p> <p><u>With reference to the TSP and PM₁₀ monitoring specified under this condition a nephelometer instrument, or alternative instrument subject to approval by council, shall be used with a heated inlet to minimise the interface from humidity and shall be configured to record concentrations in µg/m³;</u></p> <p><u>b-c.</u> Monitoring of windspeed, and TSP within 200m of sensitive receptors, and associated use of the trigger levels set out in Table ALL.A.24.T1 to determine the circumstances where additional dust control measures, or if required, the cessation of work, is necessary to ensure Condition ALL.A.3 is satisfied;</p> <p><u>c-d.</u> A process for investigating any exceedance of the trigger levels, reporting on the reason for the exceedance, and identifying and implementing corrective actions to prevent a repeat occurrence, where possible;</p> <p><u>d-e.</u> Procedures for revegetation of batters at the mine site, Tailings Storage Facility embankments, stockpiles and other bare surface areas as appropriate;</p> <p><u>e-f.</u> Details of the key personnel responsible for ensuring that site operations are carried out in accordance with the Air Quality Management Plan;</p> <p><u>f-g.</u> A process for investigating and reporting on any complaints about dust levels; and</p> <p><u>g-h.</u> Details of the site operation and maintenance practices to be implemented, particularly in relation to the stockpiles, haul roads, and access roads, to keep dust emissions to a minimum.</p> <p>Table ALL.A.24.T1: Trigger Levels and Actions</p> <table> <tr> <th>Item</th><th>Trigger</th><th>Action</th></tr> <tr> <td>TSP Alert</td><td>TSP concentration (1-hour average) exceeds 170 µg/m³.</td><td>Dust sources and dust control measures within 200 m of sensitive receptors will be reviewed and additional dust control methods shall be implemented if necessary, as detailed in the site AQMP.</td></tr> <tr> <td>TSP Alarm</td><td>TSP concentration (1-hour average) exceeds 200 µg/m³</td><td>Contributing dust generating activities will cease within 200 m of sensitive receptors except for dust control</td></tr> </table>	Item	Trigger	Action	TSP Alert	TSP concentration (1-hour average) exceeds 170 µg/m ³ .	Dust sources and dust control measures within 200 m of sensitive receptors will be reviewed and additional dust control methods shall be implemented if necessary, as detailed in the site AQMP.	TSP Alarm	TSP concentration (1-hour average) exceeds 200 µg/m ³	Contributing dust generating activities will cease within 200 m of sensitive receptors except for dust control	
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TSP Alarm	TSP concentration (1-hour average) exceeds 200 µg/m ³	Contributing dust generating activities will cease within 200 m of sensitive receptors except for dust control									

Commented [MD13]: Added at request of WRC.



	Condition	Comment
	<div>Or TSP concentration (24-hour average) exceeds 60 µg/m³</div> <div>activities as detailed in the AQMP.</div> <div> Wind Speed Alert (applicable to activities within the Gladstone Open Pit (Area 5) only, and does not apply during rain events) Rolling hourly average wind speeds exceed 5 m/s and winds are blowing towards sensitive receptors. Dust sources and dust control measures within 200 m of sensitive receptors will be reviewed and additional dust control methods shall be implemented if necessary, as detailed in the site AQMP. </div> <div> Wind Speed Alarm (applicable to activities within the Gladstone Open Pit (Area 5) only, and does not apply during rain events) Rolling hourly average wind speeds exceed 7.5 m/s and winds are blowing towards sensitive receptors. Contributing dust-generating activities will cease within 200 m of sensitive receptors except for dust control activities as detailed in the site AQMP. </div>	
	Monitoring	
ALL.A.25	The Consent Holder must undertake monitoring in accordance with the certified Air Quality Management Plan.	
ALL.A.26	<p>The Consent Holder must submit an annual Air Quality Monitoring Report to the Waikato Regional Council. The Air Quality Monitoring Report must, as a minimum include:</p> <ol style="list-style-type: none"> A summary of the results of the monitoring required by this consent; Any environmentally important trends arising from the monitoring programme; Compliance with all conditions; Any reasons for non-compliance or difficulties in achieving compliance with the conditions of this resource consent; and Any works that have been undertaken to improve environmental performance or that are proposed to be undertaken in the up-coming year to improve environmental performance in relation to the activities included in this consent. <p>The report must be provided in a format acceptable to the Waikato Regional Council.</p>	
	Complaints	



	Condition	Comment
ALL.A.27	<p>If any complaints are received by the Consent Holder regarding dust, odour or other airborne contaminants that could reasonably be attributed to the Consent Holder's activities under these consents the Consent Holder must record the following details in a complaint log:</p> <ul style="list-style-type: none"> a. The date, time and details of the complaint; b. The name and address of complainant (if available); c. The location from which the complaint arose; d. The wind direction at the time of complaint; e. The likely cause of the complaint and any factors that influenced its severity; f. Any corrective action taken by the Consent Holder in response to the complaint, including timing of that corrective action; and g. Action taken or proposed as a result of the complaint including the steps to be taken in future to prevent recurrence of similar events. <p>The complaint log must be made available to the Waikato Regional Council on request and a copy must be submitted to the Waikato Regional Council at six monthly intervals</p>	



SOIL DISTURBANCE AND VEGETATION CLEARANCE

CONSENT TYPE AND ACTIVITIES AUTHORISED	RMA S9	To undertake soil disturbance and vegetation clearance in a high-risk erosion area
LOCATION	All Areas	
TERM	35 years	
LAPSE PERIOD	10 years	

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
ALL.B.1	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
ALL.B.2	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent.	



DRILLING BELOW THE WATER TABLE

CONSENT TYPE AND ACTIVITIES AUTHORISED	RMA S9 / S15	To drill holes below the water table for mineral exploration, geotechnical investigation, water quality monitoring and to establish and operate piezometers.
LOCATION	All Areas	
TERM	35 years	
LAPSE PERIOD	10 years	

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
ALL.C.1	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
ALL.C.2	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent.	
	General Requirements	
ALL.C.3	The Waikato Regional Council must be notified in writing at least two weeks in advance of the installation of each bore, standpipe, piezometer, and groundwater monitoring bore.	
ALL.C.4	The bore must be constructed and maintained so that it will not cause cross contamination between hydraulic units (aquifers) in any water (including groundwater and geothermal water).	
ALL.C.5	All openings to the bore must be sealed or screened to prevent the entry of foreign matter or contaminants. The ground immediately surrounding the top of the bore casing must be sealed and graded to drain surface water away from the bore.	



	Condition	Comment
ALL.C.6	Upon completion of the bore, any wastes introduced to the bore during drilling and construction must be removed.	
ALL.C.7	If artesian conditions are encountered, a conductor casing must be grout sealed to ensure control of potential flowing artesian groundwater and to prevent instability of the ground at the bore head. Bore head completion must be such that groundwater leakage under flowing artesian pressures is prevented.	
ALL.C.8	Discharge of wastewater from bore installation into or onto the ground is permitted provided that only non-hazardous and non-toxic drilling fluids and/or foams are used as approved by Waikato Regional Council. Drilling must be undertaken in such a manner that there is no discharge of grease or oil, and wastewater does not directly enter surface water.	
ALL.C.9	Bores that are no longer operational must be decommissioned to prevent contamination.	
ALL.C.10	<p>The Consent Holder must submit to the Waikato Regional Council (within one month of an agreed anniversary date) an annual report which contains:</p> <ul style="list-style-type: none"> a. a log for each bore drilled during that calendar year. Each log must show: <ul style="list-style-type: none"> i. the location of the bore ii. date of completion iii. duration of drilling iv. depth and diameter of the bore v. the method of drilling vi. full construction details vii. the subsurface geology viii. development information ix. installed instrumentation (pumps, loggers, flow meters, etc.) b. A list of any decommissioned bores, including their logs. 	



GROUNDWATER TAKES

CONSENT TYPE AND ACTIVITIES AUTHORISED	RMA S14	To take groundwater for the purpose of servicing drilling activities relating to exploration, monitoring and geotechnical investigations.
LOCATION	All Areas	
TERM	35 years	
LAPSE PERIOD	10 years	

	Condition	Comments
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
ALL.D.1	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
ALL.D.2	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent.	
	Limits	
ALL.D.3	The rate of abstraction from any individual bore used to service drilling activities must not exceed 3 litres / second.	
ALL.D.4	Abstraction to service drilling activities must not occur from more than 4 bores in the same catchment at any given time.	



UNDERGROUND ACTIVITIES IN AREAS 1, 2, 3 AND 5



CONSENT TYPE AND ACTIVITIES AUTHORISED	RMA S9	To drill below the water table to establish underground tunnels, access portals and mines using a drill and blast technique. (UG.1)
	RMA S14	To take and divert groundwater intercepted during tunnelling and stoping activities. (UG.2)
	RMA S14	To take groundwater for surface water contingency mitigation purposes. (UG.3)
	RMA S15	To discharge contaminants to land and groundwater associated with the underground storage, use and backfilling of rock containing potential acid forming material and hydrocarbons. (UG.4)
	RMA S15	To discharge contaminants to land and groundwater when sealing drill holes and underground workings. (UG.5)
	RMA S15	To discharge groundwater to streams and wetlands for surface water contingency mitigation purposes. (UG.6)
LOCATION	Areas 1, 2, 3, and 5	
TERM	35 years	
LAPSE PERIOD	10 years	

Condition		Comments
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
UG.1	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	These common conditions include conditions which address dewatering and settlement.
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
UG.2	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent.	
	Definitions	
UG.3	For the purposes of this consent: a. Access Tunnels means:	



Condition		Comments
	<ul style="list-style-type: none"> i. The Wharekirauponga Access Tunnel which connects the Waihi Surface Facilities Area to the WUG Dual Tunnel and Willows Access Tunnel; ii. The WUG Dual Tunnel and related development which connect the WUG mining activities to the Wharekirauponga Access Tunnel; and iii. The Willows Access Tunnel which connects the Willows Surface Facilities Area with the Wharekirauponga Access Tunnel. <p>b. Condition C.1.b does not apply and Mining Activities means:</p> <ul style="list-style-type: none"> i. Ore drive development along the EG Vein System; and ii. Stopping Activities (being the extraction of ore via drill and blast methods from level-to-level drill holes greater than 15 m). <p>c. For groundwater management purposes, EG Vein System means any orebody associated structures that that will be mined or hydraulically connected to mined structures, which have the potential to cause effects on shallow groundwater.</p>	
	Pre-Mining Activities Groundwater Management	
UG.4	<p>The Consent Holder must control groundwater ingress into all tunnels and ventilation shafts not including those that are Mining Activities by:</p> <ul style="list-style-type: none"> a. Conducting drilling and investigative work sufficiently in advance of the tunnel faces within the Access Tunnels to assess geotechnical and hydrogeological conditions and evaluate where and what type of grouting or alternative mitigation measures may be required to manage any groundwater effects; b. Having available, when and where required, the equipment and suitably qualified and experienced personnel to conduct appropriate monitoring, carry out necessary mitigation, test the efficacy of measures employed and if required, implement alternative mitigation Having available the required equipment and suitably qualified and experienced personnel to conduct monitoring, testing and grouting requirements or alternative mitigation measures required within the Access Tunnels; and c. Ensuring that grouting or alternative methods to control groundwater ingress within the Access Tunnels and ventilation shafts are adapted where necessary to address any deviations from expected conditions and to avoid greater than minor effect on shallow groundwater which will or is likely to adversely affect any surface water body. 	<p>There is now good knowledge of the hydrogeology of the area through which the Access Tunnels will pass.</p> <p>This, combined with a requirement to forward drill and conduct hydraulic testing ahead of the development face means by the time the tunnel reaches a location the Consent Holder will have a high level of knowledge of the hydraulic properties of the area.</p> <p>Based on that knowledge the Consent Holder will apply the appropriate solution specified in the <u>Trigger Action Response Plan</u>TARPs such that water ingress is suitably managed to achieve Condition UG.7.</p> <p><u>Trigger Action Response Plan</u>TARPs will provide an</p>

Condition		Comments
		additional layer of security that this will occur and enable any unexpected response to be identified and addressed before it has the potential to impact on the surface.
UG.5	<p>a. Subject to (b), at quarterly intervals during the construction of the Access Tunnels the Consent Holder must provide to the Waikato Regional Council, the Department of Conservation, and Expert Groundwater Management Panel, required by Condition UG.30, a report (Quarterly Access Tunnel Report) which:</p> <ul style="list-style-type: none"> i. Describes the location, depth and excavated volume (m³) of the tunnel; ii. Describes the total volume of water pumped to and from the tunnel; iii. Identifies the lengths of the development that, due to the encountered geotechnical and hydrogeological conditions, required grouting or alternative methods of mitigation to control the ingress of groundwater, and a description of the grouting or alternative mitigation that was undertaken; and iv. Includes analysis of the effectiveness of the grouting or alternative mitigation over the previous three-month period and any proposed amendments to how the Consent Holder will implement the requirements of Condition UG.4. <p>b. The first Quarterly Access Tunnel Report must be provided no later than four months after Access Tunnel construction commences.</p>	<p>This condition requires regular communication with the Consent Authority and Expert Groundwater Management Panel on progress and the effectiveness of the management measures.</p> <p>Condition UG.32 compels the Consent Holder to implement the recommendations of the Expert Groundwater Management Panel.</p>
	Baseline Data Collection Ahead of Mining Activities	
UG.6	The Consent Holder must undertake not less than two years of baseline data collection prior to the commencement of mining activities at the Wharekirauponga Underground Mine. The purpose of the baseline data collection is to confirm key hydrological and hydrogeological statistics (including seasonal variations where appropriate) of the hydrological and hydrogeological systems in the Wharekirauponga Catchment in such a way as to enable actual and potential material changes to those systems as a result of mining activities authorised by this consent to be identified through monitoring and addressed through management responses by the Consent Holder.	



	Condition	Comments
	<p>The baseline data collection should include ecological condition of the wetlands listed in Table UG.13.T, as outlined in Condition UG.10.</p> <p>The baseline data collection must be undertaken in accordance with the Wharekirauponga Underground Mine Water Management Plan referred to in Condition C4.</p>	
	<p>Compliance Limits – Natural State Water Bodies and Natural Inland Wetlands Potentially Affected by Mining Activities</p>	
UG.7	<p>Other than for flows associated with the re-emergence of the warm spring located nominally at NZTM E1850258, N5868719, the mining activities authorised by this consent must not cause the natural flows of any surface water body identified as a Natural State Water Body in the Waikato Regional Plan and identified as being potentially affected by mining activities in the Wharekirauponga Hydrology Modelling report prepared by GHD Limited (WAI-985-000-REP-LC-0063) dated January 2025 to fall below the relevant Respond Trigger Levels set out in Condition UG.10.</p>	<p>This is the bottom line compliance limit the activities must be managed to achieve.</p> <p>The subsequent conditions set out how these compliance limits will be achieved. They require any unexpected effects to be managed so that any non-compliance with this condition is avoided, remedied, or mitigated.</p> <p>The exception of the warm spring is due to the positive effects of its depletion during mining on surface water quality.</p>
	<p>Natural State Water Bodies</p>	
UG.8	<p>To ensure compliance with Condition UG.7 during mining activities, and in accordance with the Wharekirauponga Underground Mine Water Management Plan referred to in Condition C4, the Consent Holder must implement a monitoring programme which is capable of identifying when any reductions in the natural flows of Natural State Water Bodies are occurring as a result of the mining activities authorised by this consent.</p> <p>As a minimum the monitoring programme must:</p> <ol style="list-style-type: none"> Measure and record the daily volume of water pumped from the underground mine (in accordance with Condition UG.39); Provide data on the dewatering effects on groundwater at different levels (shallow and deep) in the vicinity of the Wharekirauponga Underground Mine; Measure and record daily rainfall data specific to the catchments above the Wharekirauponga Underground Mine; and 	

Commented [MD14]: WRC recommended inclusion of Adams 9 and Adams 10 here as well. As per later comment, following clarification with the wetland experts, monitoring is proposed at Adams 9 and Adams 10 and they therefore are captured by Table UG.13.T.

Commented [MD15]: Amendment made at request of the WRC. 're-emergence' was misleading.

Commented [MD16]: WRC had recommended inclusion of "or a natural inland wetland as defined in the National Policy Statement for Freshwater Management" be included in this condition, presumably in order to subject the wetlands to compliance against the triggers.

This does not work as the triggers are specific to the natural state waterways and any changes to wetlands are not suited to the establishment of triggers - rather a more qualitative assessment is appropriate. This qualitative assessment of any change is required by the management plan.

Commented [MD17]: WRC has recommended inclusion of "and Natural Inland Wetlands" here.

This doesn't work. There are separate conditions for the wetlands which are fit for purpose. See comment on UG.6.

Commented [MD18]: WRC has recommended included of "or natural wetlands" here.

See comment on UG.6

Commented [MD19]: This refers to a new condition which has been linked in regarding telemetry / flow-metering.

Condition		Comments																						
	d. Provide data on the stream flow of Natural State Water Bodies and water levels within Natural Inland Wetlands above and in the vicinity of the Wharekirauponga Underground Mine, and at control sites in similar nearby catchments that will not be affected by mining activities, as set out in Condition UG.9.																							
UG.9	<p>The monitoring programme required by Condition UG.8 must be implemented at the locations listed in Table UG.9.T below, <u>unless otherwise agreed in writing by the Waikato Regional Council</u>.</p> <p>Table UG.9.T</p> <table><tr><th>Natural State Water Body <u>Monitoring Site</u></th><th>Map Reference NZTM2000 (Approximate)</th></tr><tr><td>WKP01</td><td>1851376, 5871977</td></tr><tr><td>WKP03</td><td>1850400, 5868874</td></tr><tr><td>T-Stream West</td><td>1849598, 5868439</td></tr><tr><td>Edmonds Stream</td><td>1849983, 5868181</td></tr><tr><td>Adams Stream</td><td>1850384, 5868980</td></tr><tr><td>Thompson Stream</td><td>1851165, 5869253</td></tr><tr><td>LS1 (Control Site)</td><td>1851389, 5872531</td></tr><tr><td>LS6 (Control Site)</td><td>1850462, 5870689</td></tr><tr><td>WS2 (Control Site)</td><td>1854081, 5868827</td></tr><tr><td>WHK2 (Control Site)</td><td>18498320, 5865641</td></tr></table>	Natural State Water Body <u>Monitoring Site</u>	Map Reference NZTM2000 (Approximate)	WKP01	1851376, 5871977	WKP03	1850400, 5868874	T-Stream West	1849598, 5868439	Edmonds Stream	1849983, 5868181	Adams Stream	1850384, 5868980	Thompson Stream	1851165, 5869253	LS1 (Control Site)	1851389, 5872531	LS6 (Control Site)	1850462, 5870689	WS2 (Control Site)	1854081, 5868827	WHK2 (Control Site)	18498320, 5865641	
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UG.10	<p><u>At all times during mining activities</u>, the Consent Holder must compare the monitored stream flow and rainfall conditions required by Condition UG.8+2 against the Alert Trigger Levels identified in Table UG.10.T below.</p> <p><u>Advice Note:</u> The Alert Trigger Levels in Table UG.10.T reflect the modelled mean annual low flow for each of the listed Natural State Water Bodies and represents a rolling 7-day mean flow.</p> <p>Attachment 1 details and defines the composition / function of the derivation of the Alert Trigger Level.</p> <p><u>Advice note:</u> <i>If monitoring identifies that the flow in a Natural State Water Body is less than the Alert Trigger Level for that Natural State Water Body as set out in Table UG.10.T, this signifies that the Natural State Water Body has been in a state of low flow for a 7-day period, however it does not imply that the flow in the Natural State Water Body has been affected by the mining activities authorised by this consent. (Advice note ends)</i></p> <p>If a flow of less than the Alert Trigger Level for a Natural State Water Body in Table UG.10.T is recorded, the Consent Holder must undertake daily reviews of the flows at each of the listed Natural State Water <u>Bodies-Body locations set out in Table</u></p>																							

Commented [MD20]: WRC has recommended inclusion of "UG.12" here.

See comment on UG.6.

Commented [MD21]: Statement added in response to WRC's recommendation for flexibility in monitoring requirements.

Condition	Comments																					
<p>UG.9 until the flows are no longer less than the Alert Trigger Level, and:</p> <ul style="list-style-type: none">• Check and verify the stream flow data, rainfall data and groundwater level data from piezometers near to these sites for the period leading up to the trigger event for accuracy and inconsistencies;• Check and verify the stream flow data and groundwater level data at the identified control sites, or at similar suitable locations, for evidence of similar or trending flow patterns and / or alignment with the expected rainfall / flow trends, and potential climatic drivers of the observed data; and• Provide a summary report of the Alert Trigger Level occurrences in the a report required by Condition UG.26. <p>If monitoring identifies that the flow in a those Natural State Water Body locations identified in Table UG.9.T is less than the Respond Trigger Level for that Natural State Water Body calculated in accordance with Table UG.10.T, the Consent Holder must immediately cease any upstream surface water abstraction and commission a suitably qualified and experienced professional approved by the Waikato Regional Council to investigate the cause of the Respond Trigger Level exceedance matter, and provide a report which summarises the findings of that investigation as set out in Condition UG.27. If the investigation finds it to be necessary, the Consent Holder must implement mitigation measures in accordance with the Wharekirauponga Underground Mine Water Management Plan referred to in Condition C4, and as detailed in the Trigger Action Response specified in Condition UG.19(b).</p> <p>Table UG.10.T: Alert and Respond Trigger Levels</p> <table><tr><th>Natural State Water Body</th><th>Alert Trigger Level, m³/day (based off a rolling 7-day mean flow)</th><th>Respond Trigger Level, m³/day (R₃₀ = the rolling 30-day mean rainfall in mm)</th></tr><tr><td>WKP01</td><td>10,200</td><td>2213 x R₃₀ + 4285</td></tr><tr><td>WKP03</td><td>4,800</td><td>1106 x R₃₀ + 1864</td></tr><tr><td>T-Stream West</td><td>2,700</td><td>626 x R₃₀ + 919</td></tr><tr><td>Edmonds Stream</td><td>2,200</td><td>447 x R₃₀ + 930</td></tr><tr><td>Thompson Stream</td><td>1,600</td><td>299 x R₃₀ + 856</td></tr><tr><td>Adams Stream</td><td>1,000</td><td>145 x R₃₀ + 577</td></tr></table> <p>Advice Note: References to Natural State Water Body Alert and Respond Trigger Levels throughout the Waihi North Project – Conditions for the Waikato Regional Council are those set out in</p>	Natural State Water Body	Alert Trigger Level, m ³ /day (based off a rolling 7-day mean flow)	Respond Trigger Level, m ³ /day (R ₃₀ = the rolling 30-day mean rainfall in mm)	WKP01	10,200	2213 x R ₃₀ + 4285	WKP03	4,800	1106 x R ₃₀ + 1864	T-Stream West	2,700	626 x R ₃₀ + 919	Edmonds Stream	2,200	447 x R ₃₀ + 930	Thompson Stream	1,600	299 x R ₃₀ + 856	Adams Stream	1,000	145 x R ₃₀ + 577	
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Condition		Comments
	Table UG.10.T, unless the Alert and Respond Trigger Levels in Table UG.10.T have been adjusted via the provisions of Condition UG.29.	
UG.11	In circumstances where a Respond Trigger Level has not been exceeded, but investigations undertaken in response to an Alert Trigger level required by Condition UG.14 demonstrate that mining activities are giving rise to unanticipated effects on flows within the Natural State Water Bodies identified in Table UG.10.T, the Consent Holder must commission a suitably qualified and experienced professional approved by the Waikato Regional Council to investigate the cause of the Alert Trigger Level exceedance and provide a report which summarises the findings of that investigation as set out in Condition UG.27. If the investigation finds it to be necessary, the Consent Holder must implement mitigation measures in accordance with the Wharekirauponga Underground Mine Water Management Plan, and as detailed in the Trigger Action Response specified in Condition UG.19(b).	
	Natural Inland Wetlands	
UG.12	<p>In accordance with the Wharekirauponga Underground Mine Water Management Plan referred to in Condition C4 the Consent Holder must develop and implement a wetland monitoring programme for the Natural Inland Wetlands identified in Table UG.13.T in Condition UG.13 which is capable of identifying when any reductions in the natural water levels of Natural Inland Wetlands those wetlands occur as a result of the mining activities authorised by this consent, and any consequential adverse ecological impacts.</p> <p>As a minimum the monitoring programme must include the monitoring methods specified in Condition UG.8, and:</p> <ul style="list-style-type: none"> Measure and record the natural water levels in Natural Inland Wetlands that are potentially affected by mining activities and at a wetland control site in a similar nearby catchment that will not be affected by mining activities (as per Condition UG.13); and Measure and record (through visual inspection) characteristics associated with natural water levels in Natural Inland Wetlands that are potentially affected by mining activities (as per Condition UG.13). These are to include: <ul style="list-style-type: none"> Signs of composition shifts towards dryland plant species measured using national wetland delineation protocols for Dominance and Prevalence from representative vegetation plots within each wetland listed in UG.13.T; and Increase in % cover of invasive non-native Facultative, Facultative Upland or Upland plant species, including pampas and blackberry. 	

Commented [MD22]: Added following discussions with WRC to acknowledge Condition UG.29 provides a mechanism for the Natural State Water Body Alert and Response Trigger Levels to be adjusted.

Commented [MD23]: WRC has recommended the inclusion of "or Natural Inland wetlands identified in Table UG.13.T." here. See comment on UG.6.

Commented [MD24]: WRC has suggested bundling the Natural State Water Bodies and Natural Inland Wetland conditions.

See comment on UG.6

Commented [MD25]: Added at request of WRC.

Commented [MD26]: Added at request of WRC.

Commented [MD27]: WRC has recommended inclusion of the two clauses tracked in red, as well as a third clause as follows:

[Visual sign of swamp maire foliage desiccation recorded via photo points and a % desiccated foliage score for selected trees](#)

OGNZL is comfortable with the inclusion of the two clauses which have been added to the condition set. However consider that the inclusion of the 'swamp maire' clause is not appropriate for the following reasons:

Swamp maire is not present in any of the reference wetlands; and
There is evidence of signs of myrtle rust infestation on some swamp maire in the area, and it would not be possible to determine if desiccation of foliage comes back to myrtle rust infection or potential dewatering effects.

Commented [MD28]: WRC has recommended inclusion of the following clause:

Compare the monitored wetland levels required against the Alert Trigger Levels identified in the Wharekirauponga Underground Mine Water Management Plan, and activate Condition UG.14 when:

The groundwater level of the piezometer adjacent to a wetland drops to a level below the base of the wetland; and
The wetland water level drops below the lowest level previously recorded in the baseline monitoring database for that wetland.

These are currently included as early warning measures in the Management Plan. These are suitable as general indicators of change - but shouldn't be applied as compliance bottom lines. The stream triggers are intended to apply that rigour and these are corollary measures to keep a watch on wetlands. The preference is to leave them in the Management Plan and not include them as pseudo bottom lines in the conditions because natural circumstances could yield these results in any event.

Condition	Comments																						
<p>UG.13 The monitoring programme required by Condition UG.12 must be implemented at the locations listed in Table UG.13.T below.</p> <p>Table UG.13.T: Monitoring Locations</p> <table> <tr> <th>Natural Inland Wetland</th><th>Map Reference NZTM2000 (Approximate)</th></tr> <tr> <td>Edmonds 16</td><td>1849962, 5867471</td></tr> <tr> <td>Edmonds 17</td><td>1849822, 5867407</td></tr> <tr> <td>Edmonds 18</td><td>1849887, 5867447</td></tr> <tr> <td>Edmonds 20</td><td>1849779, 5867359</td></tr> <tr> <td>Edmonds 22</td><td>1849708, 5867243</td></tr> <tr> <td>Adams 3</td><td>1850260, 5869204</td></tr> <tr> <td>Adams 4</td><td>1850028, 5869249</td></tr> <tr> <td>Adams 9</td><td>1849853, 5869173</td></tr> <tr> <td>Adams 10</td><td>1849859, 5869131</td></tr> <tr> <td>Waiharakeke (Control Site)</td><td>1848909, 5864926 <i>Or an alternative control location that is determined to be appropriate, as approved by the WRC.</i></td></tr> </table>	Natural Inland Wetland	Map Reference NZTM2000 (Approximate)	Edmonds 16	1849962, 5867471	Edmonds 17	1849822, 5867407	Edmonds 18	1849887, 5867447	Edmonds 20	1849779, 5867359	Edmonds 22	1849708, 5867243	Adams 3	1850260, 5869204	Adams 4	1850028, 5869249	Adams 9	1849853, 5869173	Adams 10	1849859, 5869131	Waiharakeke (Control Site)	1848909, 5864926 <i>Or an alternative control location that is determined to be appropriate, as approved by the WRC.</i>	
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<p>UG.14 If the an Alert Trigger Level in Condition UG.10 has been reached exceeded at any of the Table UG.10.T Natural State Water Bodies, the Consent Holder must:</p> <ul style="list-style-type: none"> Check and verify the water level monitoring data and groundwater level data from piezometers within and near to the Natural Inland Wetland sites listed in U.13.T. for the period leading up to the trigger event for accuracy and inconsistency; Check and verify the water level monitoring data at the identified Natural Inland Wetland control site, or at similar suitable locations, for evidence of similar or trending water level patterns and / or alignment with the expected rainfall / water level trends, and potential climatic drivers of the observed data; Undertake a physical visual inspection of the listed Natural Inland Wetlands potentially affected by mining activities to assess the water level of those wetlands and the in the adjacent groundwater; and Include a summary report of the Alert Trigger Level occurrences exceedances, in the report required by Condition UG.26. <p>If the a Respond Trigger Level in Condition UG.10 has been reached exceeded at any of the Table UG.10.T Natural State Water Bodies, the Consent Holder must assess the water levels both within and adjacent to the wetlands to determine whether any changes, or</p>																							

Commented [MD29]: There has been some confusion over the number, and which, wetlands requiring monitoring. OGNZL has sought clarification from the wetland experts. There are nine wetlands where monitoring is proposed (these include Adams 9 and Adams 10).

Commented [MD30]: See comment above.

Commented [MD31]: WRC recommended that these co-ordinates be replaced with "replace with a location within a wetland of similar size / structure / composition / ecological setting and hydrology to the affected wetlands."

The Waiharakeke control site is a wetland that has been selected due its similar size, structure, composition and hydrology to those in Wharekurauponga.

However, additional text has been linked in allowing for an alternative control site to be utilised with the approval of WRC.

Commented [MD32]: WRC has recommended the inclusion of "or if an Alert Trigger Level in Condition UG.12 has been reached at any of the Table UG.13.T. Natural Inland Wetlands," be included here.

As per earlier comment on UG.12, it is considered that it is appropriate for the Alert Trigger Levels to remain in the management plan and not be replicated in the condition set. As such, this text is not necessary.

Commented [MD33]: WRC recommended the inclusion of an additional clause here:

Remeasure wetland ecological baselines (at a minimum vegetation plots and foliage condition of swamp maire) to determine the extent of any adverse ecological impact. Time of remeasurement should account for any anticipated lags between dewatering and ecological response

Any changes to wetland ecology as a result of dewatering would be over multiple months, or even years. If vegetation information is being collected at regular intervals as required by UG. 12, this will provide for determination of changes over time.

Condition	Comments
<p>differences of water level within any pair of monitors <u>piezometers</u>, indicate a potential dewatering effect. If changes beyond the expected natural variation are found, the Consent Holder must commission a suitably qualified and experienced professional approved by the Waikato Regional Council to investigate the matter, and prepare a report as set out in Condition UG.27. If the investigation finds it to be necessary, the Consent Holder must implement appropriate mitigation measures in accordance with the Wharekirauponga Underground Mine Water Management Plan, and as detailed in the Trigger Action Response Plan (as per Condition UG.19(b)).</p> <p><u><i>Advice Note: If the suitably qualified and experienced professional investigating changes beyond the expected natural variation of wetland water levels requires assistance from other experts, they may seek such assistance (including from members of the Expert Groundwater Panel).</i></u></p>	
<p>UG.15 In the event that the an assessment undertaken pursuant to Condition UG.11 or Condition UG.14 concludes that supplementation or reinjection of water to are <u>recharge of</u> Natural State Water Bodies or wetlands <u>Natural Inland Wetlands</u> from groundwater is required, the Consent Holder must advise the Waikato Regional Council and the Department of Conservation no later than 5 working days of the recharge commencing of:</p> <p>a. The location of groundwater bore(s) and discharge point(s); and</p> <p>b. The expected commencement date and duration of the abstraction and discharge;</p>	
<p>UG.16 The consent holder shall ensure that the effects of any discharge of groundwater for mitigation purposes does not cause harm to the aquatic life of the receiving environment.</p>	
<p>UG.17 Prior to any discharge of groundwater <u>into a Natural Inland Wetland</u> for mitigation purposes a representative sample of the groundwater from must be collected and analysed for <u>temperature</u>, turbidity, pH, <u>electrical</u> conductivity, hardness, sulphate, copper, iron, manganese and zinc. This sampling is required to confirm the groundwater quality in that bore can be discharged <u>for recharge purposes in a manner which will comply with Condition UG.16.</u></p>	
<p>UG.18 Discharge of groundwater for <u>Natural Inland Wetland effect</u> mitigation purposes must not occur unless the groundwater analysis undertaken pursuant to Condition UG.17 demonstrates that the discharge will comply with Condition UG.16.</p>	
Mine Related Groundwater Management and Monitoring	
<p>UG.19 From the commencement of mining activities <u>authorised by this consent</u> the Consent Holder must control groundwater ingress into</p>	<p>The Wharekirauponga Underground Mine Water</p>

Commented [MD34]: Linked in at request of WRC.

Commented [MD35]: The water quality parameters in UG17 align with conditions of existing consents held with WRC that allow groundwater discharge to natural state waterbodies. Therefore, these parameters are seen as appropriate for assessing groundwater discharge to wetlands also.

Commented [MD36]: WRC has recommended the inclusion of the following here:

"In the event that the mitigation actions outlined in Condition U.G.14 fail to recharge any of the natural wetlands listed in UG.13.T, and in the opinion of a suitably qualified ecologist, approved by the WRC and DOC, that the wetland values, including the health of swamp maire (*Syzygium maire*) are likely to be irreparably degraded, an offsetting or compensation package should be developed to ensure the project results in no net loss of wetland habitat, wetland ecological value, or the local population of swamp maire."

This is considered to be unnecessary with regard to the anticipated level of effects associated with the project and the various mitigation measures proposed (which include supplementation of water in the wetlands and the ceasing of mining activities if supplementation is not successful).



Condition		Comments
	<p>the area being mined in a manner that ensures compliance with the limits set out within Condition UG.7 by, as a minimum:</p> <p>a. Installing monitoring instruments and undertaking hydraulic testing in groundwater zones potentially affected by mining activities in advance of mining occurring (including use of instruments installed prior to or as part of work required by the Wharekirauponga Underground Mine Water Management Plan).</p> <p><u>Once confirmed, the location of the monitoring instruments is to be incorporated into the Wharekirauponga Underground Mine Water Management Plan, along with rationale as to why these locations are being utilised;</u></p> <p>b. Adhering to the Trigger Action Response measures set out in the Wharekirauponga Underground Mine Water Management Plan referred to in Condition C4 during mining activities so that methods of mitigation to control effects on Nnatural Ssstate Swater bBodies and/or Nnatural iinland Wwetlands are suitably adapted to address any deviations from the expected natural parameters of the Nnatural Ssstate Wwater bBodies and/or Nnatural iinland Wwetlands which have been identified as being potentially affected by mining activities, where those deviations have the potential to give rise to more than minor adverse changes in the flow regimes and/or water levels of Nnatural Ssstate Wwater bBodies and/or Nnatural iinland Wwetlands which are inconsistent with achieving Condition UG.7; and</p> <p>c. Having available, when and where required, the equipment and suitably qualified and experienced personnel to conduct appropriate monitoring, <u>carry out necessary mitigation, test efficacy of measures employed and if required ing-of grouting requirements or</u> alternative mitigation measures.</p>	<p>Management Plan identifies key principles to manage groundwater ingress and describes how these principles will be implemented.</p>
	Wharekirauponga Underground Mine Water Management Plan	
UG.20	The Consent Holder must implement the Wharekirauponga Underground Mine Water Management Plan referred to in Condition C4, subject to any amendments that may be made under Condition C8.	
UG.21	<p>Any amended version of the Wharekirauponga Underground Mine Water Management Plan must be prepared by a suitably qualified and experienced professional and must satisfy the following objectives:</p> <p>a. To ensure protection of the Natural State Water Bodies and Natural Inland Wetlands from dewatering activities associated with <u>tunneling and stoping</u> mining activities;</p> <p>b. To describe how the Consent Holder will undertake dewatering activities in accordance with the principles in Condition UG.1619; and</p>	

Commented [MD37]: Linked in at request of the WRC.



Condition		Comments
	<p>c. To describe how the Waikato Regional Council and the Department of Conservation is are able to determine that the activity is being undertaken in a manner which appropriately avoids or remedies any more than minor reductions in the expected natural parameters-flows within of the Natural State Water Bodies and/or natural water levels within the Natural Inland Wetlands which have been identified as being potentially affected by tunneling and stoping mining activities.</p>	
UG.22	<p>Any amended version of the Wharekirauponga Underground Mine Water Management Plan must include the following:</p> <p>a. Identification of the baseline data to be collected;</p> <p>b. A detailed strategy, describing how tunneling and stoping mining activities and associated groundwater management will be undertaken to achieve the following outcomes;</p> <p>i. To ensure protection of the Natural State Water Bodies and Natural Inland Wetlands from dewatering activities associated with mining activities;</p> <p>ii. To describe how the Consent Holder will undertake dewatering activities in accordance with the principles in Condition UG. 16 19; and</p> <p>iii. To describe how the Waikato Regional Council and the Department of Conservation is are able to determine that the activity is being undertaken in a manner which appropriately avoids or remedies any more than minor reductions in the expected natural parameters-flows of the within the Natural State Water Bodies and/or the Natural Inland Wetlands which have been identified as being potentially affected by mining activities.</p> <p>c. Monitoring that is required to be undertaken for the period when any dewatering activities are occurring within the mine to enable timely assessment of stream flows within Natural State Water Bodies against the surface flow levels set in Condition UG.10, Table UG.10.T, including rainfall, surface water flows and groundwater levels;</p> <p>d. Monitoring that is required to be undertaken for the period when any dewatering activities are occurring within the mine to enable timely assessment of wetland water levels against the surface flow levels set in accordance with Condition UG.10, including rainfall, surface water flows and groundwater levels and pressure; and</p> <p>e. Identification of potential adaptive management and mitigation measures to be implemented in circumstances where dewatering activities result in flows/levels reaching the</p>	<p>At this stage of the consent the Consent Holder will have collected a substantial body of information on the geohydrology of the Mine Area.</p> <p>That information will inform the development of the strategy. Including any necessary Trigger Action Response Plan TARPs.</p>



Condition		Comments
	Respond Trigger Levels for Natural State Water Bodies in Condition UG.10.	
UG.23	Prior to submitting any amended version of the Wharekirauponga Underground Mine Water Management Plan to the Waikato Regional Council and the Department of Conservation, it must be provided to the Expert Groundwater Management Panel for review and comment in accordance with Conditions UG.31 – UG.37.	
UG.24	Condition C8(c) of Schedule One does not apply to any amendment to the Wharekirauponga Underground Mine Water Management Plan.	
	Reporting	
UG.25	<p>a. Within three months of the commencement of mining activities At least once every three months following the commencement of mining activities (which are not tunnelling or monitoring and data collection activities), and every three months thereafter the Consent Holder must provide to the Waikato Regional Council, the Department of Conservation, and Expert Groundwater Management Panel a report (Quarterly Report) which includes:</p> <ul style="list-style-type: none"> i. A description of the monitoring instruments installed, and pre-development hydraulic testing undertaken; ii. A summary of all collected surface water flow and wetland water level data; iii. A description of any new tunnels and stopes created mining activities, including their location, depth and volume; iv. A description of any grouting or alternative mitigation undertaken to control the ingress of groundwater; iv. A description of any dewatering that has occurred, including the method of dewatering and the daily flow rates, volume and chemistry of the water; v. A description of any grouting or alternative migration undertaken to control the ingress of groundwater; vi. Any other methods of addressing dewatering as part of the Trigger Action Response Plan TARP. vii. An analysis of the effectiveness of the grouting or other mitigation over the previous reporting period and any proposed amendments which should be made to the Wharekirauponga Underground Mine Water Management Plan and in turn to the groundwater management practices implemented by the Consent Holder. <p>b. At the request of the Consent Holder, the Waikato Regional Council may agree in writing to a less frequent reporting</p>	<p>This condition requires regular communication with the Waikato Regional Council and Peer Review Panel on progress and the effectiveness of the management measures.</p> <p>Condition UG.32 compels the Consent Holder to implement the recommendations of the Peer Review Panel.</p>



Condition		Comments
	obligation than specified in (a). When considering a less frequent reporting obligation the Waikato Regional Council shall take advice from the Expert Groundwater Management Panel.	
UG.26	<p>At least once every 12 months following the commencement of mining activities (which are not tunnelling or monitoring and data collection activities), the Consent Holder must provide to the Waikato Regional Council, the Department of Conservation, and Expert Groundwater Management Panel an report ("Annual Groundwater and Surface Water Monitoring Report") which includes:</p> <ul style="list-style-type: none"> a. Data from all monitoring undertaken during the previous year; b. Identification of any effects or trends resulting from mine dewatering activities in the flow regimes of Natural sState Water bBodies and/or water levels within Natural Inland wWetlands which are potentially affected by mining activities; c. Interpretation and analysis of any change in surface flows or wetland water levels during the previous year, and any contingency or mitigation actions taken in response to those changes; d. A summary of compliance and / or non-compliance with resource consent conditions; and e. A summary of any works that have been, or are proposed to be, undertaken to improve environmental performance in relation to activities provided for by the resourceauthorised by this consent. 	
	Mine Compliance Monitoring and Reporting	
UG.27	In the event that a Respond Trigger Level is reached-exceeded for a Natural State Waterways and/or Natural Inland Wetlands the Consent Holder must provide to the Waikato Regional Council, the Department of Conservation, and the Expert Groundwater Panel a report ("Compliance Report") outlining the nature of the exceedance and, if the investigation required by either Condition UG.10 or Condition UG.14 finds it to be necessary, the remedial and / or mitigation measures that were applied to in response.	
UG.28	The report required by Condition UG.27 must be provided to the Waikato Regional Council, the Department of Conservation, and the Expert Groundwater Management Panel within 40 working days of the Respond Trigger Level being exceeded.	
	Natural State Water bBBody and Natural Inland Wetland Compliance Trigger Level Adjustment	
UG.29	If the monitoring required by Conditions UG.8 and UG.9 the Wherekirauponga Underground Mine Water Management Plan determines that the Alert Trigger Levels and / or Respond Trigger	



Condition		Comments
	<p>Levels <u>set out in Condition UG.10</u> are not appropriate in order to assess a departure from the expected natural operating range of the Natural State Water Bodies or Natural Inland Wetlands, the Consent Holder must engage a suitably qualified and experienced expert to prepare a Compliance Trigger Level Adjustment Report. <u>This report must set out any proposed adjustments to the Condition UG.10 Alert Trigger Levels or Respond Trigger Levels for the natural state waterbodies potentially affected by mining activities</u>. The reasoning for the proposed adjustments must be outlined and the suitably qualified and experienced expert must confirm that the change in these trigger levels is valid and reflect the <u>naturally observed natural flow</u> levels of the Natural State Water Bodies.</p> <p>The Compliance Trigger Level Adjustment Report must be submitted to the Waikato Regional Council for certification. Prior to submitting the report to the Waikato Regional Council for certification purposes, it must be provided to the Expert Groundwater Management Panel for review and comment in accordance with Conditions UG.31 – UG.37.</p> <p><u>Once the Compliance Trigger Level Adjustment Report has been certified by the Waikato Regional Council, the Natural State Water Body Alert Trigger Levels and / or Respond Trigger Levels set out in Condition UG.10 may be adjusted.</u></p> <p>The Compliance Trigger Level Adjustment Report may be reviewed and updated at any time by the Consent Holder. Any updates to the trigger levels set out in Condition UG.10 must not be implemented until the updated Compliance Trigger Level Adjustment Report has been reviewed and commented upon by the Expert Groundwater Management Panel and subsequently re-certified <u>by the Consent Authority</u>.</p>	
	Expert Groundwater Management Panel	
UG.30	<u>Prior to commencing work on the access tunnels</u> , the Consent Holder must engage, at its cost, an Expert Groundwater Management Panel.	
UG.31	<p>The role of the Expert Groundwater Management Panel is to review and provide <u>advice and</u> recommendations to Waikato Regional Council, the Department of Conservation, and the Consent Holder on the adequacy and appropriateness of the following:</p> <p><u>a. Proposed mitigation measures to be applied in circumstances where the Consent Holder is required to respond to an exceedance of an Alert or a Respond Trigger Level set out in Table UG.10.T;</u></p> <p><u>a-b. Quarterly Access Tunnel Reports required by Condition UG.5;</u></p>	

Commented [MD38]: WRC has asked how adjusting the timing of the Compliance Trigger Level will relate to the reporting requirements of Conditions UG.25 - UG.28.

An adjustment of the Compliance Trigger Levels will require a robust supporting report which would provide a summary of the matters covered by UG.25 - UG.28. The requirements of UG.25 - UG.28 will continue on the same timeframes.

Commented [MD39]: Added at the request of the WRC to ensure adjusted trigger levels are not implemented until they have been certified by the WRC.

An advice note has also been linked into Condition UG.10 acknowledging that there is a mechanism provided via the conditions for adjustments to the trigger levels.

Condition		Comments
	<p>b.c. Any review of the Wharekirauponga Underground Mine Water Management Plan under Conditions C.8 and UG.21 – UG.24, prior to its provision to Council for certification;</p> <p>c.d. Quarterly Report required by Condition UG.25;</p> <p>d. The Annual Groundwater and Surface Water Monitoring Report required by Condition UG.26; and</p> <p>e. Any Compliance Report required by Condition UG.27; and</p> <p>e.f. Any adjustments recommended to Alert Trigger Levels and / or Respond Trigger Levels under Condition UG.29; and</p>	
UG.32	The Consent Holder must address any recommendations from the Expert Groundwater Management Panel in finalising <u>any changes to</u> the Wharekirauponga Underground Mine Water Management Plan and any <u>other</u> document referred to in <u>this c</u> Condition <u>UG.31</u> that is submitted to the Waikato Regional Council must identify any recommendations <u>made by the Expert Groundwater Management Panel</u> that have not been adopted and the reasons for this.	
UG.33	<p>The Expert Groundwater Management Panel must comprise of a member or members who have expertise and technical speciality which has been demonstrated in at least one of the following <u>fields</u>:</p> <p><u>a. Mātauranga Māori;</u></p> <p>a.b. Hydrology;</p> <p>b.c. Hydrogeology, including demonstratable experience in assessment of surface water-groundwater interactions;</p> <p>c.d. Geotechnical engineering;</p> <p>d.e. The use of grouting techniques to manage groundwater inflows; and</p> <p>e.f. Underground mining.</p> <p>There may be any number of individuals on the Expert Groundwater Management Panel, however to ensure the Panel is fulfilling the purposes of Condition UG.31, the Panel may engage / call on suitably qualified and experienced experts with expertise and speciality in the fields set out in <u>UG.33(a-b) above</u> as and when necessary.</p> <p><u>Members of this Expert Groundwater Management Panel may also be members of any Peer Review Panel required under any other consents held by Consent Holder in relation to its Waihi Operation.</u></p>	
UG.34	The members of the Expert Groundwater Management Panel, and their defined field(s) of expertise, must be approved by the Waikato Regional Council prior to appointment to the Panel.	
UG.35	In the instance that the Council considers that a member of the Expert Groundwater Management Panel is not fulfilling their role in	

Commented [JK40]: Addition made in response to comments provided by DOC.

Commented [MD41]: WRC has suggested it may be helpful to include an aquatic ecologist on this Panel. A specialist in this field has not been added, however UG.36 does enable the Panel to co-opt other specialist members.

Commented [MD42]: Added in response to discussion with iwi

Condition		Comments
	<p>accordance with Condition UG.31, the Council can terminate that members position on the Panel.</p> <p>In the instance that such termination results in the Expert Groundwater Management Panel having no members, a new Panel member must be instated in accordance with Condition UG.30.</p>	
UG.36	The Expert Groundwater Management Panel may co-opt other specialist members to assist in any of its functions for specified tasks and periods, subject to the prior approval of the Waikato Regional Council.	
UG.37	The Consent Holder must provide the Expert Groundwater Management Panel with all records, plans, designs, etc, that the Panel requests, and must afford the Panel reasonable access as is necessary and consistent with health and safety procedures.	
UG.38	<p>a. If there is disagreement between the Consent Holder and the Expert Groundwater Management Panel about a Panel recommendation, in the first instance the Consent Holder must invite the Expert Groundwater Management Panel and Waikato Regional Council to a collaborative workshop to determine a process of resolution.</p> <p>b. If a resolution cannot be agreed under (a) within 10 working days, the matter shall be referred to an independent appropriately qualified expert, acceptable to both the Consent Holder and the Expert Groundwater Management Panel parties ('expert-Expert'), setting out the details of the matter to be referred for determination and the reasons the parties do not agree.</p> <p>c. The expert-Expert shall, as soon as possible, issue a recommendation on the matter. Within 5-five working days of receipt of the recommendation from the expert the Waikato Regional Council must advise the Consent Holder on whether the recommendation of the Expert Groundwater Management Panel which was in dispute shall be implemented or an alternative course of action may be taken.</p>	
	<u>Telemetry / Flow Metering</u>	
UG.39	<u>The Consent Holder must record the quantity of water taken from underground on a cumulative basis. This data must be telemetered back to the Waikato Regional Council. The telemetry system must be compatible with Waikato Regional Council telemetry system standards and data protocols and be provided in continuous 15 minute values of net take volume in units of cubic metres. The data must be reported once daily to the Waikato Regional Council via the telemetry system and there must be 96 values per day.</u>	

Commented [MD43]: The conditions in this section are WRC's standard telemetry / flow-meter conditions.

	Condition	Comments
UG.40	<p>Prior to the first exercise of this consent and upon request of the Waikato Regional Council, the Consent Holder must undertake an assessment of the accuracy of the water measuring system(s). Each system must have a reliable calibration to water flow and must be maintained to an accuracy of +/- 5%. The assessment must be undertaken by an independent, qualified person and evidence documenting the assessment shall be forwarded to the Waikato Regional Council within one month of the assessment occurring.</p>	
	<p>Consent Review</p>	
UG.40UG.4	<p>In addition to the matters listed in Condition G33, pursuant to Section 128(1)(a)(i) and (iii) of the Resource Management Act, the Waikato Regional Council may, 12 months from the commencement of this consent and annually thereafter, or on receipt of any of the reports required by the conditions of this consent, review any or all of the conditions of these consents for the following purposes:</p> <ol style="list-style-type: none"> To review the effectiveness of the conditions of this consent to avoid, remedy or mitigate the effects of dewatering within the access and development tunnels and during stoping-mining activities on the expected natural parameters flows of the Natural State Water Bodies and/or the natural water levels in nNatural linland Wwetlands which have been identified as being potentially affected by tunnelling and stoping-mining activities, where those effects are likely to give rise to more than minor adverse changes in these flows / levels the flow regimes and water levels of the natural state waterbodies and/or water levels within wetlands, and if necessary to avoid, remedy or mitigate such effects by way of further or amended conditions. In deciding to undertake a review and where further or amended conditions are deemed necessary, the Waikato Regional Council shall have regard to all of the information contained in the reports required under the conditions of this consent; or To address any matter relating to the recommendations of the Expert Groundwater Management Panel required by the conditions of these this Resource Cc consents. <p>Any review under this condition must, in addition to the matters set out in the Resource Management Act 1991, also recognise and provide for the purpose of the Fast Approvals Track Act 2024.</p>	



AREA SPECIFIC CONSENTS



AREA 1 SPECIFIC CONSENTS

CONSENT TYPE AND
ACTIVITIES AUTHORISED RMA S14 To take surface water from streams and wetlands for
monitoring purposes

LOCATION Area 1

TERM 35 years

LAPSE PERIOD 10 years

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC1.A.1	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC1.A.2	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent.	



CONSENT TYPE AND ACTIVITIES AUTHORISED RMA S14 To divert surface water in diversion channels around ventilation shaft sites

LOCATION Area 1

TERM 35 years

LAPSE PERIOD 10 years

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC1.B.1	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC1.B.2	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent.	



CONSENT TYPE AND ACTIVITIES AUTHORISED RMA S14 To take groundwater for pumping tests.

LOCATION Area 1

TERM 35 years

LAPSE PERIOD 10 years

	Condition	Comments
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC1.C.1.	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC1.C.2.	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent.	
	Limits	
SC1.C.3.	The maximum instantaneous rate of take from any pumping test must not exceed 10 litres per second.	
	Telemetry	
SC1.C.4.	The consent holder must record the quantity of water taken from each pumping test at the point of take on a cumulative basis. This data must be telemetered back to the Waikato Regional Council. The telemetry system must be compatible with Waikato Regional Council telemetry system standards and data protocols and be provided in continuous 15 minute values of net take volume in units of cubic metres. The data must be reported once daily to the Waikato Regional Council via the telemetry system and there must be 96 values per daily report. When no water is being taken the data must specify the net take volume as zero.	



	Condition	Comments
	Accuracy of the Water Measuring Systems	
SC1.C.5.	Prior to the first exercise of this consent and upon request of the Waikato Regional Council, the consent holder must undertake an assessment of the accuracy of the water measuring system(s). Each system must have a reliable calibration to water flow and must be maintained to an accuracy of +/- 5%. The assessment must be undertaken by an independent, qualified person and evidence documenting the assessment shall be forwarded to the Waikato Regional Council within one month of the assessment occurring.	

CONSENT TYPE AND ACTIVITIES AUTHORISED	RMA S15	To discharge groundwater potentially containing contaminants to the main stem of the Wharekirauponga Stream.
LOCATION	Area 1	
TERM	35 years	
LAPSE PERIOD	10 years	

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC1.D.1.	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC1.D.2.	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent.	
	General	
SC1.D.3.	This consent only authorises discharges from pumping test activities	
SC1.D.4.	At least 10 working days prior to the commencement of the discharge from each pumping test, the consent holder shall advise the Waikato Regional Council in writing of: <ul style="list-style-type: none"> a. The location of the bore and the discharge point; and b. The expected duration of the pumping test. 	The following conditions are as per the existing authorisation for pumping test discharges in the Coromandel Forest Park (AUTH146336.02.01) except that the requirement for preliminary aquatic survey in AUTH146336.02.01 is not applied (this was a requirement for the first pump testing activity to verify the anticipated effects)
SC1.D.5.	The discharges from the pumping tests must be to the main stem of the Wharekirauponga Stream only.	

	Condition	Comment												
SC1.D.6.	The maximum instantaneous rate of any discharge must not exceed 10 litres per second.													
SC1.D.7.	The duration of any pump test must not exceed 30 days.													
SC1.D.8.	The consent holder must ensure that the effects of this discharge do not cause harm to the aquatic life of the Wharekirauponga Stream.													
SC1.D.9.	The turbidity of the discharged water must not exceed 25 NTU.													
SC1.D.10.	<p>The following limits must not be exceeded within the Wharekirauponga Stream immediately downstream of the zone of reasonable mixing as a result of the exercise of this consent.</p> <p>When determining compliance with this condition the zone of reasonable mixing shall comprise of the area of the stream bounded by the point of discharge on the Wharekirauponga Stream and the lesser of 100 metres downstream of the discharge point or a distance of 7 times the average width of the stream (measured at median flow) in the reach to 100 metres downstream of the discharge point.</p> <p>Table 1: Receiving Environment Limits</p> <table><tr><th>Parameter</th><th>Limit (mg/l)</th></tr><tr><td>Dissolved copper</td><td>0.003</td></tr><tr><td>Dissolved iron</td><td>1.0</td></tr><tr><td>Dissolved manganese</td><td>0.1</td></tr><tr><td>Dissolved zinc</td><td>0.05</td></tr><tr><td>pH</td><td>6-9</td></tr></table>	Parameter	Limit (mg/l)	Dissolved copper	0.003	Dissolved iron	1.0	Dissolved manganese	0.1	Dissolved zinc	0.05	pH	6-9	
Parameter	Limit (mg/l)													
Dissolved copper	0.003													
Dissolved iron	1.0													
Dissolved manganese	0.1													
Dissolved zinc	0.05													
pH	6-9													
SC1.D.11.	Prior to the discharge of water from a pumping test a representative sample of the groundwater from that bore must be collected and analysed for pH, conductivity, hardness, sulphate, copper, iron, manganese and zinc. This sampling is required to confirm the groundwater quality in that bore can be discharged in a manner which will comply with Conditions SC1.D.8 – SD1.D.10, and to identify the minimum in-stream flow rate required for assimilation of the discharge within the specified limits.													
SC1.D.12.	Results of the groundwater analysis and minimum flow rate assessment must be notified in writing to Waikato Regional Council prior to any discharge taking place.													
SC1.D.13.	The discharge from a pump test must not occur unless the groundwater analysis and minimum flow rate assessment demonstrate that the discharge will comply with Conditions SC1.D.8 – SD1.D.10.													

Commented [MD44]: Added at request of WRC.

	Condition	Comment														
SC1.D.14.	<p>Unless otherwise agreed in writing by the Waikato Regional Council the consent holder must undertake the following programme of monitoring for any discharge authorised by this consent:</p> <p>Table 2: Discharge Monitoring Parameters</p> <table> <tr> <th>Frequency</th><th>Site</th><th>Parameter</th></tr> <tr> <td rowspan="3">Continuously whilst the discharge is occurring</td><td>Discharge</td><td>Turbidity</td></tr> <tr> <td>Wharekirauponga Stream at existing flow gauging locations WKP1, WKP2 and WKP3.</td><td>Flow by level pressure transducers during the discharge.</td></tr> <tr> <td>Pumping test bore collar</td><td>Flow</td></tr> <tr> <td rowspan="2"> Daily sampling comprising: <ul style="list-style-type: none"> At least one sample event before each pump test discharge commences; A sample event on Day 1 and 3 of each pump test discharge; A sample event on Day 8, 13, 18, 23 and 28 if the pump test is continuing on those days; and A sample event within at least 1 day after each pump test ceases. </td><td>Discharge</td><td rowspan="2">pH, conductivity, hardness, sulphate, copper, iron, manganese, zinc</td></tr> <tr> <td> Wharekirauponga Stream: <ol style="list-style-type: none"> immediately downstream of the zone of reasonable mixing; and immediately upstream of point of discharge (control point) </td></tr> </table>	Frequency	Site	Parameter	Continuously whilst the discharge is occurring	Discharge	Turbidity	Wharekirauponga Stream at existing flow gauging locations WKP1, WKP2 and WKP3.	Flow by level pressure transducers during the discharge.	Pumping test bore collar	Flow	Daily sampling comprising: <ul style="list-style-type: none"> At least one sample event before each pump test discharge commences; A sample event on Day 1 and 3 of each pump test discharge; A sample event on Day 8, 13, 18, 23 and 28 if the pump test is continuing on those days; and A sample event within at least 1 day after each pump test ceases. 	Discharge	pH, conductivity, hardness, sulphate, copper, iron, manganese, zinc	Wharekirauponga Stream: <ol style="list-style-type: none"> immediately downstream of the zone of reasonable mixing; and immediately upstream of point of discharge (control point) 	
Frequency	Site	Parameter														
Continuously whilst the discharge is occurring	Discharge	Turbidity														
	Wharekirauponga Stream at existing flow gauging locations WKP1, WKP2 and WKP3.	Flow by level pressure transducers during the discharge.														
	Pumping test bore collar	Flow														
Daily sampling comprising: <ul style="list-style-type: none"> At least one sample event before each pump test discharge commences; A sample event on Day 1 and 3 of each pump test discharge; A sample event on Day 8, 13, 18, 23 and 28 if the pump test is continuing on those days; and A sample event within at least 1 day after each pump test ceases. 	Discharge	pH, conductivity, hardness, sulphate, copper, iron, manganese, zinc														
	Wharekirauponga Stream: <ol style="list-style-type: none"> immediately downstream of the zone of reasonable mixing; and immediately upstream of point of discharge (control point) 															
SC1.D.15.	<p>All water quality sampling and analysis under this consent must be undertaken using Standard Methods for the Examination of Water and Wastewater (19th Edition, or any updated version), APHA, AWWA and WEF, unless otherwise agreed in writing by Waikato Regional Council. Analyses shall be undertaken at an appropriately qualified laboratory. All other measuring, testing, recording and analytical methods as may be required from time to time pursuant to the requirements of this consent shall be to the satisfaction of the Waikato Regional Council.</p>															
SC1.D.16.	<p>Following the cessation of the discharge of each pumping test the consent holder must provide the Waikato Regional Council a report which:</p>															



	Condition	Comment
	<p>a. Contains the results of all water monitoring undertaken in accordance with Conditions SC1.D.11 and SC1.D.14; and</p> <p>b. Assesses compliance with Conditions SC1.D.5 - SC1.D.10.</p> <p>The final water monitoring sample(s) as required under Condition SC1.D.14 shall be dispatched for analysis as soon as reasonably practicable following cessation of the discharge and the complete report shall be provided to Waikato Regional Council within 10 working days of the receipt by the consent holder of the final analysis results.</p>	



AREA 2 SPECIFIC CONSENTS

[WILLOWS PORTAL AND WILLOWS SURFACE FACILITIES AREA]



CONSENT TYPE AND ACTIVITIES AUTHORISED RMA S13 To disturb and reclaim the bed of unnamed tributaries of the Mataura Stream associated with establishing clean and dirty water drains for mining and erosion and sediment control purposes.

LOCATION Area 2

TERM 35 years

LAPSE PERIOD 10 years

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC2.A.1	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC2.A.2	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent.	<p>Note: Schedule Two contains a comprehensive suite of conditions which address:</p> <ul style="list-style-type: none"> - Erosion and sediment control; - Fish/Aquatic fauna salvage and relocation; and - Requirements for mitigating and offsetting residual effects on aquatic ecology, including minimum design requirements for new channel construction and riparian planting.

Commented [MD45]: Change requested by WRC.



CONSENT TYPE AND ACTIVITIES AUTHORISED RMA S14 To dam and divert water for erosion and sediment control purposes using clean water and dirty water drains.

LOCATION Area 2

TERM 35 years

LAPSE PERIOD 10 years

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC2.B.1	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC2.B.2	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent	Note: Schedule Two contains a comprehensive suite of conditions which address: <ul style="list-style-type: none"> - Instream works; and - Erosion and sediment control and measures.



CONSENT TYPE AND ACTIVITIES AUTHORISED	RMA S15	To discharge sediment laden water to land within temporary sediment retention ponds and decanting earth bunds and to discharge water from those devices to surface water via spillways.
LOCATION	Area 2	
TERM	35 years	
LAPSE PERIOD	10 years	

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC2.C.1	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC2.C.2	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent.	Note: Schedule Two contains a comprehensive suite of conditions which address: <ul style="list-style-type: none"> - Erosion and sediment control and discharges from sediment retention devices; and - A Water Management Plan



CONSENT TYPE AND ACTIVITIES AUTHORISED RMA S13 To disturb the bed of unnamed tributaries of the Mataura Stream associated with the establishment of diversion drains and formalised overland flow paths to divert natural runoff and unnamed tributaries of the Mataura Stream around developed areas to downstream water bodies and overland flow paths.

LOCATION Area 2

TERM 35 years

LAPSE PERIOD 10 years

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC2.D.1	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC2.D.2	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent.	<p>> Note: Schedule Two contains a comprehensive suite of conditions which address:</p> <ul style="list-style-type: none"> - Erosion and sediment control; - Aquatic fauna Fish salvage and relocation; and - Requirements for mitigating and offsetting residual effects on aquatic ecology, including minimum design requirements for new channel construction and riparian planting.

Commented [MD46]: Change requested by WRC.



CONSENT TYPE AND ACTIVITIES AUTHORISED	RMA S14	To dam and divert water within unnamed tributaries of the Mataura Stream and from natural runoff around developed areas to downstream water bodies and overland flow paths.
LOCATION	Area 2	
TERM	35 years	
LAPSE PERIOD	10 years	

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC2.E.1.	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC2.E.2.	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent.	Note: Schedule Two contains a comprehensive suite of conditions which address: <ul style="list-style-type: none"> - Instream works; - Erosion and sediment control and measures; and - A Water Management Plan
	Other Matters	
SC2.E.3.	The Consent Holder must divert clean runoff away from downstream developed areas using clean water diversion drains and formalised overland flow paths in accordance with Waikato stormwater management guideline (TR2020/07, May 2020), or any subsequent version of the guideline (in which case the latter version prevails).	
SC2.E.4.	All diversion drains and formalised overland flow paths must be designed and maintained to manage a 10% Annual Exceedance Probability (AEP) flood event.	



CONSENT TYPE AND ACTIVITIES AUTHORISED	RMA S13	To disturb and reclaim the bed of an unnamed tributary of the Mataura Stream to establish the Willows Rock Stack.
	RMA S15	To discharge PAF and NAF rock and overburden on to land at the Willows Rock Stack and associated Mine Access Road.
	RMA S14	To dam and divert runoff, intercepted groundwater and seepage from the Willows Rock Stack, Willows Portal, Mine Access Road and WRS Toe Seepage Pond to the Willows Collection Pond.
	RMA S13	To disturb the bed and place a dam structure in the bed of an unnamed tributary of the Mataura Stream to establish the WRS Toe Seepage Pond.
	RMA S14	To dam water in an unnamed tributary of the Mataura Stream associated with the construction and operation of the WRS Toe Seepage Pond.
LOCATION	Area 2	
TERM	35 years	
LAPSE PERIOD	10 years	

Condition		Comments
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC2.F.1.	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC2.F.2.	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent.	
	Design and Construction	
SC2.F.3.	The Willows Rock Stack must be wholly located within the footprint shown on “Map 1 – Willows Rock Stack” annexed as Attachment 1 to this consent.	



Condition	Comments
SC2.F.4.	The Willows Rock Stack must be constructed in accordance with the following documents included in Part B of the application documents: <ul style="list-style-type: none"> “Oceana Gold (New Zealand) Limited Waihi North Project; Willows Rock Stack and Surface Facilities Technical Report, Submitted by Engineering Geology Limited” (the EGL Design Report); and Waihi North Project Geochemical Assessment, Geochemistry of Tailings and Overburden, Treatment and Mitigation, submitted by AECOM New Zealand Limited.
SC2.F.5.	Clean water drains designed to accommodate, as a minimum, 10% Annual Exceedance Probability (AEP) storm flow must be installed and maintained around the footprint of the Willows Rock Stack, WRS Toe Seepage Pond and Mine Access Road to divert clean surface runoff and any groundwater that is intercepted within the footprint of those activities.
SC2.F.6.	Diversion drains must be designed, installed and maintained to collect runoff from the Willows Rock Stack, WRS Toe Seepage Pond and Mine Access Road and divert it to the Willows Collection Pond.
SC2.F.7.	Prior to deposition of rock or overburden, the footprint of the Willows Rock Stack must be stripped of topsoil, subsoil and other weak material, which is to be stockpiled for rehabilitation purposes. <u>Advice Note: Characterisation of in-situ material, other than topsoil and subsoils, should be undertaken prior to the removal of materials to inform management requirements.</u>
SC2.F.8.	The shear key specified in the EGL WRS Design Report must be earth lined with non-acid forming material with a permeability no greater than 1×10^{-8} m/s.
SC2.F.9.	A rockfill underdrainage system must be installed and maintained in the gully beneath Willows Rock Stack to collect contaminated seepage from waste rock and minimise the release of seepage to ground and convey it to the Willows Collection Pond. <u>The drainage layer must be designed and constructed to prevent the ingress of oxygen into the rock stack.</u>
SC2.F.10.	The underdrain system required by Condition SC2.F.9 must be designed and installed to minimise air ingress into the stockpile, and to ensure that the toe of the Willows Rock Stack remains saturated.
SC2.F.11.	Oxygen traps (goose necks <u>or a similar approved technique</u>) must be added to the underdrain system required by Condition SC2.F.9 to minimise oxygen ingress into the stockpile and associated oxidation and acid generation.
SC2.F.12.	The Consent Holder must ensure that the WRS Toe embankment is constructed from, or lined with, materials which provide for secure

Commented [MD47]: Change requested by WRC.

Commented [MD48]: Added in relation to request for change to SC2.F.11. by WRC.

Commented [MD49]: Added at request of WRC.

	Condition	Comments
	long term control of seepage and runoff, and which have no acid forming potential.	
SC2.F.13.	<p>The Consent Holder must supply the following documentation to the Waikato Regional Council prior to commencement of the construction works authorised by this consent:</p> <ul style="list-style-type: none"> a. Detailed Design Report b. Specification c. Drawings d. Construction Monitoring Inspection Schedule <p>All subsequent amendments to the design must be supplied to the Waikato Regional Council prior to implementation.</p>	
SC2.F.13.A	All detailed design reporting shall include seismic design analyses in accordance with National Seismic Hazard Model (2022).	
SC2.F.14.	All construction works must be implemented under the supervision of appropriately qualified and experienced persons.	
SC2.F.15.	<p>On completion of the initial foundations, underdrainage system, and surface water drainage system construction works, and prior to the commissioning of any subsequent stages, the Consent Holder must supply written confirmation to the Waikato Regional Council and the Peer Review Panel that the foundations, underdrainage system, and surface water drainage system works of the relevant stage have been constructed in accordance with the requirement in Condition SC2.F.12.</p> <p>Thereafter, the facility must be inspected by an appropriately qualified and experienced person or persons with recognised experience in the design of rock storage facilities (the Designer) on an annual basis, and a written report on the inspection provided to Waikato Regional Council and copied to the Peer Review Panel within one month of completion of the inspection.</p>	
SC2.F.16.	The Consent Holder must not place any potentially acid forming material in any area of the Willows Rock Stack or Mine Access Road until the report required by Condition SC2.F.15 has been submitted to the Waikato Regional Council in respect of that area, acknowledging that the Willows Rock Stack and its foundations may be developed in stages.	
	Monitoring	
SC2.F.17.	The Consent Holder must install groundwater quality monitoring bores to detect seepage bypassing the underdrainage system, and to determine the representative groundwater quality for shallow and deeper groundwater around the perimeter of land owned by the Consent Holder. This is to include installation of groundwater quality monitoring bores between the Willows Rock Stack and the	

Commented [MD50]: Added at request of WRC.



	Condition	Comments
	Mataura Stream (to the north, east and southeast of Willows Rock Stack). The locations and specifications of the bores shall be to the satisfaction of the Waikato Regional Council.	
SC2.F.18.	The Consent Holder must undertake baseline monitoring of groundwater monitoring bores at least monthly over a twelve month period, prior to the placing of PAF material within the Willows Rock Stack. Groundwater monitoring is to be undertaken using the methodology provided in the Willows Rock Stack Monitoring and Management Plan required by Condition SC2.F.23 and monitoring shall include the measurement of the parameters annexed as Attachment 2 to this consent. The results of baseline monitoring must be forwarded to Waikato Regional Council at quarterly intervals.	
SC2.F.19.	The Consent Holder must calculate trigger levels for the parameters annexed as Attachment 2 to this consent for down gradient bores based on the trends observed in the baseline monitoring data required by Condition SC2.F.18 at levels which will provide early warning of potential changes of groundwater quality as a result of the activities authorised by this consent. All trigger levels must be set at the 95 th percentile confidence limit.	
SC2.F.20.	<p>At any time following completion of baseline monitoring, if monitoring results within the monitoring bores exceeds the relevant trigger level for that bore over two consecutive readings, then the Consent Holder must:</p> <ul style="list-style-type: none"> a. Characterise and assess the source of the change; and b. Take all necessary measures to ensure that General Condition G18 is complied with. <p>The trigger and actions taken must be reported to the Waikato Regional Council immediately upon completion.</p>	
SC2.F.21.	<p>Ongoing monitoring must be undertaken at the locations and using the methodology outlined in the Willows Rock Stack Monitoring and Management Plan required by Condition SC2.F.23, with monitoring to include the measurement of all parameters annexed as Attachment 2 to this consent.</p> <p>Monitoring results must be provided to the Waikato Regional Council and copied to the Peer Review Panel as part of annual reporting as required under Condition SC2.F.27.</p>	
SC2.F.22.	<p>The Consent Holder must classify waste rock in a manner to be set out in the Willows Rock Stack Monitoring and Management Plan required by Condition SC2.F.23 and as a minimum includes:</p> <ul style="list-style-type: none"> a. Definitions used to characterise waste rock embankments in terms of acid base accounting; b. Criteria used for classifying waste rock; 	

Commented [MD51]: WRC requested that the following condition be added:

"During construction of the Willows Rock Stack the Consent Holder must install oxygen probes to validate design criteria and confirm that oxygen is excluded beyond 8m of the edge of the Willows Rock Stack"

This has not been added as management requirements associated with oxygen levels will be included in the monitoring programme provided in the WRS Monitoring and Management Plan. The monitoring programme will reflect the requirement to limit the degree of any oxygen ingress that occurs.



Condition		Comments
	<ul style="list-style-type: none"> c. An assessment protocol for classifying waste rock; d. Waste rock sampling requirements during construction and rehabilitation of the Willows Rock Stack; and e. Requirements for limestone addition for any potentially acid forming rock placed within stockpiles. 	
	Willows Rock Stack Monitoring and Management Plan	
SC2.F.23.	<p>No later than 30 working days prior to the first discharge of rock or overburden on to land at the Willows Rock Stack, the Consent Holder must submit a Willows Rock Stack Monitoring and Management Plan for certification under Condition C5.</p> <p>Certification is required to verify that the Willows Rock Stack Monitoring and Management Plan:</p> <ul style="list-style-type: none"> a. Includes actions, methods, monitoring programmes, and trigger levels as appropriate to meet the objectives in Condition SC2.F.24; and b. Satisfies the requirements in Condition SC2.F.25. <p>The Willows Rock Stack Monitoring and Management Plan need not be a standalone document, and the Consent Holder may, at its discretion, include it as part of any other management plan required by the conditions of this consent.</p>	
SC2.F.24.	<p>The objectives of the Willows Rock Stack Monitoring and Management Plan are to set out details of:</p> <ul style="list-style-type: none"> a. The monitoring that will be undertaken to ensure that the Willows Rock Stack does not adversely affect land, ground and surface water resources; and b. The contingency measures necessary to ensure the conditions of this consent are achieved. 	
SC2.F.25.	<p>The Willows Rock Stack Monitoring and Management Plan must include, as a minimum:</p> <ul style="list-style-type: none"> a. A Risk Management Plan, as defined in the Australian/New Zealand Standards for Risk Management (AS/NZS 4360:1999) or any subsequent replacement standard. The purposes of the Risk Management Plan must be to: <ul style="list-style-type: none"> i. Identify and assess the operational risks relating to the Willows Rock Stack; ii. Develop an appropriate monitoring programme; and iii. Set out the actions to be taken in the event that monitoring in accordance with ii above indicate a material increase in the risks identified in i. 	



Condition		Comments
	<p>b. The details of the monitoring bores to be established in accordance with Condition SC2.F.17 to detect seepage bypassing the underdrainage system, and to determine the representative groundwater quality for shallow and deeper groundwater around the perimeter of land downstream of the Willows Rock Stack owned by the Consent Holder;</p> <p>c. Details of the monitoring to be undertaken in accordance with Condition SC2.F.18, and the trigger levels set in accordance with Condition SC2.F.19;</p> <p>d. A contingency plan to be actioned in the event a trigger level is exceeded over two consecutive readings, and which is sufficient to assess the source of the change, and to determine what, if any, measures should be implemented to ensure that General Condition G18 is complied with; and</p> <p>e. Details of the waste rock classification process to be used in accordance with Condition SC2.F.22.</p> <p>In detailing the monitoring programmes the Consent Holder must provide information on the monitoring methods proposed, the monitoring locations, parameters to be monitored, and the calibration and maintenance of monitoring equipment.</p>	
	<i>Review of the Willows Rock Stack Monitoring and Management Plan</i>	
SC2.F.26.	<p>The Willows Rock Stack Monitoring and Management Plan must be reviewed at least annually by the Consent Holder to ascertain whether any amendments are required in order to ensure ongoing compliance with Condition SC.2.F.24 and Condition SC2.F.25.</p> <p>Any required amendments must be made in accordance with Condition C8.</p>	
	Willows Rock Stack Monitoring Report	
SC2.F.27.	<p>The Consent Holder must submit an annual Willows Rock Stack Monitoring report to the Waikato Regional Council. The report must, as a minimum include:</p> <p>a. The data from monitoring undertaken during the previous year;</p> <p>b. Identification of any environmentally important trends associated with the above monitoring;</p> <p>c. Interpretation and analysis of any change in groundwater chemistry over the previous year and predictions of any future changes in groundwater and identify what contingency actions, if any, it proposes to take in response to these predictions;</p>	

Commented [MD52]: WRC queried if the report should include surface water.

The current drafting of the condition already includes surface water. The data referenced in clause a includes surface water monitoring.



Condition	Comments
	<p>d. Any contingency actions that may have been taken during the year;</p> <p>e. Comment on compliance with all conditions and any reasons for non-compliance or difficulty in achieving conformance with the conditions of this consent;</p> <p>f. A summary and analysis of any complaints relevant to this consent, from the complaint log; and</p> <p>g. Any works that have been undertaken to improve environmental performance or that are proposed to be undertaken in the forthcoming year to improve environmental performance in relation to activities permitted by this consent.</p> <p>The report must be forwarded in a format acceptable to the Waikato Regional Council.</p> <p>The report shall also be provided to the Peer Review Panel for their consideration in an advisory capacity only with regard to the progression of works.</p> <p>The Willows Rock Stack Monitoring Report need not be a standalone document and the Consent Holder may, at its discretion, include it as part of any other monitoring report required by the conditions of this consent.</p>
	<p>Peer Technical Review</p>
SC2.F.28.	<p>The design and construction of all works covered by this consent must be reviewed by an appropriately qualified and experienced person or persons.</p> <p>a. The person or persons must be instructed to report in writing to the Waikato Regional Council at least at the following times:</p> <ul style="list-style-type: none"> i. prior to commencement of construction of Willows Rock Stack; ii. at all critical stages during the ongoing design and construction of Willows Rock Stack but not less than annually; iii. on the completion of the Willows Rock Stack; iv. following any significant design changes; and v. prior to commencement of approved post closure discharge to the Ohinemuri River from the Willows Rock Stack collection pond, <p>b. And must be instructed to address at least the following matters:</p>

Commented [MD53]: Amended at request of WRC



Condition		Comments
	<ul style="list-style-type: none"> i. progress against the Annual Work Programme; ii. site preparation including hydrogeological issues and geotechnical issues; iii. foundation design and use of on-site material; iv. foundation design and construction; v. all underdrainage systems; vi. stockpile management; vii. monitoring; and viii. rehabilitation and closure plans associated with the Willows Rock Stack. <p>The reports required by this condition shall also be provided to the Peer Review Panel for their consideration in an advisory capacity only with regard to the progression of works.</p>	
	Mataura Wetland	
SC2.F.29.	<p>Prior to any disturbance or reclamation of work that may affect flows that sustain the Mataura Wetland authorised by this consent, the Consent Holder must prepare a Mataura Wetland Restoration and Monitoring Plan for certification by the Waikato Regional Council. This plan must include:</p> <ul style="list-style-type: none"> a. A baseline description of the existing Mataura Wetland, and confirmation of the hydrological conditions that sustain its ecological values and the expected restored state; b. A map delineating the extent of the Mataura Wetland including any buffer area proposed; and c. A proposed monitoring and reporting framework, including the results of the monitoring and any remedial works undertaken to address adverse effects on hydrology. <p>a.—undertake baseline monitoring of the Mataura Wetland vegetation and confirm the hydrological conditions that sustain this vegetation:</p> <p>The results of this monitoring must be reported to the Waikato Regional Council.</p>	
SC2.F.30.	<p>At five yearly intervals following the commencement of activities authorised by this consent certification of the Mataura Wetland Restoration and Monitoring Plan referred to in Condition SC2.F.29, the Consent Holder must monitor the condition of the Mataura Wetland vegetation and the hydrological conditions that sustain it.</p>	

Commented [MD54]: Amended as per WRC request.

Commented [MD55]: Amended as per WRC request.



Condition	Comments
	<p>Where there have been significant changes in the existing wetland flora or soil moisture levels such that the ecological value or extent of the wetland has been adversely affected the Consent Holder must:</p> <ul style="list-style-type: none"> a. Characterise and assess the source of the change; and b. Take all necessary measures to ensure that the ecological health and extent of the Mataura Wetland is restored to at least preconstruction baseline conditions. <p>The results of this monitoring and any actions taken to ensure compliance with (b) must be provided to the Waikato Regional Council.</p>
SC2.F.31.	<p><u>No construction or disturbance works may occur within the area identified as the Mataura Wetland. As part of the integrated mitigation package, the Mataura Wetland will be restored by stock fencing, weed and pest control and ecologically appropriate planting.</u></p>

Commented [MD56]: Added as per WRC request.



CONSENT TYPE AND
ACTIVITIES AUTHORISED RMA S13 To disturb the bed of the Mataura Stream and unnamed tributaries of the Mataura Stream to accommodate spillway structures and piped discharges from sediment retention ponds and decanting earth bunds.

LOCATION Area 2

TERM 35 years

LAPSE PERIOD 10 years

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC2.G.1	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC2.G.2	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent.	<p>Note: Schedule Two contains a comprehensive suite of conditions which address:</p> <ul style="list-style-type: none"> - Erosion and sediment control; and - Aquatic fauna Fish salvage and relocation.

Commented [MD57]: Change requested by WRC.



CONSENT TYPE AND ACTIVITIES AUTHORISED RMA S13 To place and use culverts within the Willows Surface Facility Area.

LOCATION Area 2

TERM 35 years

LAPSE PERIOD 10 years

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC2.H.1.	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC2.H.2.	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent	<p>Note: Schedule Two contains a comprehensive suite of conditions which address:</p> <ul style="list-style-type: none"> - Erosion and sediment control; - Aquatic fauna Fish salvage and relocation; and - Requirements for mitigating and offsetting residual effects on aquatic ecology, including minimum design requirements for new channel construction and riparian planting.
	Culvert Design	
SC2.H.3.	All new culverts must be constructed and operated to convey the runoff resulting from at least a 5% Annual Exceedance Probability (AEP), 24-hour duration, design storm.	
SC2.H.4.	Fish passage must be provided where temporary works on diversions and culverts have a duration exceeding 7 days.	

Commented [MD58]: Change requested by WRC.



	Condition	Comment
SC2.H.5.	Fish passage for climbing fish species must be provided through culverts in accordance with the <i>New Zealand Fish Passage Guidelines for Structures up to 4 metres</i> (2018) or any subsequent version of the guidelines (in which case the latter version prevails).	
SC2.H.6.	The Consent Holder must ensure that the area of disturbance during placement/construction of all culverts is kept to a practical minimum.	
SC2.H.7.	Within 20 working days following completion of each culvert, the Consent Holder must provide the Waikato Regional Council with the information required under Regulations 62(3) and 63(3) of the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 (NESF).	
	Monitoring and Maintenance	
SC2.H.8.	Following the completion of construction of any new culvert where Condition SC2.H.4 applies, upstream and downstream fish passage through any culvert is to be maintained and monitored in accordance with Regulation 69 of the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 (NESF).	

CONSENT TYPE AND ACTIVITIES AUTHORISED	RMA S15	To discharge non-acid forming overburden, including soil and sediment, on to land in stockpiles and earth bunds.
LOCATION	Area 2	
TERM	35 years	
LAPSE PERIOD	10 years	

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC2.I.1	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC2.I.2	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent.	Note: Schedule Two contains a comprehensive suite of conditions which address erosion and sediment control.
	General Requirements	
SC2.I.3	Preparation of stockpile sites for the temporary storage of non-acid forming waste rock, soil and sediment removed from ponds and drains prior to the placement of material must include: <ul style="list-style-type: none"> a. Stripping and stockpiling of topsoil and subsoils for later use in site rehabilitation; b. Construction of clean water diversion drains around the site to divert and discharge clean surface run-off and intercepted groundwater in accordance with consent [cross reference relevant diversion consent]; and c. Construction of diversion drains around the site perimeter to divert stockpile run-off to sediment detention ponds for sediment reduction prior to discharge. 	



CONSENT TYPE AND ACTIVITIES AUTHORISED	RMA S14	To dam water within the Willows Collection Pond.
	S15	To discharge water to surface water from the Willows Collection Pond via a spillway.
LOCATION	Area 2	
TERM	35 years	
LAPSE PERIOD	10 years	

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC2.J.1.	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC2.J.2.	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent.	Of particular relevance to this consent these conditions include the requirement for a Water Management Plan.
	Design and Construction	
SC2.J.3.	The Willows Collection Pond must be constructed and operated to contain, as a minimum, the run-off generated from within its catchment during a 24-hour duration rainfall event with an Annual Exceedance Probability (AEP) of 10%, taking into account a combination of both storage volume and pumping rate.	
SC2.J.4.	Subject to Condition SC2.J.5, for 24-hour duration rainfall events with an AEP greater than 10%, all stormwater reporting to the Willows Collection Pond must be pumped to the Water Treatment Plant at the Waihi Surface Facilities Area for treatment.	
SC2.J.5.	If the Consent Holder can demonstrate that the quality of water entering the Willows Collection Pond:	



	Condition	Comment
	<p>a. Meets or is better than the receiving water criteria defined in Condition G18;</p> <p>b. Is capable of remaining so on a continuous basis; and,</p> <p>c. In combination with all other discharges authorised for this site, does not cause a significant adverse environmental effect on the receiving groundwater and surface water, or on users of these resources, or, in the case of surface water, aquatic biota,</p> <p>then the Consent Holder may, if approved by the Waikato Regional Council in writing, discharge directly from the pond, provided that:</p> <p>d. The Consent Holder continuously monitors pH and turbidity in the pond; and</p> <p>e. For rainfall events with an AEP greater than 50%, discharges from the pond:</p> <ul style="list-style-type: none"> i. have turbidity of no greater than 110 NTU and ii. have a pH within the range of 6.0-9.0 pH units. 	
SC2.J.6.	The Willows Collection Pond must be provided with a spillway that will safely route a 1% AEP flood.	
SC2.J.7.	<p>The Consent Holder must ensure that the Willows Collection Pond is:</p> <ul style="list-style-type: none"> a. Constructed from materials which provide for secure long term containment; and b. Constructed using materials which have no acid forming potential; and c. Either lined with 1.5mm HDPE (or other similar synthetic liner approved by the Waikato Regional Council) to a height of 1.5m from the base, and with a 0.5m protective cover layer. 	
SC2.J.8.	The Willows Collection Pond design must be submitted to the Waikato Regional Council for certification prior to commencement of the construction works authorised by this consent.	
SC2.J.9.	The Willows Collection Pond and associated works must be designed and implemented under the supervision of appropriately qualified and experienced persons.	
SC2.J.10.	Routine maintenance and desilting of the Willows Collection Pond must only occur during periods of projected fine weather. All silt removed must be disposed of to a tailings storage facility.	

Commented [MD59]: WRC has recommended linking the monitoring of EC into this clause. This has not been integrated noting that such monitoring is not currently undertaken, and it will not add any extra protection / value.



	Condition	Comment						
SC2.J.11.	No chemicals or additives may be used in the Willows Collection Pond or the discharge from the pond without the prior written approval of the Waikato Regional Council.							
	Discharges and Monitoring							
SC2.J.12.	<p>Except where Condition SC2.J.5 applies, the Consent Holder must monitor the discharge from the Willows Collection Pond every day during any overflow event in accordance with Table SC2.J.12.T:</p> <table><tr><td>Table SC2.J.12.T – Willows Collection Pond Overflow Monitoring Parameters</td></tr><tr><td>pH</td></tr><tr><td>Conductivity</td></tr><tr><td>Turbidity</td></tr><tr><td>Total ammonia</td></tr><tr><td>Trace elements (iron, manganese, copper, nickel, zinc, silver, antimony, arsenic, selenium, cadmium, chromium (iv), lead and mercury.</td></tr></table> <p><i>Table Note:</i> <i>The Willows Collection Pond overflow monitoring programme for metals is for 'acid-soluble' concentrations determined on unfiltered samples.</i></p>	Table SC2.J.12.T – Willows Collection Pond Overflow Monitoring Parameters	pH	Conductivity	Turbidity	Total ammonia	Trace elements (iron, manganese, copper, nickel, zinc, silver, antimony, arsenic, selenium, cadmium, chromium (iv), lead and mercury.	
Table SC2.J.12.T – Willows Collection Pond Overflow Monitoring Parameters								
pH								
Conductivity								
Turbidity								
Total ammonia								
Trace elements (iron, manganese, copper, nickel, zinc, silver, antimony, arsenic, selenium, cadmium, chromium (iv), lead and mercury.								
SC2.J.13.	Results of the monitoring undertaken in accordance with Condition SC2.J.12 must be forwarded to the Waikato Regional Council every three months.							
SC2.J.14.	All water quality sampling and analysis must be undertaken using Standard Methods for the Examination of Water and Wastewater (19th Edition 1995, or updates), APHA, AWWA and WEF, unless							

Commented [MD60]: WRC has questioned how comparable the data with G18 will be. G18 is filtered dissolved analysis, whereas the pond analysis is acid soluble. As such the two data sources are not comparable.

Nonetheless, conductivity monitoring is required by this condition. Acid soluble is appropriate for surface water discharges.



	Condition	Comment
	otherwise agreed in writing by the Waikato Regional Council. Analyses must be undertaken at an appropriately certified laboratory. All other measuring, testing, recording and analytical methods as may be required from time to time pursuant to the requirements of this consent must be to the satisfaction of the Waikato Regional Council.	



CONSENT TYPE AND ACTIVITIES AUTHORISED	RMA S15	To discharge water to land within the Willows Surface Facilities Area Silt Pond and to surface water via a spillway.
LOCATION	Area 2	
TERM	35 years	
LAPSE PERIOD	10 years	

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC2.K.1.	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC2.K.2.	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent.	Of particular relevance to this consent these conditions include the requirement for a Water Management Plan.
	Design Requirements	
SC2.K.3.	The Willows Surface Facilities Area Silt Pond must be designed and constructed to have a minimum live storage capacity equivalent to the volume of run-off generated during a 50% Annual Exceedance Probability (AEP), 2-hour duration, design storm. These ponds must be regularly maintained so as to retain its design live storage capacity.	
	Discharge Quality	
SC2.K.4.	No chemicals or additives may be used in the Willows Surface Facilities Area Silt Pond without the prior written approval of the Waikato Regional Council.	
SC2.K.5.	Unless otherwise agreed by the Waikato Regional Council in writing, the contributing catchments to the Willows Surface Facilities Area Silt Pond must not contain contaminated or potentially acid-forming soil or rock.	

	Condition	Comment
	<p>For the purpose of this condition, <u>the definition of "non-acid-forming" is defined as aligns with that detailed in the Waste Classification Protocol prepared by AECOM dated February 2025</u>;</p> <p>a. NAGpH no less than 4 <u>> 4.5</u>; and,</p> <p>b. NAPP NPR is equal to or less than 0 <u>> 1</u>,</p> <p>where NAGpH is the pH of the solution produced from a Net Acid Generation test, NAPP NPR is Net Acid Producing Potential <u>Net Potential Ratio</u> ($= \frac{\text{MPA} - \text{ANC}}{\text{ANC} / \text{MPA}}$), ANC is total Acid Neutralising Capacity, and MPA is total Maximum Potential Acidity, and ANC is total Acid Neutralising Capacity.</p>	
SC2.K.6.	<p>For rainfall events with an AEP greater than 50%, the Willows Surface Facilities Area Silt Pond discharges must:</p> <p>a. Contain no oil or grease;</p> <p>b. Have a suspended solids concentration no greater than 100 g/m³ and / or turbidity concentration no greater than 110 NTU; and</p> <p>c. Have a pH within the range of 6.0-9.0 pH units.</p>	
SC2.K.7.	<p>The Consent Holder must monitor pH and turbidity in the Willows Surface Facilities Area Silt Pond discharge not less than once per calendar month.</p> <p>The results of the monitoring must be forwarded on a quarterly basis to Waikato Regional Council.</p>	

Commented [MD61]: Amended at request of WRC.



CONSENT TYPE AND ACTIVITIES AUTHORISED	RMA S15	To discharge domestic sewage to land via a new effluent disposal field.
LOCATION	Area 2	
TERM	35 years	
LAPSE PERIOD	10 years	

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC2.L.1.	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC2.L.2.	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent	
	Standards	
SC2.L.3.	The maximum volume of treated wastewater discharged must not exceed 25 cubic metres per day as measured over any rolling 24-hour period.	
SC2.L.4.	Treated wastewater discharged onto the ground must not exceed a loading rate of 20 millimetres per day or the absorptive capacity of the soils, whichever is the lesser.	
SC2.L.5.	The Consent Holder must ensure that a reserve wastewater disposal area of not less than one hundred percent (100%) of the duty disposal area is available all times. To this end the Consent Holder must ensure that no permanent hard surface (for example concrete) is placed over the reserve disposal area.	
SC2.L.6.	The Consent Holder must ensure that: <ul style="list-style-type: none"> a. The design is such that a vertical separation distance of at least 600 millimetres of unsaturated soil between the 	



	Condition	Comment
	<p>bottom of the disposal system and the groundwater exists during the wettest months of the year immediately following a 200% Annual Exceedance Probability (AEP) rain event); and</p> <p>b. The operation of the disposal system is undertaken in a way that ensures the design standard in a. is achieved.</p>	
SC2.L.7.	There must be no breakout (uncontrolled discharge) of wastewater from any part of the new wastewater treatment system or the disposal area that results in visible ponding of the wastewater on the ground surface and/or an overland discharge of wastewater.	
SC2.L.8.	Surface water and stormwater runoff must be directed away from the wastewater treatment and disposal area.	
SC2.L.9.	The wastewater treatment system must be maintained in a watertight condition to prevent the ingress of stormwater or groundwater into the system.	
SC2.L.10.	The Consent Holder must plant and maintain the disposal area with appropriate high evapotranspiration plant species or grass. The Consent Holder must clearly signpost the treatment plant and wastewater disposal area.	
SC2.L.11.	The Consent Holder must ensure that the wastewater treatment and disposal system is appropriately operated and maintained at all times.	
SC2.L.12.	Within one month of commissioning the new wastewater treatment system, the Consent Holder must provide the Waikato Regional Council with a copy of the As-Built Plans for the system. and confirm in writing the date the system was commissioned.	
SC2.L.13.	The Consent Holder must maintain a record of all maintenance and desludging undertaken on the wastewater treatment and disposal system. These records must be compiled by 30 June each year and be made available to the Waikato Regional Council on request.	

AREA 5 SPECIFIC CONSENTS



CONSENT TYPE AND ACTIVITIES AUTHORISED RMA S13 To disturb the bed of unnamed tributaries of the Ohinemuri River to accommodate spillway structures and piped discharges from sediment retention ponds and decanting earth bunds.

LOCATION Area 5

TERM 35 years

LAPSE PERIOD 10 years

	Condition	Comments
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC5.A.1.	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC5.A.2.	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent.	<p>Note: Schedule Two contains a comprehensive suite of conditions which address:</p> <ul style="list-style-type: none"> - Erosion and sediment control; and - Aquatic fauna Fish salvage and relocation.

Commented [MD62]: Change requested by WRC.

CONSENT TYPE AND ACTIVITIES AUTHORISED RMA S15 To discharge overflow water from sediment retention ponds and decanted from earth bunds to land and surface water via spillways.

LOCATION Area 5

TERM 35 years

LAPSE PERIOD 10 years

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC5.B.1	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC5.B.2	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent	<p>Note Schedule Two contains conditions which address:</p> <ul style="list-style-type: none"> - Erosion and sediment control and discharges from these sediment retention ponds; and - A Water Management Plan.



CONSENT TYPE AND ACTIVITIES AUTHORISED	RMA S15	To discharge non-acid forming overburden and topsoil on to land in stockpiles and earth bunds adjacent to the Gladstone Open Pit.
LOCATION	Area 5	
TERM	35 years	
LAPSE PERIOD	10 years	

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC5.C.1	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC5.C.2	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent.	Note: Schedule Two contains a comprehensive suite of conditions which address erosion and sediment control.
	Stockpile Management	
SC5.C.3	Preparation of stockpile sites for the temporary storage of non-acid forming waste rock and soil prior to the placement of material must include: <ul style="list-style-type: none"> a. Stripping and stockpiling of topsoil and subsoils for later use in site rehabilitation. b. Construction of clean water diversion drains around the site to divert and discharge clean surface run-off and intercepted groundwater in accordance with consent [cross reference relevant diversion consent]. c. Construction of diversion drains around the site perimeter to divert stockpile run-off to sediment retention ponds for sediment reduction prior to discharge. 	



CONSENT TYPE AND ACTIVITIES AUTHORISED RMA S13 To disturb and reclaim the bed of an unnamed tributary of the Ohinemuri River to establish the Gladstone Open Pit.

LOCATION Area 5

TERM 35 years

LAPSE PERIOD 10 years

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC5.D.1	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC5.D.2	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent.	<p>Note: Schedule Two contains a comprehensive suite of conditions which address:</p> <ul style="list-style-type: none"> - Erosion and sediment control; - Aquatic fauna Fish salvage and relocation; and - Requirements for mitigating and offsetting residual effects on aquatic ecology, including minimum design requirements for new channel construction and riparian planting.
	Design	
SC5.D.3	The Gladstone Open Pit must be wholly located within the footprint shown on “Map 1 – Gladstone Open Pit Area” annexed as Attachment 1 to this consent	
	Gladstone Wetland	

Commented [MD63]: Change requested by WRC.

	Condition	Comment
SC5.D.4	<p>Prior to any disturbance or reclamation authorised by this consent the Consent Holder must undertake baseline monitoring of the Gladstone Wetland vegetation and confirm the hydrological conditions that sustain this wetland.</p> <p>The results of this monitoring must be reported to the Waikato Regional Council.</p>	
SC5.D.5	<p>At five yearly intervals after the commencement of activities authorised by this consent, the Consent Holder must monitor the condition of the Gladstone Wetland vegetation and the hydrological conditions that sustain it.</p> <p>Where there have been significant changes in the existing wetland flora or soil moisture levels such that the ecological value or extent of the wetland has been adversely affected, the Consent Holder must:</p> <ol style="list-style-type: none"> Characterise and assess the source of the change; and Take all necessary measures to ensure that the ecological health and extent of the Gladstone Wetland is restored to preconstruction baseline conditions. <p>The results of this monitoring and any actions taken to ensure compliance with b must be provided to the Waikato Regional Council.</p>	



Attachment 1 – Gladstone Open Pit Footprint



CONSENT TYPE AND ACTIVITIES AUTHORISED	RMA S9	To drill drain holes in the wall of the Gladstone Open Pit to depressurise the pit wall.
	RMA S14	To take water to dewater the Gladstone Open Pit using pit wall drain holes and divert to the Water Treatment Plant
LOCATION	Area 5	
TERM	35 years	
LAPSE PERIOD	10 years	

	Condition	Comments
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC5.E.1	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC5.E.2	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent.	



CONSENT TYPE AND ACTIVITIES AUTHORISED	RMA S14	To divert and take surface water collected in the base of the Gladstone Open Pit and divert this water to the Water Treatment Plant.
LOCATION	Area 5	
TERM	35 years	
LAPSE PERIOD	10 years	

	Condition	Comments
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC5.F.1	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC5.F.2	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent	Note: Schedule two contains a condition which require a Water Management Plan.



CONSENT TYPE AND ACTIVITIES AUTHORISED	RMA S15	To discharge overburden to land within Gladstone Open Pit to create the Gladstone Open Pit Tailings Storage Facility.
	RMA S15	To discharge contaminants to land associated with the discharge of tailings into the Gladstone Open Pit Tailings Storage Facility.
	RMA S14	To dam water in the Gladstone Open Pit Tailings Storage Facility.
	RMA S14	To take groundwater from the Gladstone Open Pit Tailings Storage Facility and divert this water to the Water Treatment Plant or Processing Plant using underdrainage and decanting collection systems.
LOCATION	Area 5	
TERM	35 years	
LAPSE PERIOD	10 years	

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC5.G.1.	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC5.G.2.	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent	<p>Note: Schedule Two contains a comprehensive suite of conditions which address:</p> <ul style="list-style-type: none"> - Erosion and sediment control; - Aquatic fauna Fish salvage and relocation; and - Requirements for mitigating and offsetting residual effects on aquatic ecology, including minimum design requirements for new

Commented [MD64]: Change requested by WRC.



	Condition	Comment
		channel construction and riparian planting.
	Design and Construction	
SC5.G.3.	The Gladstone Open Pit Tailings Storage Facility ("GOPTSF") must be wholly located within the footprint shown on Attachment 1 to this consent.	
SC5.G.4.	The GOPTSF must be constructed in accordance with the design document <i>Oceana Gold (New Zealand) Limited – Gladstone Pit TSF Design Report</i> , GHD.	
SC5.G.5.	The Consent Holder must ensure that the entire footprint of the GOPTSF tailing impoundment is underlain by a low permeability geosynthetic liner which provides for secure long term containment of tailings.	
SC5.G.6.	<p>The Consent Holder must ensure that any potentially acid forming (PAF) material stored outside the footprint of the GOPTSF, and which is intended for disposal into GOPTSF, is stored on a pad constructed in accordance with the requirements set out below.</p> <p>Any such pad must be constructed from or lined with at least 600 mm of natural, non-acid forming materials with a permeability of no greater than 1×10^{-8} m/s. The pads must be constructed to direct any seepage so that it reports to a point from where it can be monitored, and if necessary, directed to the Water Treatment Plant for treatment prior to discharge.</p> <p><u>If monitoring indicates the presence of sulphate in the groundwater, then monitoring of the groundwater surface water down-gradient of any such storage pad must be undertaken and meet the limits specified in G18 with respect to baseline sulphate levels.</u> That monitoring may form part of any monitoring programme already undertaken at the Site.</p>	
SC5.G.7.	The Consent Holder must install an underdrainage system beneath the GOPTSF impoundment liner to collect contaminated seepage and groundwater.	
SC5.G.8.	The Consent Holder must ensure that this underdrainage system is in place prior to the discharge of tailings to GOPTSF.	
SC5.G.9.	Until basal lining of the GOPTSF is complete, the Consent Holder must ensure that the pH of a slurry of the surface of any exposed PAF rock (after liming) comprising one part	

Commented [MD65]: Added in response to comments from WRC.



	Condition	Comment
	<p>solids (less than 4 mm size fraction) to two parts deionised water, remains greater than or equal to pH 5.5. Unless Waikato Regional Council agrees in writing to an alternative sampling programme, samples must be collected on a grid pattern of not more than 50 m and, within 1 week of placement of any PAF rock and then at intervals not exceeding 4 weeks.</p> <p>The procedure for collecting and analysing the samples must be as described in the GOPTSF Monitoring and Management Plan.</p>	
SC5.G.10.	The Consent Holder must collect all underdrainage flow from the tailings storage facility and divert it to the Water Treatment Plant for treatment or for use in the Processing Plant.	
SC5.G.11.	A minimum freeboard of 4 metres must be maintained between the pit crest and all material in the tailings pond (i.e. solid and liquid). This level must be sufficient to impound the surface run-off arising from the Probable Maximum Precipitation (PMP) event without overtopping, plus a 1.0 metre freeboard. Following rainfall or any event that reduces the freeboard below 1.0 metres, the water level must be drawn down as soon as practicable to restore the 1.0 metre minimum freeboard.	
SC5.G.12.	<p>The Consent Holder must supply the following documentation to the Waikato Regional Council and Peer Review Panel prior to commencement of the GOPTSF construction works:</p> <ul style="list-style-type: none"> a. Detailed Design Report b. Construction Drawings c. Specification <p>All subsequent amendments to the design must be supplied to the Waikato Regional Council prior to implementation and following peer review by an appropriately qualified and experienced person or persons.</p>	
SC5.G.12.A	All detailed design reporting shall include seismic design analyses in accordance with National Seismic Hazard Model (2022).	
SC5.G.13.	The Consent Holder must retain a person or persons with recognised qualifications and experience in the design of tailings storage facilities (the Designer). All aspects of the	

Commented [MD66]: Added at request of WRC.

	Condition	Comment
	<p>design of this facility must be undertaken under the supervision of the Designer, who must provide to Waikato Regional Council in conjunction with the documentation required by Condition SC5.G.12, written confirmation that all aspects of the GOPTSF have been designed in accordance with accepted engineering best practise, and to ensure the effective control of acid-rock-drainage and the containment of tailings.</p> <p><i>Advice Note: Acid and metalliferous drainage includes acidic drainage from materials classified as PAF and drainage from materials classified as waste with potential for trace element leaching as defined in the Waste Classification Management certified under Condition C5.</i></p>	
SC5.G.14.	All construction works must be implemented under the supervision of appropriately qualified and experienced persons.	
SC5.G.15.	<p>On completion of the construction works, and prior to the first discharge of tailings into the impoundment, the Consent Holder must supply to the Waikato Regional Council and Peer Review Panel:</p> <ol style="list-style-type: none"> A full set of as-built plans; and Written confirmation that the works have been constructed in accordance with the design submitted under Condition SC5.G.12. <p>Thereafter, the facility must be inspected by a registered engineer on an annual basis, and a written report on the inspection provided to Waikato Regional Council and copied to the Peer Review Panel within one month of completion of the inspection.</p>	
SC5.G.16.	The Consent Holder must maintain the structural integrity of the works associated with the exercise of these consents and of any erosion control and energy dissipation works which become necessary as a consequence of the exercise of these consents.	
	Monitoring	
SC5.G.17.	The Consent Holder must measure and record the volume of storage provided by the available freeboard at quarterly intervals. This information must be made available to Waikato Regional Council on request.	

Commented [MD67]: Amended at request of WRC who noted that acid rock drainage is not restricted to rocks that generate acidity but can also include rocks that generate neutral metalliferous drainage.



	Condition	Comment
SC5.G.18.	At monthly intervals the Consent Holder must collect a sample of tailings being discharged to the tailings pond and determine its acid neutralising capacity (ANC), maximum potential acidity (MPA), and net acid generation (NAG) capacity. The date the sample is collected and the ANC, MPA and NAG results must be reported to the Waikato Regional Council annually.	
SC5.G.19.	The Consent Holder must install groundwater quality monitoring bores to detect seepage bypassing the underdrainage system, and to determine the representative groundwater quality for shallow and deeper groundwater around the perimeter of land owned by the Consent Holder. This is to include installation of groundwater quality monitoring bores between the GOPTSF and the Ohinemuri River (around the full perimeter of the GOPTSF). The locations and specifications of the bores shall be to the satisfaction of the Waikato Regional Council.	
SC5.G.20.	The Consent Holder must undertake baseline monitoring of groundwater monitoring bores at least monthly over a twelve month period, prior to the discharge of tailings or PAF material within the GOPTSF. Groundwater monitoring is to be undertaken using the methodology provided in the GOPTSF Monitoring and Management Plan required by Condition SC5.G.25 and monitoring shall include the measurement of all parameters annexed as Attachment 2 to this consent. The results of baseline monitoring must be forwarded to Waikato Regional Council at quarterly intervals.	
SC5.G.21.	The Consent Holder must calculate trigger levels for the parameters annexed as Attachment 2 to this consent for down gradient bores based on the trends observed in the baseline monitoring data required by Condition SC5.G.20 at levels which will provide early warning of potential changes of groundwater quality as a result of the activities authorised by this consent. All trigger levels must be set at the 95 th percentile confidence limit.	
SC5.G.22.	If at any time following completion of baseline monitoring, the monitoring results within the monitoring bores exceed the relevant trigger levels for that bore over two consecutive readings then the Consent Holder must: <ul style="list-style-type: none"> a. Characterise and assess the source of the change; and b. Take all necessary measures to ensure that General Condition G18 is complied with. 	



	Condition	Comment
	The trigger and actions taken must be reported to the Waikato Regional Council immediately on completion.	
SC5.G.23.	<p>Ongoing monitoring must be undertaken at the locations and using the methodology outlined in the GOPTSF Monitoring and Management Plan required by Condition SC5.G.25, with monitoring to include the measurement of all parameters annexed as Attachment 2 to this consent.</p> <p>Monitoring results must be provided to Waikato Regional Council and copied to the Peer Review Panel as part of annual reporting as required under Condition SC5.G.29.</p>	
SC5.G.24.	<p>The Consent Holder must classify waste rock in a manner to be set out in the GOPTSF Monitoring and Management Plan required by Condition SC5.G.25 and as a minimum includes:</p> <ol style="list-style-type: none"> Definitions used to characterise waste rock embankments in terms of acid base accounting; Criteria used for classifying waste rock; An assessment protocol for classifying waste rock; Waste rock sampling requirements for the Gladstone Open Pit and the Gladstone Open Pit Tailings Storage Facility; and Requirements for limestone addition for any potentially acid forming rock placed within stockpiles. 	
	GOPTSF Monitoring and Management Plan	
SC5.G.25.	<p>No later than 30 working days prior to the commencement of construction of the GOPTSF, the Consent Holder must submit a GOPTSF Monitoring and Management Plan for certification under Condition C5.</p> <p>Certification is required to verify that the GOPTSF Monitoring and Management Plan:</p> <ol style="list-style-type: none"> Includes actions, methods, monitoring programmes and trigger levels as appropriate to meet the objectives in Condition SC5.G.26; and Satisfies the requirements in Condition SC5.G.27. <p>The GOPTSF Monitoring and Management Plan need not be a standalone document and the Consent Holder may, at its discretion, include it as part of any other management plan required by the conditions of this consent</p>	



	Condition	Comment
SC5.G.26.	<p>The objectives of the GOPTSF Monitoring and Management Plan are to set out details of:</p> <ul style="list-style-type: none"> a. The monitoring that will be undertaken to ensure that the GOPTSF does not adversely affect land, ground and groundwater resources; b. The trigger levels determined in accordance with Condition SC5.G.21; and c. The contingency measures that will be implemented in response to any exceedance of a trigger level, in order to prevent any reoccurrence of an exceedance and to ensure compliance with the conditions of this consent. 	
SC5.G.27.	<p>The GOPTSF Monitoring and Management Plan must include, as a minimum:</p> <ul style="list-style-type: none"> a. A Risk Management Plan for the GOPTSF, prepared in accordance with the Australian/New Zealand Standards for Risk Management (AS/NZS 4360:1999) or any subsequent replacement standard, that: <ul style="list-style-type: none"> i. Identifies and assesses the operational risks relating to the GOPTSF; ii. Sets out details of an appropriate monitoring programme; and iii. Sets out the actions to be taken in the event that monitoring in accordance with ii above indicates a material increase in the risks identified in i above. b. A structural integrity surveillance and monitoring programme for the GOPTSF; c. A description of the monitoring systems and the measures to be adopted to ensure compliance with General Condition G18, including: <ul style="list-style-type: none"> i. The details of the monitoring bores to be established in accordance with Condition SC5.G.19; ii. Details of monitoring in both shallow and deep aquifer systems to be undertaken in accordance with Condition SC5.G.23; iii. The trigger levels set in accordance with Condition SC5.G.21 and the contingency measures required by Condition SC5.G.26.c; and iv. The measurement and monitoring of the liner system integrity (by measuring drainage quality 	



	Condition	Comment
	<p>and flow from all underdrainage and surface collection systems) in order to verify the "as built" structure is achieving design performance.</p> <p>d. Details of the waste rock classification to be used in accordance with Condition SC5.G.24.</p> <p>In detailing the monitoring programmes the Consent Holder must provide information on the monitoring methods proposed, the monitoring locations, parameters to be monitored, and the required calibration and maintenance of monitoring equipment.</p>	
	<i>Review of the GOPTSF Monitoring and Management Plan</i>	
SC5.G.28.	<p>The GOPTSF Monitoring and Management Plan must be reviewed at least annually by the Consent Holder to ascertain whether any amendments are required in order to ensure ongoing compliance with Condition SC5.G.26 and Condition SC5.G.27.</p> <p>Any required amendments must be made in accordance with Condition C8.</p>	
	GOPTSF Monitoring Report	
SC5.G.29.	<p>The Consent Holder must submit an annual GOPTSF Monitoring Report to the Waikato Regional Council. The report must, as a minimum include:</p> <ul style="list-style-type: none"> a. The volume of all contaminated material disposed of within the GOPTSF, including brine and hydrocarbons; b. The data from monitoring undertaken during the previous year; c. Identification of any environmentally important trends associated with the above monitoring; d. Interpretation and analysis of any change in groundwater chemistry over the previous year and predictions of any future changes in groundwater or surface water chemistry, and identification of what contingency actions, if any, it proposes to take in response to these predictions; e. Any contingency actions that may have been taken during the previous year; 	



	Condition	Comment
	<p>f. Comment on compliance with all conditions and any reasons for non-compliance or difficulty in achieving conformance with the conditions of this consent;</p> <p>g. A summary and analysis of complaints relevant to this consent, from the complaint log (refer Schedule One); and</p> <p>h. Any works that have been undertaken to improve environmental performance or that are proposed to be undertaken in the forthcoming year to improve environmental performance in relation to activities permitted by this consent.</p> <p>The report must be forwarded in a format acceptable to the Waikato Regional Council.</p> <p>The GOPTSF Monitoring Report need not be a standalone document and the Consent Holder may, at its discretion, include it as part of any other monitoring report required by the conditions of this consent.</p>	
	Peer Technical Review	
SC5.G.30.	<p>The design and construction of all works authorised by this consent must be referred to an appropriately qualified and experienced person or persons.</p> <p>The person or persons must be instructed by the Consent Holder to report in writing to the Waikato Regional Council at least at the following times:</p> <ol style="list-style-type: none"> Prior to commencement of construction of GOPTSF; At all critical stages during the ongoing design and construction of GOPTSF, but not less than annually; On the completion of GOPTSF; and Following any significant design changes; <p>and must be instructed to address at least the following matters:</p> <ol style="list-style-type: none"> Progress against the Annual Work Programme; Site preparation including hydrogeological issues and geotechnical issues; Foundation and liner design; All underdrainage systems; Tailings impoundment management; 	

Commented [MD68]: Amended at request of WRC



	Condition	Comment
	<p>j. Monitoring; and</p> <p>k. Rehabilitation and closure plans.</p> <p>The reports required by this condition shall also be provided to the Peer Review Panel for their consideration in an advisory capacity only with regard to the progression of works.</p>	



Attachment 1 Gladstone Open Pit Tailings Storage Facility Area Footprint

CONSENT TYPE AND ACTIVITIES AUTHORISED	RMA S15	To discharge overburden to land to backfill the Gladstone Open Pit Tailings Storage Facility for rehabilitation.
	RMA S14	To divert water upon capping of the Gladstone Open Pit Tailings Storage Facility.
LOCATION	Area 5	
TERM	35 years	
LAPSE PERIOD	10 years	

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC5.H.1.	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC5.H.2.	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent.	
	Closure	
SC5.H.3.	On completion of tailings deposition, the Gladstone Open Pit Tailings Storage Facility must be capped with a layer of low permeability NAF weathered rockfill, with a minimum thickness of 1.0 metre, and any exposed PAF material above outlets or spillways or in the north wall of the pit must also be capped.	



CONSENT TYPE AND ACTIVITIES AUTHORISED	RMA S15	To carry out earthworks, trenching and other activities in watercourses necessary for the construction of a pipeline corridor and the laying of pipes from the WTP to the Ohinemuri River outfall structures
LOCATION	Area 5	
TERM	35 years	
LAPSE PERIOD	10 years	

Condition		Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC5.I.1.	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC5.I.2.	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent.	



CONSENT TYPE AND ACTIVITIES AUTHORISED RMA S13 To disturb the bed and place outfall structures for the discharge of treated water in the bed of the Ohinemuri River.

LOCATION Area 5

TERM 35 years

LAPSE PERIOD 10 years

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC5.J.1.	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC5.J.2.	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent.	
	Other Conditions	
SC5.J.3.	<p>The outfall structures must be constructed in accordance with the design annexed as Attachment 1 to this consent. All outfall structures must include diffusers that are designed and installed:</p> <ol style="list-style-type: none"> In accordance with best practice to ensure rapid dispersion and dilution of the discharges; In a manner that ensures the passage of migratory aquatic fauna; and So that complete mixing of the discharge authorised by [insert cross reference to the WTP discharge consent] is achieved within: <ol style="list-style-type: none"> 500 m of the upstream discharge point (E1), and 250 m of the downstream discharge point (E2). 	

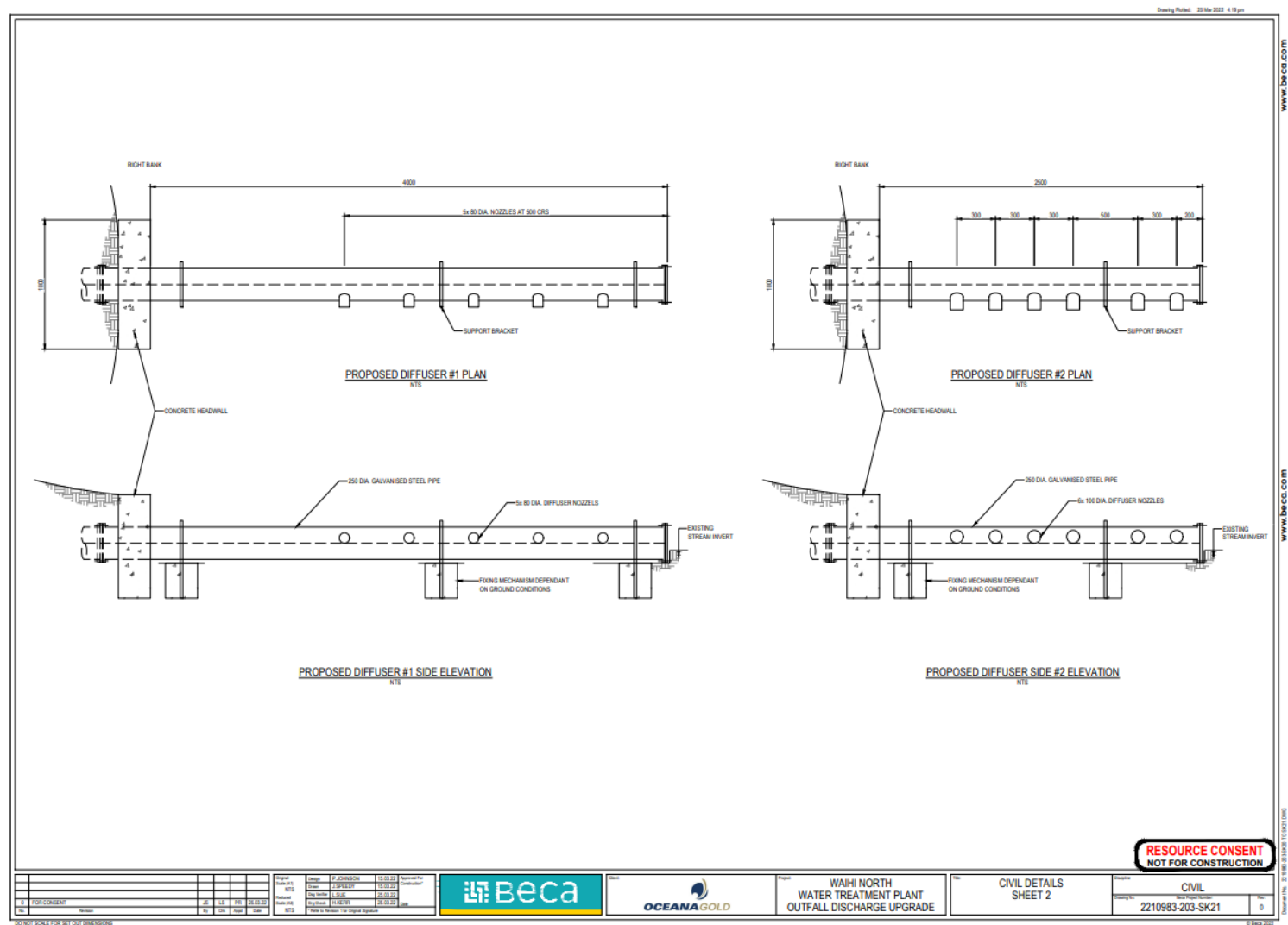


	Condition	Comment
SC5.J.4.	All construction works must be implemented under the supervision of appropriately qualified and experienced persons.	
SC5.J.5.	The site must be left tidy following the placement of the structure and all equipment and surplus construction materials removed from the river.	
SC5.J.6.	The structures must remain in place and be maintained in a structurally sound condition at all times.	



Attachment 1 Outfall Design





CONSENT TYPE AND ACTIVITIES AUTHORISED	RMA S15	To discharge treated water from the Water Treatment Plant into the Ohinemuri River.
LOCATION	Area 5	
TERM	35 years	
LAPSE PERIOD	10 years	

	Condition	Comment																								
	Discharge Rate and Method																									
SC5.K.1.	The maximum combined daily discharge volumes from all discharge sites must not exceed those shown in Table SC5.K.4.T.																									
SC5.K.2.	The maximum combined rate of discharge from all discharge sites must not exceed that shown in Table SC5.K.4.T.																									
SC5.K.3.	The rate of discharge at point E1 must not exceed the percentage of the instantaneous river flow (F) shown in Table SC5.K.4.T.																									
SC5.K.4.	<p>For the combined discharge from points E1 and E2, the rate of discharge must not exceed the percentage of the instantaneous river flow at discharge point E2, minus the discharge volume from point E1, (ie $E1 + E2 \leq (Q - E1) F$), as shown in Table SC5.K.4.T, where:</p> <ul style="list-style-type: none">- E1 = rate of discharge at point E1;- E2 = rate of discharge at point E2; and- Q= river flow at E2. <p>Table SC5.K.4.T – Discharge Criteria for Operating Regimes</p> <table><tr><th>Criteria</th><th>Operating Regime A</th><th>Operating Regime B</th><th>Operating Regime C</th><th>Operating Regime D</th><th>Operating Regime E</th></tr><tr><td>Daily Discharge Volume</td><td>20,000m³/d</td><td>26,000m³/d</td><td>5,200m³/d</td><td>26,000m³/d</td><td>52,000m³/d</td></tr><tr><td>Discharge Rate</td><td>235 L/s</td><td>301 L/s</td><td>60 L/s</td><td>301 L/s</td><td>602 L/s</td></tr><tr><td>% of river flow, F</td><td>15%</td><td>20%</td><td>10%</td><td>40%</td><td>60%</td></tr></table>	Criteria	Operating Regime A	Operating Regime B	Operating Regime C	Operating Regime D	Operating Regime E	Daily Discharge Volume	20,000m³/d	26,000m³/d	5,200m³/d	26,000m³/d	52,000m³/d	Discharge Rate	235 L/s	301 L/s	60 L/s	301 L/s	602 L/s	% of river flow, F	15%	20%	10%	40%	60%	
Criteria	Operating Regime A	Operating Regime B	Operating Regime C	Operating Regime D	Operating Regime E																					
Daily Discharge Volume	20,000m³/d	26,000m³/d	5,200m³/d	26,000m³/d	52,000m³/d																					
Discharge Rate	235 L/s	301 L/s	60 L/s	301 L/s	602 L/s																					
% of river flow, F	15%	20%	10%	40%	60%																					
SC5.K.5.	The Consent Holder must establish and maintain river gauging facilities, for the purpose of determining the river flow at the points of discharge, to the satisfaction of Waikato Regional Council.																									
SC5.K.6.	The treated water discharge to the Ohinemuri River must be undertaken via multi-port diffusers and ensure rapid dispersion and dilution of the																									



	Condition	Comment
	discharges in accordance with best practice, to the satisfaction of the Waikato Regional Council.	
SC5.K.7.	The diffusers must be installed at a location and in a manner that ensures initial mixing does not prevent the passage of migratory aquatic fauna.	
SC5.K.8.	The diffusers must be designed and installed so that complete mixing is achieved within: <ul style="list-style-type: none"> - 500 m of the upstream discharge point (E1), and - 250 m of the downstream discharge point (E2). 	
	Discharge Limits and Receiving Environment Standards	
SC5.K.9.	The treated water discharge must comply with the limits specified in Tables SC5.K.9.T1, SC5.K.9.T2, and SC5.K.9.T3 at all times.	

Commented [MD69]: The WRC recommended that the following conditions be linked in:

"The Consent Holder must measure the Total Nitrogen in the discharge."

"The annual mass load of nitrogen discharged from the site must not exceed 13 tonnes per year."

These conditions have not been linked in for the following reasons:

An ammonia limit is already in place.
It is not understood why there is a need to measure nitrogen when there is no associated compliance limit.
It is not understood why a catchment based limit is being set.
The 13 T limit is based on data from 2006 - 2015 and does not reflect the current mass load.



Table SC5.K.9.T1: WTP Discharge Compliance Limits

Parameter	Treated Water Concentration (g/m ³ unless otherwise stated)									
	Operating Regime A		Operating Regime B		Operating Regime C		Operating Regime D		Operating Regime E	
	Normal Compliance ⁽¹⁾	Maximum ⁽¹⁾	Normal Compliance ⁽¹⁾	Maximum ⁽¹⁾	Normal Compliance ⁽¹⁾	Maximum ⁽¹⁾	Normal Compliance ⁽¹⁾	Maximum ⁽¹⁾	Normal Compliance ⁽¹⁾	Maximum ⁽¹⁾
pH	6.0-9.5		6.0-9.5		6.0-9.5		6.0-9.5		6.0-9.5	
Temperature	<3°C rise	<3°C rise	<3°C rise	<3°C rise	<3°C rise	<3°C rise	<3°C rise	<3°C rise	<3°C rise	<3°C rise
Total Suspended Solids	10	50	8	40	50	4010	8	40	8	40
Cyanide (WAD)	0.25	0.71	0.2	0.56	0.110.36	0.321.02	0.11	0.32	0.09	0.25
Iron	1.0	6.7	0.8	5.0	0.50.1	3.10.3	0.5	3.1	0.4	2.4
Manganese	1.0	1.3	0.8	1.0	0.50.1	0.60.4	0.5	0.6	0.4	0.5
Copper	0.07 ⁽²⁾	0.13 ⁽²⁾	0.055 ⁽³⁾	0.10 ⁽³⁾	0.031 ^(4a) 0.033 ^(4a)	0.054 ^(4a) 0.06 ^(4a)	0.033 ^(4a)	0.06 ^(4a)	0.025 ^(4b)	0.05 ^(4b)
Nickel		1.2 ⁽²⁾		0.94 ⁽³⁾		0.64 ^(4a) 0.55 ^(4a)		0.55 ^(4a)		0.42 ^(4b)
Zinc		0.8 ⁽²⁾		0.61 ⁽³⁾		0.38 ^(4a) 0.36 ^(4a)		0.36 ^(4a)		0.27 ^(4b)
Ammonia	Refer Table SC5.K.9.T3		Refer Table SC5.K.9.T3		Refer Table SC5.K.9.T3		Refer Table SC5.K.9.T3		Refer Table SC5.K.9.T3	
Silver	0.02 ⁽²⁾	0.03 ⁽²⁾	0.017 ⁽³⁾	0.024 ⁽³⁾	0.005 ^(4a) 0.01 ^(4a)	0.014 ^(4a) 0.005 ^(4a)	0.01 ^(4a)	0.014 ^(4a)	0.007 ^(4b)	0.011 ^(4b)
Antimony		0.23	0.1 ⁽⁵⁾	0.18	0.06 ⁽⁵⁾ 0.07 ⁽⁵⁾	0.100.33	0.06 ⁽⁵⁾	0.10	0.05	0.08
Arsenic		1.45		1.14		0.660.02		0.66		0.51
Selenium	0.15	0.27	0.12 ⁽⁵⁾	0.2 ⁽⁵⁾	0.22 ⁽⁵⁾ 0.07 ⁽⁵⁾	0.38 ⁽⁵⁾ 0.12 ⁽⁵⁾	0.07 ⁽⁵⁾	0.12 ⁽⁵⁾	0.05 ⁽⁵⁾	0.09 ⁽⁵⁾

Commented [MD70]: There was an error in this table relating to Operating Regime C compliance limits; Operating Regime B values had been included in error. This has been amended to align with existing treated water discharge consent limits, as per tracked changes.



Parameter	Treated Water Concentration (g/m ³ unless otherwise stated)									
	Operating Regime A		Operating Regime B		Operating Regime C		Operating Regime D		Operating Regime E	
	Normal Compliance ⁽¹⁾	Maximum ⁽¹⁾	Normal Compliance ⁽¹⁾	Maximum ⁽¹⁾	Normal Compliance ⁽¹⁾	Maximum ⁽¹⁾	Normal Compliance ⁽¹⁾	Maximum ⁽¹⁾	Normal Compliance ⁽¹⁾	Maximum ⁽¹⁾
Mercury		0.0005 ⁽⁶⁾		0.0005 ⁽⁶⁾		0.0005 ⁽⁶⁾ 0.0005⁽⁶⁾		0.0005 ⁽⁶⁾		0.0005 ⁽⁶⁾
Cadmium		0.008 ⁽²⁾		0.007 ⁽³⁾		0.004 ^(4a) 0.004^(4a)		0.004 ^(4a)		0.003 ^(4b)
Chromium (VI)		0.08		0.06		0.05 ⁽⁶⁾ 0.04		0.04		0.03
Lead		0.02 ⁽²⁾		0.018 ⁽³⁾		0.006 ^(4a) 0.011^(4a)		0.011 ^(4a)		0.008 ^(4b)
Hardness Assumption	670		530		200 ⁽⁴⁾		315		243	

Commented [MD70]: There was an error in this table relating to Operating Regime C compliance limits; Operating Regime B values had been included in error. This has been amended to align with existing treated water discharge consent limits, as per tracked changes.

Condition	Comment
<p><i>Table SC5.K.9.T1 Notes:</i></p> <p>(1) “Normal Compliance” values to be met 97% of time based on all analyses taken during a quarterly period when the WTP is discharging. “Maximum” values are not to be exceeded in any single analysis.</p> <p>(2) Operating Regime A – For hardness related metals, the compliance values in Table 1 assume a hardness in the WTP discharge of 670 g/m³ as CaCO₃ prior to dilution in the Ohinemuri River. This equates to an in-river hardness of about 100 g/m³ as CaCO₃ following mixing. Refer to Table SC5.K.9.T2 for the compliance levels at differing hardness concentrations.</p> <p>(3) Operating Regime B – For hardness related metals, the compliance values in Table SC5.K.9.T1 assume a hardness in the RO only discharge of zero and 530 g/m³ CaCO₃ prior to dilution in the Ohinemuri River. This equates to an in-river hardness of about 100 g/m³ as CaCO₃ following mixing. Refer to Table 2 for the compliance levels at differing hardness concentrations.</p> <p>(4) Operating Regime C – Prior to discharge of RO permeate, hardness must be added to achieve a minimum hardness of 200 g/m³ as CaCO₃ to ensure in-river compliance for hardness-related metals. Refer to Table SC5.K.9.T2 for the compliance levels at differing hardness concentrations.</p> <p>(4a) Operating Regime D – For hardness related metals, the compliance values in Table SC5.K.9.T1 assume a hardness in the WTP discharge of 315 g/m³ as CaCO₃ prior to dilution in the Ohinemuri River. This equates to an in-river hardness of about 100 g/m³ as CaCO₃ following mixing. Refer to Table SC5.K.9.T2 for the compliance levels at differing hardness concentrations.</p> <p>(4b) Operating Regime E – For hardness related metals, the compliance values in Table SC5.K.9.T1 assume a hardness in the WTP discharge of 243 g/m³ as CaCO₃ prior to dilution in the Ohinemuri River. This equates to an in-river hardness of about 100 g/m³ as CaCO₃ following mixing. Refer to Table SC5.K.9.T2 for the compliance levels at differing hardness concentrations.</p> <p>(5) Values are trigger limits, not compliance limits. In the event that the trigger limits are exceeded, the Consent Holder must inform the Waikato Regional Council as soon as practicable and prepare a report, to the satisfaction of the council, to demonstrate that continued discharges at concentrations exceeding the trigger limits will have no more than minor effects on the Ohinemuri River. This report must be provided to the Waikato Regional Council within two months of the Consent Holder becoming aware of the trigger exceedance.</p> <p>(6) Current analytical procedures for mercury have a practical quantification limit (PQL) of 0.0005 g/m³, and for chromium (VI) have</p>	



Condition	Comment																																																					
	<p>a PQL of 0.05 g/m³. The reporting 'limit' for mercury and chromium concentrations must be reviewed annually by the Consent Holder and must be adjusted in line with improvements in analytical technology.</p> <p>(7) Discharge limits for metals are for 'acid-soluble' concentration, determined on unfiltered samples.</p> <p>Table SC5.K.9.T2: Calculation of Compliance Levels for Hardness Related Criteria</p> <p>Maximum Allowable Concentration = $\frac{(1+Z \times (Y-X))}{Z}$</p> <p>Where:</p> <p>$Y = (\exp \{m [\ln H'] + b\}) \times 10^{-3} \times C$, and</p> <p>$H' = \frac{(Z \times \text{WTP Discharge Hardness}) + 14}{(1+Z)}$</p> <p>Z=0.15 for Operating Regime A Z=0.2 for Operating Regime B Z=0.1 for Operating Regime C Z=0.4 for Operating Regime D Z=0.6 for Operating Regime E</p> <p>using the following constants:</p> <table><tr><th rowspan="2">Parameter</th><th colspan="2">Compliance</th><th colspan="2">Maximum⁽¹⁾</th><th rowspan="2">X⁽²⁾</th><th rowspan="2">C</th></tr><tr><th>m</th><th>B</th><th>m</th><th>b</th></tr><tr><td>Copper</td><td>0.8545⁽³⁾</td><td>-1.465⁽³⁾</td><td>0.9422</td><td>-1.464</td><td>0.001</td><td>0.85 or 1.10⁽⁴⁾</td></tr><tr><td>Nickel</td><td>n/a</td><td>n/a</td><td>0.846</td><td>1.1645</td><td>0.006</td><td>1.0</td></tr><tr><td>Zinc</td><td>n/a</td><td>n/a</td><td>0.8473</td><td>0.7614</td><td>0.0047</td><td>1.0</td></tr><tr><td>Silver</td><td>1.51⁽⁵⁾</td><td>-9.72⁽⁵⁾</td><td>1.72</td><td>-6.52</td><td>0.00005</td><td>45.2 or 1.0⁽⁶⁾</td></tr><tr><td>Cadmium</td><td>n/a</td><td>n/a</td><td>0.7852</td><td>-3.49</td><td>0.0001</td><td>1.0</td></tr><tr><td>Lead</td><td>n/a</td><td>n/a</td><td>1.273</td><td>-4.705</td><td>0.0002</td><td>1.0</td></tr></table> <p>Table SC5.K.9.T2 Notes:</p> <p>(1) From USEPA acute criteria (copper and silver) or chronic criteria (nickel, zinc, cadmium and lead) for aquatic biota.</p> <p>(2) Mean receiving water quality as measured at Station OH3.</p> <p>(3) From USEPA chronic criteria for aquatic biota.</p> <p>(4) Constant to convert calculation for copper = 0.85 (Compliance value) or = 1.0 (Maximum value).</p>	Parameter	Compliance		Maximum ⁽¹⁾		X ⁽²⁾	C	m	B	m	b	Copper	0.8545 ⁽³⁾	-1.465 ⁽³⁾	0.9422	-1.464	0.001	0.85 or 1.10 ⁽⁴⁾	Nickel	n/a	n/a	0.846	1.1645	0.006	1.0	Zinc	n/a	n/a	0.8473	0.7614	0.0047	1.0	Silver	1.51 ⁽⁵⁾	-9.72 ⁽⁵⁾	1.72	-6.52	0.00005	45.2 or 1.0 ⁽⁶⁾	Cadmium	n/a	n/a	0.7852	-3.49	0.0001	1.0	Lead	n/a	n/a	1.273	-4.705	0.0002	1.0
Parameter	Compliance		Maximum ⁽¹⁾		X ⁽²⁾	C																																																
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Condition		Comment
	(5) <i>From site specific criteria, calculated using USEPA (1985) methodology.</i>	
	(6) <i>Constant to convert calculation for silver = 103/22.1 (Compliance value) or = 1.0 (Maximum value).</i>	



Table SC5.K.9.T3: Compliance Criteria for Total Ammonia

Temperature, (°C)	Normal Compliance, (g/m³ as total ammonia)							Maximum, (g/m³ as total ammonia)						
	0	6	10	15	20	25	30	0	6	10	15	20	25	30
pH	Regime A													
6.50	23.00	21.46	20.70	19.17	19.17	19.17	18.40	268.31	252.98	237.65	229.98	222.31	222.31	222.31
6.75	23.00	21.46	20.70	19.93	19.17	19.17	19.17	245.31	229.98	214.65	206.98	206.98	199.32	199.32
7.00	23.00	21.46	20.70	19.93	19.17	19.17	19.17	214.65	199.32	191.65	183.98	176.32	176.32	176.32
7.25	23.00	21.46	20.70	19.93	19.17	19.17	19.17	133.39	168.65	153.32	151.02	147.19	145.65	145.65
7.50	23.00	21.46	20.70	19.93	19.17	19.17	19.17	133.39	124.96	118.82	114.22	111.92	111.16	111.16
7.75	21.46	19.93	19.17	18.40	17.63	17.63	18.40	93.53	87.39	83.56	80.49	78.96	78.19	78.96
8.00	13.95	13.03	12.42	12.04	12.65	11.88	12.19	61.33	57.50	54.43	52.90	52.13	52.13	53.66
8.25	7.90	7.44	7.13	6.90	6.90	6.98	7.21	34.50	32.20	31.43	30.66	29.90	30.66	31.43
8.50	4.45	4.22	4.06	4.06	4.06	4.22	4.45	19.93	18.40	17.63	17.63	17.63	18.40	19.93
8.75	2.61	2.45	2.38	2.38	2.45	2.68	2.91	11.27	10.73	10.50	10.58	10.89	11.65	12.65
9.00	1.49	1.45	1.45	1.49	1.61	1.76	2.07	6.59	6.36	6.36	6.59	6.98	7.74	8.89
pH	Regime B													
6.50	18.00	16.79	16.20	15.00	15.00	15.00	14.40	209.98	197.98	185.99	179.98	173.98	173.98	173.98
6.75	18.00	16.79	16.20	15.60	15.00	15.00	15.00	191.98	179.98	167.99	161.98	161.98	155.99	155.99



	Normal Compliance, (g/m ³ as total ammonia)							Maximum, (g/m ³ as total ammonia)						
Temperature, (°C)	0	6	10	15	20	25	30	0	6	10	15	20	25	30
7.00	18.00	16.79	16.20	15.60	15.00	15.00	15.00	167.99	155.99	149.99	143.98	137.99	137.99	137.99
7.25	18.00	16.79	16.20	15.60	15.00	15.00	15.00	104.39	131.99	119.99	118.19	115.19	113.99	113.99
7.50	18.00	16.79	16.20	15.60	15.00	15.00	15.00	104.39	97.79	92.99	89.39	87.59	86.99	86.99
7.75	16.79	15.60	15.00	14.40	13.80	13.80	14.40	73.20	68.39	65.39	62.99	61.79	61.19	61.79
8.00	10.92	10.20	9.72	9.42	9.90	9.30	9.54	48.00	45.00	42.60	41.40	40.80	40.80	41.99
8.25	6.18	5.82	5.58	5.40	5.40	5.46	5.64	27.00	25.20	24.60	23.99	23.40	23.99	24.60
8.50	3.48	3.30	3.18	3.18	3.18	3.30	3.48	15.60	14.40	13.80	13.80	13.80	14.40	15.60
8.75	2.04	1.92	1.86	1.86	1.92	2.10	2.28	8.82	8.40	8.22	8.28	8.52	9.12	9.90
9.00	1.17	1.13	1.13	1.17	1.26	1.38	1.62	5.16	4.98	4.98	5.16	5.46	6.06	6.96
pH	Regime C													
6.50	33.00	30.79	29.70	27.50	27.50	27.50	26.40	384.97	362.97	340.98	329.97	318.97	318.97	318.97
6.75	33.00	30.79	29.70	28.60	27.50	27.50	27.50	351.97	329.97	307.98	296.97	296.97	285.98	285.98
7.00	33.00	30.79	29.70	28.60	27.50	27.50	27.50	307.98	285.98	274.98	263.97	252.98	252.98	252.98
7.25	33.00	30.79	29.70	28.60	27.50	27.50	27.50	191.39	241.98	219.98	216.68	211.19	208.98	208.98
7.50	33.00	30.79	29.70	28.60	27.50	27.50	27.50	191.39	179.29	170.48	163.88	160.58	159.49	159.49
7.75	30.79	28.60	27.50	26.40	25.30	25.30	26.40	134.20	125.39	119.89	115.49	113.29	112.19	113.29



	Normal Compliance, (g/m ³ as total ammonia)							Maximum, (g/m ³ as total ammonia)						
Temperature, (°C)	0	6	10	15	20	25	30	0	6	10	15	20	25	30
8.00	20.02	18.70	17.82	17.27	18.15	17.05	17.49	88.00	82.50	78.10	75.90	74.80	74.80	76.99
8.25	11.33	10.67	10.23	9.90	9.90	10.01	10.34	49.50	46.20	45.10	43.99	42.90	43.99	45.10
8.50	6.38	6.05	5.83	5.83	5.83	6.05	6.38	28.60	26.40	25.30	25.30	25.30	26.40	28.60
8.75	3.74	3.52	3.41	3.41	3.52	3.85	4.18	16.17	15.40	15.07	15.18	15.62	16.72	18.15
9.00	2.14	2.08	2.08	2.14	2.31	2.53	2.97	9.46	9.13	9.13	9.46	10.01	11.11	12.76
pH	Regime D													
6.50	10.50	9.80	9.45	8.75	8.75	8.75	8.40	122.49	115.49	108.49	104.99	101.49	101.49	101.49
6.75	10.50	9.80	9.45	9.10	8.75	8.75	8.75	111.99	104.99	97.99	94.49	94.49	90.99	90.99
7.00	10.50	9.80	9.45	9.10	8.75	8.75	8.75	97.99	90.99	87.49	83.99	80.49	80.49	80.49
7.25	10.50	9.80	9.45	9.10	8.75	8.75	8.75	60.90	76.99	69.99	68.94	67.20	66.49	66.49
7.50	10.50	9.80	9.45	9.10	8.75	8.75	8.75	60.90	57.05	54.24	52.14	51.09	50.75	50.75
7.75	9.80	9.10	8.75	8.40	8.05	8.05	8.40	42.70	39.90	38.15	36.75	36.05	35.70	36.05
8.00	6.37	5.95	5.67	5.50	5.78	5.42	5.57	28.00	26.25	24.85	24.15	23.80	23.80	24.50
8.25	3.61	3.40	3.26	3.15	3.15	3.19	3.29	15.75	14.70	14.35	14.00	13.65	14.00	14.35
8.50	2.03	1.93	1.85	1.85	1.85	1.93	2.03	9.10	8.40	8.05	8.05	8.05	8.40	9.10
8.75	1.19	1.12	1.09	1.09	1.12	1.22	1.33	5.15	4.90	4.79	4.83	4.97	5.32	5.78



	Normal Compliance, (g/m ³ as total ammonia)							Maximum, (g/m ³ as total ammonia)						
Temperature, (°C)	0	6	10	15	20	25	30	0	6	10	15	20	25	30
9.00	0.68	0.66	0.66	0.68	0.74	0.80	0.95	3.01	2.90	2.90	3.01	3.19	3.53	4.06
pH	Regime E													
6.5	8	7.47	7.2	6.67	6.67	6.67	6.4	93.33	87.99	83.04	79.99	77.33	77.33	77.33
6.75	8	7.47	7.2	6.93	6.67	6.67	6.67	85.33	79.99	74.66	71.99	71.99	69.33	69.33
7	8	7.47	7.2	6.93	6.67	6.67	6.67	74.66	69.33	66.66	63.99	61.33	61.33	61.33
7.25	8	7.47	7.2	6.93	6.67	6.67	6.67	46.4	58.66	53.33	52.53	51.2	50.66	50.66
7.5	8	7.47	7.2	6.93	6.67	6.67	6.67	46.4	43.47	41.33	39.73	38.93	38.67	38.67
7.75	7.47	6.93	6.67	6.4	6.13	6.13	6.4	32.53	30.4	29.07	28	27.47	27.2	27.47
8	4.85	4.53	4.32	4.19	4.13	4.13	4.24	21.33	20	18.93	18.4	18.13	18.13	18.67
8.25	2.75	2.59	2.48	2.4	2.4	2.43	2.51	12	11.2	10.93	10.67	10.4	10.67	10.93
8.5	1.55	1.47	1.41	1.41	1.41	1.47	1.55	6.93	6.4	6.13	6.13	6.13	6.4	6.93
8.75	0.91	0.85	0.83	0.83	0.85	0.93	1.01	3.92	3.73	3.65	3.68	3.79	4.05	4.4
9	0.52	0.5	0.5	0.52	0.56	0.61	0.72	2.29	2.21	2.21	2.29	2.43	2.69	3.09



Condition	Comment				
<div>SC5.K.10.</div> <div><table><tr><td></td><td>Whole body fish flesh trigger limits, mg/kg (dry weight)</td></tr><tr><td>Bullies</td><td>8.4</td></tr></table></div> <div><p>Compliance with this condition must be assessed by the monitoring regime described in Condition SC5.K.13, Table SC5.K.13.T5. In the event of an exceedance of the fish flesh trigger limit, the Consent Holder must:</p><p>a. Advise Waikato Regional Council within 48 hours of receipt of the results, and</p><p>b. Reduce the selenium concentration in the discharge by 0.04 g/m³ for Regime A, 0.03 g/m³ for Regime B ,0.05 g/m³ for Regime C, 0.02 g/m³ for Regime D and 0.02 g/m³ for Regime E unless otherwise agreed with Waikato Regional Council in writing.</p><p>Within 10 working days of advising Waikato Regional Council of an exceedance of the fish flesh trigger limit, the Consent Holder must submit a report to Waikato Regional Council that summarises:</p><p>c. Selenium concentrations in the treated water and receiving water and the results of any additional selenium monitoring required by this consent over the previous three months or as otherwise agreed with Waikato Regional Council;</p><p>d. Any operational events during the same period that might be related to the exceedance; and</p><p>e. Any recommended actions as a result of the exceedance and the reported and assessed selenium concentrations.</p><p>The recommended actions must be implemented following consultation with and the approval of Waikato Regional Council.</p><p>Following the implementation of requirements SC5.K.10 (a) – (e), the Consent Holder may revert to normal operating limits (as per Table SC5.K.9.T1 – WTP Discharge Compliance Limits) with the written approval of the Waikato Regional Council.</p></div>		Whole body fish flesh trigger limits, mg/kg (dry weight)	Bullies	8.4	
	Whole body fish flesh trigger limits, mg/kg (dry weight)				
Bullies	8.4				
<div>SC5.K.10 B</div> <div><p>If after a period of three years from the commencement of this resource consent the monitoring required by Condition SC5.K.10 has not identified any exceedance of the identified fish flesh triggers for Bullies, the Consent Holder may engage with the Waikato Regional Council to determine if there is a need for this monitoring to continue.</p></div>					



Condition		Comment																						
	If it is agreed by the Waikato Regional Council that the monitoring requirements of Condition SC5.K.10 are no longer required, the Consent Holder shall be permitted to cease this monitoring.																							
SC5.K.11.	Except as provided for by Condition SC5.K.13, Table SC5.K.13.T5 and Condition SCK.12, the Consent Holder must not sample and analyse eels unless otherwise agreed with Waikato Regional Council in writing.																							
	Monitoring																							
SC5.K.12.	<p>Unless otherwise agreed in writing by Waikato Regional Council, the Consent Holder must undertake the monitoring set out in Table SC5.K.12.4.</p> <p>Table SC5.K.12.4: WTP Discharge Monitoring</p> <table> <tr> <th>Frequency</th><th>Site</th><th>Parameters</th></tr> <tr> <td rowspan="3">Continuously</td><td>WTP Discharge</td><td>Flow (at both discharge sites), turbidity, conductivity, pH, temperature</td></tr> <tr> <td>Frendrups</td><td></td></tr> <tr> <td>Torrens (Ruddocks)</td><td>Flow, temperature</td></tr> <tr> <td>Daily</td><td>WTP Discharge</td><td>Cyanide, copper, iron, manganese, suspended solids, ammonia, silver</td></tr> <tr> <td>Weekly</td><td>WTP discharge</td><td>TSS, nickel, zinc, arsenic, mercury, cadmium, chromium (VI), lead, hardness, sulphate, Selenium, Antimony</td></tr> <tr> <td>Monthly</td><td>Ohinemuri River (at location OH5 for discharges at point E1, and location OH6 for discharges at point E2)</td><td>Cyanide, copper, iron, manganese, suspended solids, ammoniacal N, silver, TSS, nickel, zinc, arsenic, mercury, cadmium, chromium (VI), lead, hardness, sulphate; nitrate, nitrite-nitrate, TKN, Total nitrogen, total phosphorus, dissolved reactive phosphorus.</td></tr> <tr> <td>Annual</td><td>WTP Discharge</td><td>Cobalt</td></tr> </table> <p>Note:</p>	Frequency	Site	Parameters	Continuously	WTP Discharge	Flow (at both discharge sites), turbidity, conductivity, pH, temperature	Frendrups		Torrens (Ruddocks)	Flow, temperature	Daily	WTP Discharge	Cyanide, copper, iron, manganese, suspended solids, ammonia, silver	Weekly	WTP discharge	TSS, nickel, zinc, arsenic, mercury, cadmium, chromium (VI), lead, hardness, sulphate, Selenium, Antimony	Monthly	Ohinemuri River (at location OH5 for discharges at point E1, and location OH6 for discharges at point E2)	Cyanide, copper, iron, manganese, suspended solids, ammoniacal N, silver, TSS, nickel, zinc, arsenic, mercury, cadmium, chromium (VI), lead, hardness, sulphate; nitrate, nitrite-nitrate, TKN, Total nitrogen, total phosphorus, dissolved reactive phosphorus.	Annual	WTP Discharge	Cobalt	
Frequency	Site	Parameters																						
Continuously	WTP Discharge	Flow (at both discharge sites), turbidity, conductivity, pH, temperature																						
	Frendrups																							
	Torrens (Ruddocks)	Flow, temperature																						
Daily	WTP Discharge	Cyanide, copper, iron, manganese, suspended solids, ammonia, silver																						
Weekly	WTP discharge	TSS, nickel, zinc, arsenic, mercury, cadmium, chromium (VI), lead, hardness, sulphate, Selenium, Antimony																						
Monthly	Ohinemuri River (at location OH5 for discharges at point E1, and location OH6 for discharges at point E2)	Cyanide, copper, iron, manganese, suspended solids, ammoniacal N, silver, TSS, nickel, zinc, arsenic, mercury, cadmium, chromium (VI), lead, hardness, sulphate; nitrate, nitrite-nitrate, TKN, Total nitrogen, total phosphorus, dissolved reactive phosphorus.																						
Annual	WTP Discharge	Cobalt																						



Condition		Comment			
	<i>The WTP discharge monitoring programme for metals are for 'acid-soluble' concentrates determined on unfiltered samples. Monitoring of selenium and antimony in the Ohinemuri River must be based on the soluble test method, defined as the concentration of dissolved metal measured in that fraction which passes through a 0.45µm filter.</i>				
SC5.K.13.	Unless otherwise agreed with Waikato Regional Council, the Consent Holder must undertake the monitoring set out in Table SC5.K.13.T5. Table SC5.K.13.T5: Biological, Sediment and River Water Quality Monitoring				
Aquatic biota		Frequency	Sites	Methods	Parameters
Fish		Late summer (Feb-Mar)	OC2, OH5, RU1, OH1, OH6, a site on Mataura, (M1)	Electric fishing	Species numbers Species abundance Fish lengths
Macro-Invertebrates		Spring (Oct-Dec) Autumn (Mar-May)	OH3, OH5 RU1, OH1, OH6	Surber sampling	Taxa richness Total abundance Key taxa abundance
Periphyton		Spring (Oct-Dec) Autumn (Mar-May)	OH3, OH5 RU1, OH1, OH6	Rock scrape sampling	Chl _a , AFDW, taxa richness
Water Quality		Spring (Oct-Dec) Autumn (Mar-May)	OH3, OH5 RU1, OH1, OH6	Spot Sampling	All parameters listed in Condition SC5.K.9, Table 1, and NO ₃
Sediment		Spring (Oct- Dec) Autumn (Mar- May)	OH3, OH5 RU1, OH1, OH6	Sediment Coring	Metals listed in Condition SC5.K.9, Table 1
Fish (bullys)		Once during summer (January to March)	OC2, OH6	Analysed in accordance with appropriate	Composite whole body selenium concentration



Condition						Comment	
				USEPA procedures as agreed with Waikato Regional Council	n (dry weight)		
	Periphyton and macrophyte	Autumn (Mar-May)	OC2, OH6	Analysed in accordance with appropriate USEPA procedures as agreed with Waikato Regional Council	Total Selenium (both wet weight and dry weight)		
	<p><i>Table Note:</i></p> <p><i>The results of sampling undertaken to determine selenium concentration in fish, periphyton and macrophyte must be submitted to the Waikato Regional Council within one month of the sampling event.</i></p>						
SC5.K.14.	<p>Following the completion of two seasonal monitoring events (e.g. spring to spring), if a statistically significant difference (at the 95th confidence level) has occurred between sites the Consent Holder must immediately undertake further macroinvertebrate biota and abundance monitoring. Should this further monitoring determine that a statistically significant difference has persisted, the Consent Holder must inform the Waikato Regional Council immediately on receipt of the results and determine any mitigation measures that need to be implemented to ensure that significant effects are remedied or mitigated.</p> <p>In this condition 'significant' is defined as follows:</p> <ul style="list-style-type: none"> a. A significant difference in macroinvertebrate biota will be deemed to have occurred following a statistically significant change at test sites OH5 and OH6 of 30% above the natural variation recorded at the control sites OH3 and OH1; and b. A significant difference in total macroinvertebrate abundance will be deemed to have occurred following a statistically significant change at test sites OH5 and OH6 of 50% above the natural variation recorded at the control sites OH3 and OH1. <p><i>Note: River monitoring sites are illustrated in Attachment 1 to this consent</i></p>						
	Temperature						



Condition		Comment
SC5.K.15.	During the period 1 November to 30 April each year the discharge must not cause the temperature of the Ohinemuri River between monitoring sites OH3 and OH5, or OH1 and OH6 to increase more than 3.0 degrees Celsius.	
SC5.K.16.	During the period 1 November to 30 April each year the Consent Holder must record water temperature continuously at sites OH3, OH5, OH1 and OH6. Data must be retrieved and checked for compliance every 7 days. The determination of compliance with Condition SC5.K.15 must be assessed on a daily basis as being the difference between the Cox-Rutherford Index, being the average of the daily mean and the maximum temperature for each site, or another method to the satisfaction of the Waikato Regional Council. <i>Advice Note: Continuously means recording temperature at least every 15 minutes for the extent of the required period.</i>	
	Annual Summer Low Flow Monitoring	
SC5.K.17.	The Consent Holder must undertake an annual low flow stream study (the Study) between February to April when the discharge is operating and following a period of stable dry weather and when no significant rainfall is forecast. The Study must commence within 12 months of the consent first being exercised and continue for four summers.	
SC5.K.18.	The Study must be undertaken over a period of seven days in each summer at three locations close to sites OH3, OH5 and OH6. The study must account for any influence the discharge from TSF2 may be having at OH3 and the influence that flows from the Ruahorehore Stream have on OH6.	
SC5.K.19.	The Study must as a minimum include: a. Continuous diurnal monitoring for temperature for the seven-day period, including monitoring in the Ruahorehore Stream due to the influence of its flows on the Ohinemuri River at OH6; and b. Periphyton, macrophyte, macroinvertebrate community and physical habitat assessments at sites OH3, OH5 and OH6 including monitoring in the Ruahorehore Stream due to the influence of its flows on the Ohinemuri River at OH6. The monitoring and assessment methods necessary to implement the Study must be formulated by a suitably qualified and experienced scientist to the satisfaction of the Waikato Regional Council.	



Condition		Comment
SC5.K.20.	<p>By 30 June in each year that the Study is undertaken the Consent Holder must provide a report that summarises the data collected by the Study.</p> <p><i>Note: The report of the low flow stream study may be combined with any similar reports required under other resource consents held by the consent holder which authorise mining in the Waihi area.</i></p>	
SC5.K.21.	<p>By 30 June of year following the completion of the fourth year of the Study required by Condition SC5.K.17, the Consent Holder must provide a report prepared by a suitably qualified and experienced scientist that:</p> <ol style="list-style-type: none"> Summarises the findings of the low flow assessments; Provides an assessment of what temperature changes occur in the Ohinemuri River; Provides an assessment of any effects changes in water temperature upstream and downstream of the treated water discharge authorised by this consent have on the on the aquatic ecological values of the Ohinemuri River; Provides an assessment of the contribution of the treated water discharge (if any) to changes measured in temperature levels upstream and downstream of the discharge; and Provides recommendations on whether any changes to the operation of the Plant are needed in respect of its contribution to instream temperature to safeguard the life supporting capacity of the Ohinemuri River. Such changes may include the need for an alteration to the discharge regime where the results of the study determine that there are adverse effects on ecological values occurring as a result of temperature changes that accrue from the discharge. 	
SC5.K.22.	<p>All biological monitoring sampling and analysis must have regard to:</p> <ol style="list-style-type: none"> Consistent quantitative estimates of the aquatic biota; Consistent laboratory and sorting/counting protocols; Consistent taxonomic resolution of aquatic biota; <p>and must be undertaken to the satisfaction of the Waikato Regional Council.</p>	
SC5.K.23.	<p>All water quality and sediment sampling and analysis must be undertaken using Standard Methods for the Examination of Water and Wastewater (19th Edition 1995, or updates), APHA, AWWA and WEF, unless otherwise agreed in writing by Waikato Regional Council. All other measuring, testing, recording and analytical methods as may be required from time to time pursuant to the requirements of this consent must be to the satisfaction of the Waikato Regional Council.</p>	



Condition		Comment
SC5.K.24.	<p>A report detailing the results of all monitoring specified in Condition SC5.K.12 and Condition SC5.K.13 must be submitted to Waikato Regional Council by 30 July each year.</p> <p>Should a more appropriate set of standards or guidelines be developed, then those could be substituted as the comparison guidelines by mutual agreement between Waikato Regional Council and the Consent Holder.</p>	
	Consent Review	
SC5.K.25.	<p>In addition to the matters listed in Condition G33G34, the Waikato Regional Council may serve notice in accordance with Sections 128 and 129 of the Act, within 12 months of receiving the report required by Condition SC5.K.24 of its intention to review the conditions of this consent for the purposes of:</p> <ul style="list-style-type: none"> a. Amending the discharge limits (Conditions SC5.K.9 and SC5.K.10) and receiving environment standards (Condition G18) to reflect the objectives and limits set in the Regional Plan; b. Providing for any investigations necessary to identify Plant improvements required to achieve any revised discharge limits and receiving environment standards; and c. Updating other conditions as necessary to reflect any changes to the discharge limits, receiving environment standards and/or timeframes. 	



CONSENT TYPE AND ACTIVITIES AUTHORISED	RMA S13	To place a structure in the bed of an undefined waterbody.
	RMA S14	To dam water within the Water Treatment Plant Collection Pond.
	RMA S15	To discharge water from the Water Treatment Plant Collection Pond to the Ohinemuri River.
LOCATION	Area 5	
TERM	35 years	
LAPSE PERIOD	10 years	

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC5.L.1.	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC5.L.2.	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent.	
	Maintenance Requirements	
SC5.L.3.	The Consent Holder must maintain the structural integrity of the works associated with the exercise of these consents and of any erosion control and energy dissipation works which become necessary as a consequence of the exercise of this consent.	
	Design Requirements	
SC5.L.4.	The Water Treatment Plant Collection Pond must be constructed and operated to have a minimum water storage capacity sufficient to contain the run-off generated during a 10% Annual Exceedance Probability (AEP), 72-hour duration design storm event, taking into account a combination of both storage volume and pumping rate.	



	Condition	Comment
	Operational Requirements	
SC5.L.5.	For rainfall events with an AEP greater than 10%, all stormwater reporting to the Collection Pond must be pumped to the Water Treatment Plant for treatment.	
SC5.L.6.	<p>The Water Treatment Plant Collection Pond must be constructed from materials which provide for secure long term containment and which:</p> <ul style="list-style-type: none"> a. Has no acid forming potential; and b. Is lined with 1.5 mm HDPE with a 0.5 m protective cover layer (or other liner approved by the Waikato Regional Council) to a height of 1.5m from the base. 	
SC5.L.7.	Routine maintenance and desilting of the Water Treatment Plant Collection Pond must only occur during periods of projected fine weather. All silt removed must be disposed of to a tailings storage facility.	
SC5.L.8.	No chemicals or additives must be used in the Water Treatment Plant Collection Pond or the discharge from those ponds without the prior written approval of the Waikato Regional Council.	



CONSENT TYPE AND ACTIVITIES AUTHORISED	RMA S14	To dam and divert natural water around the Waihi Surface Facility Area.
LOCATION	Area 5	
TERM	35 years	
LAPSE PERIOD	10 years	

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC5.M.1.	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC5.M.2.	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent.	
	Design and Construction Requirements	
SC5.M.3.	The diversion channel must be designed to convey a 10% Annual Exceedance Probability (“AEP”) flood event.	
SC5.M.4.	All construction works must be implemented under the supervision of appropriately qualified and experienced persons.	
SC5.M.5.	The Consent Holder must ensure that the area of disturbance during construction of the diversion works is kept to a minimum.	
SC5.M.6.	The Consent Holder must advise Waikato Regional Council in writing in advance of the proposed construction of each of the diversion channels, and must provide plans of the proposed works, and advise as to proposed start times for construction.	



	Condition	Comment
SC5.M.7.	Within 20 working days following completion of each diversion, the Consent Holder must provide Waikato Regional Council with as-built plans of the completed works.	



CONSENT TYPE AND ACTIVITIES AUTHORISED	RMA S14	To dam and divert site stormwater to the contingency ponds and WTP collection pond within the Waihi Surface Facilities Area.
LOCATION	Area 5	
TERM	35 years	
LAPSE PERIOD	10 years	

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC5.N.1.	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC5.N.2.	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent.	
	Design and Construction Requirements	
SC5.N.3.	Any earthworks or structures installed for the diversion and discharge of stormwater must be designed to manage a 10% Annual Exceedance Probability (AEP) flood event and pass a 1% AEP flood event. Secondary flow paths must be away from the stockpiles.	These are the existing conditions which apply to this activity at the site under 109743
SC5.N.4.	All construction works must be implemented under the supervision of appropriately qualified and experienced persons.	
SC5.N.5.	The Consent Holder must ensure that the area of disturbance during construction of the diversion works is kept to a minimum.	
SC5.N.6.	The Consent Holder must advise Waikato Regional Council in writing in advance of the proposed construction of each of the diversion channels, and must provide plans of the proposed works, and advise as to proposed start times for construction.	



	Condition	Comment
SC5.N.7.	Within 20 working days following completion of each diversion, the Consent Holder must provide Waikato Regional Council with as-built plans of the completed works.	



CONSENT TYPE AND ACTIVITIES AUTHORISED	RMA S15	To discharge overburden and ore on to land in stockpiles within the Waihi Surface Facilities Area.
LOCATION	Area 5	
TERM	35 years	
LAPSE PERIOD	10 years	

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC5.O.1.	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC5.O.2.	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent.	
	Non-Acid Forming Material Stockpiles	
SC5.O.3.	<p>Preparation of stockpile sites for the temporary storage of non-acid forming (NAF) waste rock and soil prior to the placement of material must include:</p> <ol style="list-style-type: none"> Stripping and stockpiling of topsoil and subsoils for later use in site rehabilitation. Construction of clean water diversion drains around the site to divert and discharge clean surface run-off and intercepted groundwater in accordance with consent [cross reference diversion consent for Area 5]. Construction of diversion drains around the site perimeter to divert stockpile run-off to silt ponds for sediment reduction prior to discharge. 	Note the conditions on this consent which apply to NAF and PAF stockpiles contain the same requirements as are included in RC 109744 which currently authorises this activity.



	Condition	Comment
	Potentially Acid Forming Material Stockpiles	
SC5.O.4.	<p>Stockpiling of ore or any potentially acid forming (PAF) waste rock must occur only at sites specifically prepared for that purpose. Any area to be used for this purpose must be constructed from or lined with at least 600mm of natural or non acid forming materials with a permeability of no greater than 1×10^{-8} m/s, or alternatively a synthetic liner with equivalent or better performance, approved by the Waikato Regional Council. In situ soils may be used for this purpose if the Consent Holder can demonstrate to the Waikato Regional Council's satisfaction that the protection provided is equivalent to the liner specification detailed above.</p> <p>In addition to the provisions of Condition SC5.O.3(a) and SC5.O.3(b), PAF stockpile site preparation must include:</p> <ol style="list-style-type: none"> Grading of the proposed stockpile site and construction of stockpile drains around the site perimeter to divert stockpile run-off and leachate to a collection pond or ponds (from which collected water can be pumped to the water treatment plant prior to discharge to the Ohinemuri River); and Placement of selected, coarse waste rock as the initial layer on the low-permeability layer of the stockpile footprint to act as a leachate drainage layer. <u>The perimeter of this drainage layer shall be designed and constructed to prevent the ingress of oxygen into the stockpile;</u> If an alternative synthetic liner is used in preference to an earth liner, the liner must be covered with a protection layer consisting of soil that is placed and compacted to a minimum thickness of 400mm. 	
SC5.O.5.	Drains constructed for the purposes of conveying run-off and leachate from the PAF stockpile(s) to the collection pond(s) and the Water Treatment Plant must be lined by a method agreed to by the Waikato Regional Council and detailed in the Water Management Plan prepared pursuant to Conditions G29-G32 of Schedule Two – General Conditions.	
SC5.O.6.	<p>The Consent Holder must ensure that the collection pond(s) referred to in Condition SC5.O.4 is designed and constructed from materials that provide secure long term containment including:</p> <ol style="list-style-type: none"> A low-permeability liner forming the base and sides of the pond(s) that achieve the same or better standard to that required of the PAF stockpile liner as detailed in Condition SC5.O.4, or alternatively a synthetic liner with equivalent or 	

Commented [MD71]: Added in response to comments from WRC regarding the layer enabling oxygen ingress into the facility and the need for this to be avoided to minimise AMD risks.

	Condition	Comment
	<p>better performance, approved by the Waikato Regional Council;</p> <p>b. A minimum water storage capacity equivalent to the volume of run-off generated from within its catchment during a 10% Annual Exceedance Probability (AEP), 72-hour duration, design storm, taking into account a combination of both storage volume and pumping rate;</p> <p>c. A pump system capable of pumping all stormwater reporting to the collection pond during rainfall events less than or equal to the above design storm to the water treatment plant for treatment; and</p> <p>d. A spillway that will safely route a 1% AEP flood.</p>	
	Monitoring	
SC5.O.7.	The Consent Holder must maintain groundwater quality monitoring bores to detect seepage bypassing the underdrainage system, and to determine the representative groundwater quality for shallow groundwater around the perimeter of land owned by the Consent Holder.	This is an existing activity. The requisite bores are already installed.
SC5.O.8.	The Consent Holder must undertake monitoring of the parameters annexed as Attachment 1 to this consent in the bores maintained in accordance with Condition SC5.O.7 in order to establish trends in the monitoring bores. Monitoring must continue throughout the term of these consents. The results of that monitoring must be forwarded to Waikato Regional Council quarterly.	
SC5.O.9.	The Consent Holder must calculate trigger levels for the parameters the parameters annexed as Attachment 1 to this consent for down gradient bores based on the trends observed in the monitoring data at levels which will provide early warning indicator of potential changes of groundwater quality as a result of the activities authorised by this consent.	
SC5.O.10.	<p>At any time if monitoring results within the monitoring bores from exceed differ the relevant trigger level for that bore over two consecutive readings then the Consent Holder must:</p> <p>a. Characterise and assess the source of the change; and</p> <p>b. Take all necessary measures to ensure that General Condition G18 is complied with.</p> <p>The trigger and actions taken must be reported to the Waikato Regional Council immediately upon completion.</p>	

Commented [CM72]: Update made in response to comments provided by DOC.

	Condition	Comment
SC5.O.11.	<p>Ongoing monitoring must be undertaken at the locations and using the methodology outlined in the Area 5 Rock Storage Monitoring and Management Plan required by Condition SC5.O.12, with monitoring to include the measurement of all parameters annexed as Attachment 1 to this consent.</p> <p>Monitoring results must be provided to the Waikato Regional Council and copied to the Peer Review Panel as part of annual reporting as required under Condition SC5.O.15.</p>	
	Area 5 Rock Storage Monitoring and Management Plan	
SC5.O.12.	<p>No later than 30 working days prior to the deposition of ore or any potentially acid forming (PAF) waste rock at any Rock Storage Area, the Consent Holder must submit an Area 5 Rock Storage Monitoring and Management Plan for certification under Condition C5:</p> <p>Certification is required to verify that the Area 5 Rock Storage Monitoring and Management Plan:</p> <ul style="list-style-type: none"> a. Includes actions, methods, monitoring programmes and trigger levels as appropriate to meet the objectives in Condition SC5.O.13; and b. Satisfies the requirements in Condition SC5.O.14. <p>The Area 5 Rock Storage Monitoring and Management Plan need not be a standalone document, and the Consent Holder may, at its discretion, include it as part of any other management plan required by the conditions of this consent.</p> <p><i>Advice Note: The Area 5 Rock Storage Monitoring and Management Plan is applicable to rock storage provisions relating to the activities covered by this consent only, and does not apply to any of the Consent Holder's existing rock storage provisions which happen to be located within the boundaries of Area 5.</i></p>	
SC5.O.13.	<p>The objectives of the Area 5 Rock Storage Monitoring and Management Plan are to set out the details of:</p> <ul style="list-style-type: none"> a. The monitoring that will be undertaken to ensure that the Waihi Surface Facilities Area Rock Storage does not adversely affect land, ground and groundwater; and b. The contingency measures necessary to ensure the conditions of this consent are achieved. 	

	Condition	Comment
SC5.O.14.	<p>The Area 5 Rock Storage Monitoring and Management Plan must include, as a minimum:</p> <ul style="list-style-type: none"> a. The details of the monitoring bores installed in accordance with Condition SC5.O.7; b. Details of monitoring in accordance with Condition SC5.O.8; c. The trigger levels set in accordance with Condition SC5.O.9; d. A contingency plan to be actioned in the event a trigger level is exceeded over two consecutive readings, and which is sufficient to assess the source of the change, and to determine what, if any, mitigation measures should be implemented to ensure that General Condition G18 is complied with. <p>In detailing the monitoring programmes the Consent Holder must provide information on the monitoring methods proposed, the monitoring locations, parameters to be monitored, and the required calibration and maintenance of monitoring equipment.</p>	
	Area 5 Rock Storage Monitoring Report	
SC5.O.15.	<p>The Consent Holder must submit an annual Area 5 Rock Storage Monitoring report to the Waikato Regional Council. The report must, as a minimum include:</p> <ul style="list-style-type: none"> a. The data from monitoring undertaken during the previous year; b. Identification of any environmentally important trends associated with the above monitoring; c. Interpretation and analysis of any change in groundwater chemistry over the previous year and predictions of any future changes in groundwater quality and what contingency actions, if any, it proposes to take in response to these predictions; d. Any contingency actions that may have been taken during the previous year; e. Comment on compliance with all conditions and any reasons for non-compliance or difficulty in achieving conformance with the conditions of this consent; f. A summary and analysis of complaints relevant to this consent, from the complaint log (refer Schedule One); and g. Any works that have been undertaken to improve environmental performance or that are proposed to be undertaken in the forthcoming year to improve environmental performance in relation to activities permitted by this consent. 	



	Condition	Comment
	<p>The report must be forwarded in a format acceptable to the Waikato Regional Council.</p> <p>The Waihi Surface Facilities Area Rock Storage Monitoring Report need not be a standalone document and the Consent Holder may, at its discretion, include it as part of any other monitoring report required by the conditions of this consent.</p>	



AREA 6 SPECIFIC CONSENTS



CONSENT TYPE AND ACTIVITIES AUTHORISED RMA S14 To take groundwater for construction dewatering purposes.

LOCATION Area 6

TERM 35 years

LAPSE PERIOD 10 years

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC6.A.1	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC6.A.2	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent	



CONSENT TYPE AND ACTIVITIES AUTHORISED RMA S13 To disturb and reclaim the bed of TB1 Stream and unnamed tributaries of TB1 Stream associated with establishing diversion drains, and for placing sediment retention ponds and culverts for erosion and sediment control purposes.

LOCATION Area 6

TERM 35 years

LAPSE PERIOD 10 years

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC6.B.1	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC6.B.2	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent	<p>Note: Schedule Two contains a comprehensive suite of conditions which address:</p> <ul style="list-style-type: none"> - Erosion and sediment control; - Aquatic fauna Fish salvage and relocation; and - Requirements for mitigating and offsetting residual effects on aquatic ecology, including minimum design requirements for new channel construction and riparian planting.

Commented [MD73]: Change requested by WRC.

CONSENT TYPE AND ACTIVITIES AUTHORISED	RMA S14	To dam and divert water for erosion and sediment control purposes using clean water and dirty water drains and culverts.
LOCATION	Area 6	
TERM	35 years	
LAPSE PERIOD	10 years	

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC6.C.1	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC6.C.2	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent	Note: Schedule Two contains a comprehensive suite of Erosion and Sediment Control Conditions.



CONSENT TYPE AND ACTIVITIES AUTHORISED	RMA S9	To drill drain holes in the wall of the Western Borrow Area to depressurise the pit wall.
	RMA S14	To take water to dewater the Western Borrow Area using pit wall drain holes and divert to sediment collection ponds
LOCATION	Area 6	
TERM	35 years	
LAPSE PERIOD	10 years	

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC6.D.1	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC6.D.2	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent.	



CONSENT TYPE AND ACTIVITIES AUTHORISED	RMA S15 To discharge water to land within the sediment retention ponds and decanting earth bunds and to surface water via spillways.
LOCATION	Area 6
TERM	35 years
LAPSE PERIOD	10 years

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC6.E.1	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC6.E.2	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent.	Note: Schedule Two contains a comprehensive suite of Erosion and Sediment Control Conditions.



CONSENT TYPE AND ACTIVITIES AUTHORISED	RMA S13	To disturb, reclaim and introduce plants in, on or over the bed of TB1 Stream to install the Northern Uphill Diversion Drain.
	RMA S14	To dam and divert TB1 Stream and natural surface runoff around disturbed areas, via the Northern Uphill Diversion Drain, and to discharge that diverted water to TB1 Stream.
LOCATION	Area 6	
TERM	35 years	
LAPSE PERIOD	10 years	

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC6.F.1	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC6.F.2	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent	<p>Note: Schedule Two contains a comprehensive suite of conditions which address:</p> <ul style="list-style-type: none"> - Erosion and sediment control; - Aquatic fauna Fish salvage and relocation; and - Requirements for mitigating and offsetting residual effects on aquatic ecology, including minimum design requirements for new channel construction and riparian planting.

Commented [MD74]: Change requested by WRC.



	Condition	Comment
	Design and Construction Requirements	
SC6.F.3	The Northern Uphill Diversion Drain must be constructed in accordance with the design outlined in the document titled <i>“OceanaGold (New Zealand) Limited –Waihi North Project -Tailings Storage and Rock Disposal Volume 4 –Northern Rock StackRL173-Proposed Rock Disposal Facility–Technical Report”</i> included in Part B of the application documents.	
SC6.F.4	Diversion drains and associated works must: <ul style="list-style-type: none"> a. For sections of the diversion drains which are only required during construction, be constructed and operated to convey the run-off resulting from a 10% Annual Exceedance Probability; and b. For sections of the diversion drains that are to be permanent, be constructed and operated to convey the run-off resulting from a 1% Annual Exceedance Probability. 	
SC6.F.5	All construction works must be implemented under the supervision of appropriately qualified and experienced persons.	
SC6.F.6	The Consent Holder must advise Waikato Regional Council in writing in advance of the proposed construction of each of the diversion drains, and must provide plans of the proposed works, and advise as to proposed start times for construction.	
SC6.F.7	Within 20 working days following completion of each diversion, the Consent Holder must provide Waikato Regional Council with as-built plans of the completed works.	



CONSENT TYPE AND ACTIVITIES AUTHORISED	RMA S13	To reclaim the bed of TB1 Stream and unnamed tributaries of TB1 Stream in association with the establishment of the Western Borrow Area, Northern Rock Stack, and adjacent haul roads, perimeter roads and perimeter drains.
	RMA S15	To discharge contaminants to land associated with the storage and use of overburden (including potentially acid forming material).
	RMA S15	To discharge contaminants from seepage water from the Northern Rock Stack to ground
	RMA S14	To divert intercepted groundwater and underdrain seepage water to the Water Treatment Plant using a subsurface drainage system, leachate drainage system and perimeter ring system of sumps and pipes.
	RMA S14	To divert runoff from within the Northern Rock Stack footprint to the Northern Rock Stack Collection Pond, and from there, to the Water Treatment Plant.
LOCATION	Area 6	
TERM	35 years	
LAPSE PERIOD	10 years	

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC6.G.1	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC6.G.2	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent.	



	Condition	Comment
	Design Requirements	
SC6.G.3	The Northern Rock Stack, including the Western Borrow Area, must be wholly located within the footprint shown in the figure annexed as Attachment 1 to this consent.	
SC6.G.4	The Northern Rock Stack stockpile crest must not exceed a height of 173 metres RL (Mine Datum less 1000 metres).	
SC6.G.5	The Western Borrow Area floor level must not be below 113 metres RL (Mine Datum less 1000 metres).	
SC6.G.6	The Northern Rock Stack must be constructed in accordance with the design outlined in the document titled " <i>OceanaGold (New Zealand) Limited –Waihi North Project -Tailings Storage and Rock Disposal Volume 4 –Northern Rock StackRL 173-Proposed Rock Disposal Facility –Technical Report</i> " included in Part B of the application documents.	
SC6.G.7	<p>The Consent Holder must ensure the entire footprint of the Northern Rock Stack is underlain by a low permeability liner which provides for secure long-term containment and which:</p> <ul style="list-style-type: none"> a. Has no acid forming potential; b. Has a permeability no greater than 1×10^{-8} m/s; and c. If constructed of natural materials, has a minimum thickness of 750 mm, or, if constructed wholly or partly from synthetic materials provide protection against damage or penetration of the liner during construction and operation. <p>The Consent Holder must line all leachate drains with a 3 m wide 1.5 mm HDPE (or other similar synthetic liner approved by the Waikato Regional Council).</p>	
SC6.G.8	<p>The Consent Holder must ensure all perimeter drains are constructed from materials which provide for secure long-term containment and which:</p> <ul style="list-style-type: none"> a. Have no acid forming potential; and b. Are lined with 1.5 mm HDPE (or other similar synthetic liner approved by the Waikato Regional Council) to a height of 0.3 m from the base, and with a 0.5 m protective cover layer. 	
SC6.G.9	The Consent Holder must ensure that any potentially acid forming (PAF) material stored outside the footprint of the Northern Rock Stack, and which is intended for disposal into the Northern Rock	

	Condition	Comment
	Stack, is only stored on a pad that is constructed from, or lined with, at least 600 mm of natural, non-acid forming materials with a permeability of no greater than 1×10^{-8} m/s. The pads must be constructed to direct any seepage to a point from where it can be monitored, and, if necessary, directed to the Water Treatment Plant for treatment prior to discharge.	
SC6.G.10	The Consent Holder must install an underdrainage system beneath the Northern Rock Stack to collect contaminated seepage from any stockpiled PAF material.	
SC6.G.11	The Consent Holder must ensure that this underdrainage system is in place prior to the placement of any PAF material in the Northern Rock Stack.	
SC6.G.12	<p>Until final capping is complete, the Consent Holder must ensure that the pH of a slurry of one part solid (less than 4 mm size fraction) to two parts deionised water, of the surface of any exposed PAF rock (after liming) remains greater than or equal to pH 5.5. Unless Waikato Regional Council agrees to an alternative sampling programme in writing, samples must be collected on a grid pattern of not more than 50 metres and, where practical, within 1 week of placement of any PAF rock and then at intervals not exceeding 4 weeks.</p> <p><i>Advice Note: This test is designed to manage the potential for acid generation and sulphate release from waste rock. The procedure for collecting and analysing the samples must be as described in the Northern Rock Stack Monitoring and Management Plan.</i></p>	
SC6.G.13	The Consent Holder must collect all underdrainage flow from the Northern Rock Stack and divert it to the Water Treatment Plant for treatment or for use in the Processing Plant.	
SC6.G.14	The Consent Holder must provide the Peer Review Panel with all records, plans, designs, monitoring reports and any other information they request to assist with their advisory role and must provide the Panel full access to the site at all reasonable times.	
SC6.G.15	<p>All aspects of the design of the Northern Rock Stack must be supervised by an appropriately qualified and experienced person or persons (the Designer).</p> <p>Prior to the placement of any PAF rock in the Northern Rock Stack, the Consent Holder must provide to Waikato Regional Council written confirmation from the Designer that all aspects of the foundations, low permeability liner, underdrainage system, and</p>	



	Condition	Comment
	surface water drainage system have been investigated and designed in accordance with accepted engineering best practise, and be effective in controlling acid and metalliferous drainage acid-rock drainage .	
SC6.G.16	<p>The Consent Holder must supply the following documentation to the Waikato Regional Council prior to commencement of the Northern Rock Stack construction works:</p> <ul style="list-style-type: none"> a. Detailed Design Report b. Specification c. Drawings d. Construction Monitoring Inspection Schedule <p>All subsequent amendments to the design must be supplied to the Waikato Regional Council prior to implementation and following peer review by an appropriately qualified and experienced person or persons.</p>	
SC6.G.16. A	<u>All detailed design reporting shall include seismic design analyses in accordance with National Seismic Hazard Model (2022).</u>	
SC6.G.17	<p>All construction works associated with the Northern Rock Stack must be implemented under the supervision of appropriately qualified and experienced persons.</p> <p>The Consent Holder must supply to Waikato Regional Council a full set of as-built plans for the foundations, low permeability liner, underdrainage system, and surface water drainage system of the rock stack development.</p>	
SC6.G.18	The Consent Holder must maintain the structural integrity of the works associated with the exercise of these consents and of any erosion control and energy dissipation works that become necessary as a consequence of the exercise of these consents.	
SC6.G.19	On completion of the foundations, low permeability liner, underdrainage system, and surface water drainage system construction works the Consent Holder must supply written confirmation to the Waikato Regional Council and the Peer Review Panel that the foundations, low permeability liner, underdrainage system, and surface water drainage system works of the relevant stage have been constructed in accordance with the design referred to in Condition SC6.G.16.	

Commented [MD75]: Amended at request of WRC who noted that acid rock drainage is not restricted to rocks that generate acidity but can also include rocks that generate neutral metalliferous drainage.

Commented [MD76]: Added at request of WRC.

	Condition	Comment
	Thereafter, the facility must be inspected by an appropriately qualified and experienced person on an annual basis, and a written report on the inspection provided to Waikato Regional Council and copied to the Peer Review Panel within one month of completion of the inspection.	
	Monitoring	
SC6.G.20	<p>Throughout the period of mining the Consent Holder must establish and maintain an inventory of sources and estimated volumes of available inert material. This inventory is to be updated at six monthly intervals and balanced against estimated future demand for inert material. The inventory must be available upon request to Waikato Regional Council and the Peer Review Panel.</p> <p>In the event a shortfall occurs or is identified in advance, the Consent Holder must prepare and implement contingency measures to ensure that the control of geochemically active materials is maintained. A summary of the inventory and details of any measures which have needed to be taken must be reported annually to Waikato Regional Council.</p>	
SC6.G.21	The Consent Holder must install groundwater quality monitoring bores to detect seepage escaping the underdrainage system, and to determine the representative groundwater quality for shallow and deeper groundwater around the perimeter of land downstream of the Northern Rock Stack owned by the Consent Holder. This is to include installation of groundwater quality monitoring bores between the Northern Rock Stack and the Ohinemuri River (to the northwest and west of the Northern Rock Stack). The locations and specifications of the bores shall be to the satisfaction of the Waikato Regional Council.	
SC6.G.22	The Consent Holder must undertake baseline monitoring of groundwater monitoring bores at least monthly over a twelve month period, prior to the placing of PAF material within the Northern Rock Stack. Groundwater monitoring is to be undertaken using the methodology provided in the Northern Rock Stack Monitoring and Management Plan required by Condition SC6.G.27, and monitoring shall include the measurement of all parameters annexed as Attachment 2 to this consent. The results of baseline monitoring must be forwarded to Waikato Regional Council at quarterly intervals.	
SC6.G.23	The Consent Holder must calculate trigger levels for the parameters annexed as Attachment 2 to this consent for down gradient bores based on the trends observed in the baseline monitoring data	



	Condition	Comment
	required by Condition SC6.G.22 at levels which will provide an early warning of potential changes of groundwater quality as a result of the activities authorised by this consent. All trigger levels must be set at the 95 th percentile confidence limit.	
SC6.G.24	<p>At any time following completion of baseline monitoring, if monitoring results within the monitoring bores exceeds the relevant trigger level for that bore over two consecutive readings, then the Consent Holder must:</p> <ul style="list-style-type: none"> a. Characterise and assess the source of the change; and b. Take all necessary measures to ensure that General Condition G18 is complied with. <p>The trigger and actions taken must be reported to the Waikato Regional Council immediately on completion.</p>	
SC6.G.25	<p>Ongoing monitoring must be undertaken at the locations and using the methodology outlined in the Northern Rock Stack Monitoring and Management Plan required by Condition SC6.G.27, with monitoring to include the measurement of all parameters annexed as Attachment 2 to this consent.</p> <p>Monitoring results must be provided to the Waikato Regional Council and copied to the Peer Review Panel as part of annual reporting as required under Condition SC6.G.33.</p>	
SC6.G.26	<p>The Consent Holder must classify waste rock in a manner to be set out in the Northern Rock Stack Monitoring and Management Plan required by Condition SC6.G.27 that, as a minimum, includes:</p> <ul style="list-style-type: none"> a. Definitions used to characterise waste rock embankments in terms of acid base accounting; b. Criteria used for classifying waste rock; c. An assessment protocol for classifying waste rock; d. Waste rock sampling requirements during construction and rehabilitation of the Northern Rock Stack; and e. Requirements for limestone addition for any potentially acid forming rock placed within stockpiles. 	
	Northern Rock Stack Monitoring and Management Plan	
SC6.G.27	No later than 30 working days prior to the commencement of works to establish the Northern Rock Stack, the Consent Holder must	

	Condition	Comment
	<p>submit to the Waikato Regional Council a Northern Rock Stack Monitoring and Management Plan for certification that it:</p> <ol style="list-style-type: none"> Includes performance measures, triggers, actions, methods and monitoring programmes designed to achieve the objective in Condition SC6.G.28; and Satisfies the requirements in Condition SC6.G.29. <p>The Northern Rock Stack Monitoring and Management Plan need not be a standalone document, and the Consent Holder may at its discretion include it as part of any other management plan required by the conditions of this consent.</p>	
SC6.G.28	<p>The objective of the Northern Rock Stack Monitoring and Management Plan is to set out the details of:</p> <ol style="list-style-type: none"> The monitoring that will be undertaken to ensure that the Northern Rock Stack does not adversely affect land, ground and groundwater resources; and The contingency measures necessary to ensure the conditions of this consent are achieved. 	
SC6.G.29	<p>The Northern Rock Stack Monitoring and Management Plan must include, as a minimum:</p> <ol style="list-style-type: none"> A Risk Management Plan, as defined in the Australian/New Zealand Standards for Risk Management (AS/NZS 4360:1999) or any subsequent replacement standard. The purposes of the Risk Management Plan must be to: <ol style="list-style-type: none"> Identify and assess the operational risks relating to Northern Rock Stack; Develop an appropriate monitoring programme; and Set out the actions to be taken in the event that monitoring in accordance with ii above indicate a material increase in the risks identified in i above. A structural integrity monitoring programme for the embankment of Northern Rock Stack; Monitoring systems and the measures to be adopted to ensure compliance with General Condition G18, including: <ol style="list-style-type: none"> The details of the monitoring bores to be established in accordance with Condition SC6.G.21; Details of the monitoring in accordance with Condition SC6.G.22; 	

	Condition	Comment
	<ul style="list-style-type: none"> iii. The trigger levels set in accordance with Condition SC6.G.23; iv. The measurement and monitoring of the liner and cover system integrity (by measuring drainage quality and flow from all underdrainage and surface collection systems) in order to verify the "as built" structure is achieving predicted design performance objectives; and d. Details of the waste rock classification to be used in accordance with Condition SC6.C.26. <p>In detailing the monitoring programmes the Consent Holder must provide information on the monitoring methods proposed, the monitoring locations, parameters to be monitored, and the required calibration and maintenance of monitoring equipment.</p>	
SC6.G.30	Construction works must not commence until the Consent Holder has received certification from the Waikato Regional Council of the Northern Rock Stack Monitoring and Management Plan.	
SC6.G.31	The Northern Rock Stack Monitoring and Management Plan must be reviewed and updated (as necessary) by the Consent Holder at least annually. Any updated version of the Northern Rock Stack Monitoring and Management Plan must not be implemented until the updated Northern Rock Stack Monitoring and Management Plan has been certified.	
SC6.G.32	The Consent Holder must implement the certified Northern Rock Stack Monitoring and Management Plan.	
	Northern Rock Stack Monitoring Report	
SC6.G.33	<p>The Consent Holder must submit an annual Northern Rock Stack Monitoring Report to the Waikato Regional Council. The report must, as a minimum, contain:</p> <ul style="list-style-type: none"> a. The data from monitoring undertaken during the previous year; b. Identification of any environmentally important trends associated with the above monitoring; c. Interpretation and analysis of any change in groundwater chemistry over the previous year and predictions of any future changes in groundwater and identify what contingency actions, if any, it proposes to take in response to these predictions; d. Any contingency actions that may have been taken during the year; 	

	Condition	Comment
	<p>e. Comment on compliance with all conditions and any reasons for non-compliance or difficulty in achieving conformance with the conditions of this consent;</p> <p>f. A summary and analysis of complaints relevant to this consent, from the complaint log (refer Schedule One); and</p> <p>g. Any works that have been undertaken to improve environmental performance or that are proposed to be undertaken in the forthcoming year to improve environmental performance in relation to activities permitted by this consent.</p> <p>The report must be forwarded in a format acceptable to the Waikato Regional Council.</p> <p>The Northern Rock Stack Monitoring Report need not be a standalone document, and the Consent Holder may, at its discretion, include it as part of any other monitoring report required by the conditions of this consent.</p>	
	Peer Technical Review	
SC6.G.34	<p>The design and construction of all works covered by this consent must be peer reviewed by an appropriately qualified and experienced person or persons.</p> <p>a. The person or persons must be instructed by the Consent Holder to report in writing to the Waikato Regional Council at least at the following times:</p> <ol style="list-style-type: none"> prior to commencement of construction of Northern Rock Stack; at all critical stages during the ongoing design and construction of Northern Rock Stack but not less than annually; on the completion of the Northern Rock Stack; following any significant design changes; and prior to commencement of approved post closure discharge to the Ohinemuri River from the Northern Rock Stack collection pond, <p>b. And must be instructed to address at least the following matters:</p> <ol style="list-style-type: none"> progress against the Annual Work Programme; site preparation including hydrogeological issues and geotechnical issues; 	

Commented [MD77]: Amended at request of WRC



	Condition	Comment
	<ul style="list-style-type: none"> iii. foundation design and use of on-site material; iv. foundation design and construction; v. all underdrainage systems; vi. stockpile management; vii. monitoring; and viii. rehabilitation and closure plans associated with the Northern Rock Stack. <p>The reports required by this condition shall also be provided to the Peer Review Panel for their consideration in an advisory capacity only with regard to the progression of works.</p>	



CONSENT TYPE AND ACTIVITIES AUTHORISED	RMA S14	To dam water within the Northern Rock Stack Collection Pond
	RMA S13	To erect an overflow spillway from the Northern Rock Stack Collection Pond in, on and over the bed of a tributary of TB1 Stream
	RMA S15	To discharge water to surface water from the Northern Rock Stack Collection Pond spillway to the Ohinemuri River
LOCATION	Area 6	
TERM	35 years	
LAPSE PERIOD	10 years	

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC6.H.1	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC6.H.2	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent.	
	Design and Construction	
SC6.H.3	The Northern Rock Stack Collection Pond must be constructed in accordance with the design outlined in the document titled “ <i>OceanaGold (New Zealand) Limited –Waihi North Project - Tailings Storage and Rock Disposal Volume 4 –Northern Rock StackRL173-Proposed Rock Disposal Facility –Technical Report</i> ” included in Part B of the application documents.	
SC6.H.4	The capacity of Northern Rock Stack Collection Pond must be constructed and operated to contain the run-off generated from within its catchment during a 72-hour duration rainfall event with an Annual Exceedance Probability (AEP) of less than 10%, taking	



	Condition	Comment
	into account a combination of both storage volume and pumping rate.	
SC6.H.5	Except as provided for by Condition SC6.H.6 for 72 hour duration rainfall events with an AEP greater than 10%, all stormwater reporting to the Northern Rock Stack Collection Pond must be pumped to the Water Treatment Plant for treatment.	
SC6.H.6	<p>If the Consent Holder can demonstrate that the quality of water entering the Northern Rock Stack Collection Pond:</p> <ul style="list-style-type: none"> a. Meets or is better than the receiving water criteria defined in Condition G18; b. Is capable of remaining so on an ongoing basis; and, c. In combination with all other discharges authorised for this site, does not cause a significant adverse effect on the receiving groundwater and surface water, or on users of these resources, or, in the case of surface water, aquatic biota, <p>Then the Consent Holder may, if approved by the Waikato Regional Council in writing discharge directly from the pond, provided that:</p> <ul style="list-style-type: none"> d. The Consent Holder continuously monitors pH and turbidity in the pond; and e. For rainfall events with an AEP greater than 50%, discharges from the pond <ul style="list-style-type: none"> i. have a turbidity of no greater than 110 NTU; and ii. has a pH within the range of 6.0-9.0 pH units. 	
SC6.H.7	The Northern Rock Stack Collection Pond must be provided with a spillway that will safely route a 1% AEP flood.	
SC6.H.8	<p>The Consent Holder must ensure that the Northern Rock Stack Collection Pond is:</p> <ul style="list-style-type: none"> a. Constructed from materials which provide for secure long term containment; and b. Constructed using materials which have no acid forming potential; and c. Lined with 1.5mm HDPE with a 0.5m protective cover layer (or other similar synthetic liner approved by the Waikato Regional Council) to a height of 1.5m from the base, and with a 0.5m protective layer cover. 	



	Condition	Comment						
SC6.H.9	All construction works must be implemented under the supervision of appropriately qualified and experienced persons.							
SC6.H.10	The Consent Holder must maintain the structural integrity of the works associated with the exercise of these consents and of any erosion control and energy dissipation works which become necessary as a consequence of the exercise of these consents.							
SC6.H.11	<p>On completion of the construction works the Consent Holder must supply written confirmation to the Waikato Regional Council and the Peer Review Panel stating that the Northern Rock Stack Collection Pond has been constructed in accordance with the design parameters referred to in Condition SC6.H.8.</p> <p>Thereafter, the facility must be inspected by a registered engineer on an annual basis, and a written report on the inspection provided to the Waikato Regional Council and copied to the Peer Review Panel within one month of completion of the inspection.</p>							
SC6.H.12	Routine maintenance and desilting of the Northern Rock Stack Collection Pond must only occur during periods of projected fine weather. All silt removed must be disposed of to a tailings storage facility.							
SC6.H.13	No chemicals or additives may be used in the Northern Rock Stack Collection Pond or the discharge from the pond without the prior written approval of the Waikato Regional Council.							
	Discharges and Monitoring							
SC6.H.14	<p>Except where Condition SC6.H.6(e) applies the Consent Holder must monitor the discharge from the Northern Rock Stack Collection Pond every day during any overflow event in accordance with Table SC6.H.14.T1:</p> <table><tr><td>Table SC6.H.14.T1 – Northern Rock Stack Collection Pond Overflow Monitoring Parameters</td></tr><tr><td>pH</td></tr><tr><td>Conductivity</td></tr><tr><td>Suspended solids</td></tr><tr><td>Total ammonia</td></tr><tr><td>Trace elements, (iron, manganese, copper, nickel, zinc, silver, antimony, arsenic, selenium, cadmium, chromium (iv), lead and mercury.</td></tr></table>	Table SC6.H.14.T1 – Northern Rock Stack Collection Pond Overflow Monitoring Parameters	pH	Conductivity	Suspended solids	Total ammonia	Trace elements, (iron, manganese, copper, nickel, zinc, silver, antimony, arsenic, selenium, cadmium, chromium (iv), lead and mercury.	
Table SC6.H.14.T1 – Northern Rock Stack Collection Pond Overflow Monitoring Parameters								
pH								
Conductivity								
Suspended solids								
Total ammonia								
Trace elements, (iron, manganese, copper, nickel, zinc, silver, antimony, arsenic, selenium, cadmium, chromium (iv), lead and mercury.								



	Condition	Comment
	<p><i>Table Note:</i></p> <p><i>The Northern Rock Stack Collection Pond overflow monitoring programme for metals is for 'acid-soluble' concentrations determined on unfiltered samples.</i></p>	
SC6.H.15	Results of the monitoring undertaken in accordance with Condition SC6.H.14 must be forwarded to Waikato Regional Council quarterly.	
SC6.H.16	All water quality sampling and analysis must be undertaken using Standard Methods for the Examination of Water and Wastewater (19th Edition 1995, or updates), APHA, AWWA and WEF, unless otherwise agreed in writing by Waikato Regional Council. Analyses must be undertaken at an appropriately qualified laboratory. All other measuring, testing, recording and analytical methods as may be required from time to time pursuant to the requirements of this consent must be to the satisfaction of the Waikato Regional Council.	



CONSENT TYPE AND ACTIVITIES AUTHORISED RMA S13 To alter and use existing culverts to enable widening of the access track across TB1 Stream

RMA S13 To place and use new culverts

LOCATION Area 6

TERM 35 years

LAPSE PERIOD 10 years

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC6.1.1	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC6.1.2	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent.	<p>Note: Schedule Two contains a comprehensive suite of conditions which address:</p> <ul style="list-style-type: none"> - Erosion and sediment control; - Aquatic fauna Fish salvage and relocation; and - Requirements for mitigating and offsetting residual effects on aquatic ecology, including minimum design requirements for new channel construction and riparian planting.

Commented [MD78]: Change requested by WRC.



	Condition	Comment
	Culvert Design	
SC6.1.3	All new culverts must be constructed and operated to convey the runoff resulting from at least a 5% Annual Exceedance Probability (AEP), 24-hour duration, design storm.	
SC6.1.4	Fish passage must be provided where temporary works on diversions and culverts have a duration exceeding 7 days.	
SC6.1.5	All culvert construction works must be implemented under the supervision of appropriately qualified and experienced persons.	
SC6.1.6	The Consent Holder must ensure that the area of disturbance during placement/construction of all culverts is kept to a practical minimum.	
SC6.1.7	Within 20 working days following completion of each culvert, the Consent Holder must provide the Waikato Regional Council with the information required under Regulations 62(3) and 63(3) of the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 ("NESF").	



CONSENT TYPE AND ACTIVITIES AUTHORISED RMA S15 To discharge overburden and ore on to land in stockpiles.

LOCATION Area 6

TERM 35 years

LAPSE PERIOD 10 years

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC6.J.1.	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC6.J.2.	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent.	
	Non-Acid Forming Material Stockpiles	
SC6.J.3.	Preparation of stockpile sites for the temporary storage of non-acid forming (NAF) waste rock and soil prior to the placement of material must include: <ul style="list-style-type: none"> a. Stripping and stockpiling of topsoil and subsoils for later use in site rehabilitation. b. Construction of clean water diversion drains around the site to divert and discharge clean surface run-off and intercepted groundwater. c. Construction of diversion drains around the site perimeter to divert stockpile run-off to silt ponds for sediment reduction prior to discharge. 	
	Potentially Acid Forming Material Stockpiles	



	Condition	Comment
SC6.J.4.	<p>Stockpiling of ore or any potentially acid forming (PAF) waste rock must occur only at sites specifically prepared for that purpose and must be constructed from or lined with at least 600mm of natural or non acid forming materials with a permeability of no greater than 1×10^{-8} m/s, or alternatively a synthetic liner with equivalent or better performance, approved by the Waikato Regional Council. In situ soils may be used for this purpose if the Consent Holder can demonstrate to the Waikato Regional Council's satisfaction that the protection provided is equivalent to the liner specification detailed above.</p> <p>In addition to the provisions of Condition SC6.J.3, PAF stockpile site preparation must include:</p> <ol style="list-style-type: none"> Grading of the proposed stockpile site and construction of stockpile drains around the site perimeter to divert stockpile run-off and leachate to a collection pond or ponds (from which collected water can be pumped to the water treatment plant prior to discharge to the Ohinemuri River); and Placement of selected, coarse waste rock as the initial layer on the low-permeability layer of the stockpile footprint to act as a leachate drainage layer. <u>The perimeter of this drainage layer shall be designed and constructed to prevent the ingress of oxygen into the stockpile;</u> If an alternative synthetic liner is used in preference to an earth liner, the liner must be covered with a protection layer consisting of soil that is placed and compacted to a minimum thickness of 400mm. 	
SC6.J.5.	Drains constructed to convey run-off and leachate from the PAF stockpile(s) to the collection pond(s) and the Water Treatment Plant must be lined by a method agreed to by the Waikato Regional Council and detailed in the Water Management Plan prepared pursuant to Conditions G29 – G32.	
SC6.J.6.	<p>The Consent Holder must ensure that the collection pond(s) referred to in Condition SC6.J.3 is designed and constructed from materials that provide secure long term containment including:</p> <ol style="list-style-type: none"> A low-permeability liner forming the base and sides of the pond(s) that achieve the same or better standard to that required of the PAF stockpile liner as detailed in Condition SC6.J.4, or alternative liner with equivalent or better performance, approved by the Waikato Regional Council; A minimum water storage capacity equivalent to the volume of run-off generated from within its catchment during a 10% 	

Commented [MD79]: Added in response to comments from WRC regarding the layer enabling oxygen ingress into the facility and the need for this to be avoided to minimise AMD risks.



	Condition	Comment
	<p>Annual Exceedance Probability (AEP), 72-hour duration, design storm, taking into account a combination of both storage volume and pumping rate;</p> <p>c. A pump system capable of pumping all stormwater reporting to the collection pond during rainfall events less than or equal to the above design storm to the water treatment plant for treatment; and</p> <p>d. A spillway that will safely route a 1% AEP flood.</p>	
	Monitoring	
SC6.J.7.	<p>The Consent Holder must maintain groundwater quality monitoring bores to detect any seepage bypassing the underdrainage system, and to determine the representative groundwater quality for shallow groundwater around the perimeter of land owned by the Consent Holder.</p> <p><i>Advice Note: All groundwater monitoring in these bores must be based on the soluble test method, defined as the concentration of dissolved metals measured in that fraction which passes through a 0.45 µm filter.</i></p>	<p>This is an existing activity. The requisite bores are already installed.</p>
SC6.J.8.	<p>The Consent Holder must undertake monitoring of the parameters annexed as Attachment 1 to this consent in the bores maintained in accordance with Condition SC.J.7 in order to establish trends in the monitoring bores. Monitoring must continue throughout the term of these consents. The results of that monitoring must be forwarded to Waikato Regional Council at quarterly intervals.</p>	
SC6.J.9.	<p>The Consent Holder must set trigger levels for the parameters annexed as Attachment 1 to this consent for down gradient bores based on the trends observed in the monitoring data at levels which will provide early warning indicator of potential changes of groundwater quality as a result of the activities authorised by this consent.</p>	
SC6.J.10.	<p>At any time if monitoring results within the monitoring bores <u>differ from exceed</u> the relevant trigger level for that bore over two consecutive readings then the Consent Holder must:</p> <ol style="list-style-type: none"> Characterise and assess the source of the change; and Take all necessary measures to ensure that General Condition G18 is complied with. <p>The trend and actions taken must be detailed in the annual report to the Waikato Regional Council.</p>	

Commented [CM80]: Update made in response to comments provided by DOC.



	Condition	Comment
	Area 6 Stockpile Monitoring and Management Plan	
SC6.J.11.	<p>The Consent Holder must submit an Area 6 Stockpile Monitoring and Management Plan for certification under Condition C5.</p> <p>Certification is required to verify that the Area 6 Stockpile Monitoring and Management Plan:</p> <ol style="list-style-type: none"> Includes actions, methods, monitoring programmes and trigger levels as appropriate to meet the objectives in Condition SC5.O.12; and Satisfies the requirements in Condition SC5.O.13. <p>The Area 6 Stockpile Monitoring and Management Plan need not be a standalone document, and the Consent Holder may, at its discretion, include it as part of any other management plan required by the conditions of this consent.</p>	
SC6.J.12.	<p>The objectives of the Area 6 Stockpile Monitoring and Management Plan are to set out the details of:</p> <ol style="list-style-type: none"> The monitoring that will be undertaken to ensure that Area 6 stockpiles do not adversely affect land, ground and groundwater; and The contingency measures necessary to ensure the conditions of this consent are achieved. 	
SC6.J.13.	<p>The Area 6 Stockpile Monitoring and Management Plan must include, as a minimum:</p> <ol style="list-style-type: none"> The details of the monitoring bores installed in accordance with Condition SC6.J.7; Details of monitoring in accordance with Condition SC6.J.8; The trigger levels set in accordance with Condition SC6.J.9; and A contingency plan to be actioned in the event a trigger level is exceeded over two consecutive readings, and which is sufficient to assess the source of the change, and to determine what, if any, mitigation measures should be implemented to ensure that General Condition G18 is complied with. <p>In detailing the monitoring programmes the Consent Holder must provide information on the monitoring methods proposed, the monitoring locations, parameters to be monitored, and the required calibration and maintenance of monitoring equipment.</p>	



	Condition	Comment
	Area 6 Stockpile Monitoring Report	
SC6.J.14.	<p>The Consent Holder must submit an annual Area 6 Stockpile Monitoring report to the Waikato Regional Council. The report must, as a minimum include:</p> <ul style="list-style-type: none"> a. The data from monitoring undertaken during the previous year; b. Identification of any environmentally important trends associated with the above monitoring; c. Interpretation and analysis of any change in groundwater chemistry over the previous year and predictions of any future changes in groundwater quality and what contingency actions, if any, it proposes to take in response to these predictions; d. Any contingency actions that may have been taken during the previous year; e. Comment on compliance with all conditions and any reasons for non-compliance or difficulty in achieving conformance with the conditions of this consent; f. A summary and analysis of complaints relevant to this consent, from the complaint log (refer Schedule One); and g. Any works that have been undertaken to improve environmental performance or that are proposed to be undertaken in the forthcoming year to improve environmental performance in relation to activities permitted by this consent. <p>The report must be forwarded in a format acceptable to the Waikato Regional Council.</p> <p>The Area 6 Stockpile Monitoring Report need not be a standalone document and the Consent Holder may, at its discretion, include it as part of any other monitoring report required by the conditions of this consent.</p>	



AREA 7 SPECIFIC CONSENTS

[TAILINGS STORAGE FACILITY 3]



CONSENT TYPE AND
ACTIVITIES AUTHORISED RMA S14 To take groundwater for construction dewatering purposes.

LOCATION Area 7

TERM 35 years

LAPSE PERIOD 10 years

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC7.A.1	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC7.A.2	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent	



LAPSE PERIOD 10 years

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CONSENT TYPE AND ACTIVITIES AUTHORISED	RMA S14	To dam and divert water for erosion and sediment control purposes using clean water drains and dirty water drains.
LOCATION	Area 7	
TERM	35 years	
LAPSE PERIOD	10 years	

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC7.C.1	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC7.C.2	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent	



CONSENT TYPE AND ACTIVITIES AUTHORISED	RMA S9	To drill drain holes in the walls of the Central and Eastern Borrow Areas to depressurise the pit walls.
	RMA S14	To take water to dewater the Central and Eastern Borrow Areas using pit wall drain holes and divert to sediment collection ponds.
LOCATION	Area 7	
TERM	35 years	
LAPSE PERIOD	10 years	

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC7.D.1	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC7.D.2	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent.	



CONSENT TYPE AND ACTIVITIES AUTHORISED	RMA S15	To discharge water to land within sediment retention ponds and decanting earth bunds and to surface water via spillways.
LOCATION	Area 7	
TERM	35 years	
LAPSE PERIOD	10 years	

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC7.E.1	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC7.E.2	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent	Note: Schedule Two contains a comprehensive suite of Erosion and Sediment Control Conditions.



CONSENT TYPE AND ACTIVITIES AUTHORISED	RMA S13	To disturb, reclaim and introduce plants in, on or over the bed of unnamed tributaries of the Ruahorehore Stream to install the Southern Uphill Diversion Drain.
	RMA S14	To dam and divert water within unnamed tributaries of the Ruahorehore Stream, and natural surface runoff, around disturbed areas, via the Southern Uphill Diversion Drain
LOCATION	Area 7	
TERM	35 years	
LAPSE PERIOD	10 years	

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC7.F.1	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC7.F.2	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent	<p>Note: Schedule Two contains a comprehensive suite of conditions which address:</p> <ul style="list-style-type: none"> - Erosion and sediment control; - Aquatic fauna Fish salvage and relocation; and - Requirements for mitigating and offsetting residual effects on aquatic ecology, including minimum design requirements for new channel construction and riparian planting.

Commented [MD81]: Change requested by WRC.



	Condition	Comment
	Design and Construction Requirements	
SC7.F.3	The Southern Uphill Diversion Drain must be constructed in accordance with the design outlined in the document titled <i>“Oceana Gold (New Zealand) Limited –Waihi Operation, New Zealand–Tailings Storage and Rock Disposal Volume 3 –Proposed Tailings Storage Facility Storage 3 RL155 –Technical Report’</i> included in Part B of the application documents.	
SC7.F.4	Diversion drains and associated works must be constructed and operated to convey the run-off resulting from a 1% Annual Exceedance Probability.	
SC7.F.5	All construction works must be implemented under the supervision of appropriately qualified and experienced persons.	
SC7.F.6	The Consent Holder must advise Waikato Regional Council in writing in advance of the proposed construction of each of the diversion drains, and must provide plans of the proposed works, and advise as to proposed start times for construction.	
SC7.F.7	Within 20 working days following completion of each diversion, the Consent Holder must provide Waikato Regional Council with as-built plans of the completed works.	



CONSENT TYPE AND ACTIVITIES AUTHORISED RMA S13 To disturb and reclaim the bed of unnamed tributaries of the Ruahorehore Stream within the footprint of TSF3 and Collection Ponds (S6 and S7).

LOCATION Area 7

TERM 35 years

LAPSE PERIOD 10 years

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC7.G.1	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC7.G.2	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent	<p>Note: Schedule Two contains a comprehensive suite of conditions which address:</p> <ul style="list-style-type: none"> - Erosion and sediment control; - Aquatic fauna Fish salvage and relocation; and - Requirements for mitigating and offsetting residual effects on aquatic ecology, including minimum design requirements for new channel construction and riparian planting.

Commented [MD82]: Change requested by WRC.

CONSENT TYPE AND ACTIVITIES AUTHORISED	RMA S14	To dam water in TSF3.
	RMA S14	To dam and divert runoff from within the TSF3 footprint to Collection Pond S7.
	RMA S14	To divert intercepted groundwater and subsurface drainage from TSF3 activities to treatment.
	RMA S15	To discharge overburden to land to construct, operate and rehabilitate TSF3 and the associated haul road and Collection Ponds.
	RMA S15	To discharge tailings into TSF3.
	RMA S15	To discharge seepage from TSF3 into the ground.
LOCATION	Area 7	
TERM	35 years	
LAPSE PERIOD	10 years	

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC7.H.1	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC7.H.2	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent.	<p>Note: Schedule Two contains a comprehensive suite of conditions which address:</p> <ul style="list-style-type: none"> - Erosion and sediment control; - Aquatic fauna Fish salvage and relocation; and - Requirements for mitigating and offsetting

Commented [MD83]: Change requested by WRC.



	Condition	Comment
		residual effects on aquatic ecology, including minimum design requirements for new channel construction and riparian planting.
	Design and Construction	
SC7.H.3	Tailings Storage Facility 3 including the Eastern and Central Borrow Areas must be wholly located within the footprint shown in the figure annexed as Attachment 1 to this consent.	
SC7.H.4	The TSF3 embankment crest must not exceed an elevation of 155 metres RL (Mine Datum less 1000 metres).	
SC7.H.5	The floor level of the Central and Eastern borrow areas must not be below 125 metres RL (Mine Datum less 1000 metres).	
SC7.H.6	TSF3 must be constructed in accordance with the design outlined in the document titled " <i>Oceana Gold (New Zealand) Limited –Waihi Operation, New Zealand–Tailings Storage and Rock Disposal Volume 3 –Proposed Tailings Storage Facility 3 RL155 –Technical Report</i> " included in Part B of the application documents.	
SC7.H.7	<p>The Consent Holder must ensure the entire footprint of the TSF3 embankment and tailing impoundment is underlain by a low permeability liner which provides for secure long term containment and which:</p> <ul style="list-style-type: none"> a. Has no acid forming potential; b. Has a permeability of no greater than 1×10^{-8} m/s; and, c. If constructed of natural materials, has a minimum thickness of 750 mm beneath the embankment and 600 mm beneath the impoundment, or, if constructed wholly or partly from synthetic materials the design must provide for protection against damage or penetration of the liner during construction and operation. <p>In addition, the Consent Holder must line all leachate drains with a 3 m wide 1.5 mm HDPE (or other similar synthetic liner approved by the Waikato Regional Council).</p>	
SC7.H.8	The Consent Holder must ensure all perimeter drains are constructed from materials which provide for secure long term containment and which:	



	Condition	Comment
	<p>a. Have no acid forming potential; and</p> <p>b. Are lined with 1.5 mm HDPE (or other similar synthetic liner approved by the Waikato Regional Council) to a height of 0.3 m from the base, and with a 0.5 m protective cover layer.</p>	
SC7.H.9	<p>The Consent Holder must ensure that any potentially acid forming (PAF) material stored outside the footprint of TSF3 embankment, and which is intended for disposal into TSF3 embankment, is only stored on a pad constructed in accordance with the requirements set out below.</p> <p>Any such pad must be constructed from or lined with at least 600 mm of natural, non-acid forming materials with a permeability of no greater than 1×10^{-8} m/s. The pads must be constructed to direct any seepage so that it reports to a point from where it can be monitored, and if necessary, directed to the Water Treatment Plant for treatment prior to discharge.</p> <p>Monitoring of the groundwater down-gradient of any such storage pad must be undertaken. That monitoring may form part of any monitoring programme already undertaken at the Site.</p>	
SC7.H.10	The Consent Holder must install an underdrainage system beneath the TSF3 embankment and impoundment liner to collect contaminated seepage and groundwater.	
SC7.H.11	The Consent Holder must ensure that this underdrainage system is in place prior to the discharge of tailings to TSF3.	
SC7.H.12	<p>Until final capping is complete, the Consent Holder must ensure that the pH of a slurry of one part solid (less than 4 mm size fraction) to two parts deionised water, of the surface of any exposed PAF rock (after liming) remains greater than or equal to pH 5.5. Unless Waikato Regional Council agrees to an alternative sampling programme in writing, samples must be collected on a grid pattern of not more than 50 m and, where practical, within 1 week of placement of any PAF rock and then at intervals not exceeding 4 weeks.</p> <p>This test is designed to help determine the potential for acid generation and sulphate release from waste rock. The procedure for collecting and analysing the samples must be as described in the TSF3 Monitoring and Management Plan</p>	
SC7.H.13	The Consent Holder must, unless otherwise authorised in writing by Waikato Regional Council, collect all underdrainage flow from the	

	Condition	Comment
	tailings storage facility and divert it to the Water Treatment Plant for treatment or for use in the Processing Plant.	
SC7.H.14	The embankment structure must incorporate a minimum freeboard above all material in the tailings pond (i.e. solid and liquid). This level must be sufficient to impound the surface run-off arising from the Probable Maximum Precipitation (PMP) event without overtopping, plus a 1.0 metre freeboard. Following rainfall or any event that reduces the freeboard below the minimum requirement, the water level must be drawn down as soon as practicable to restore the full freeboard.	
SC7.H.15	The Consent Holder must provide the Peer Review Panel with all records, plans, designs, and any other information they request to assist with their advisory role, and must afford the Panel full access to the site at all reasonable times.	
SC7.H.16	The Consent Holder must retain a person or persons with recognised qualifications and experience in the design of tailings storage facilities (the Designer). All aspects of the design of this facility must be undertaken under the supervision of the Designer, who must prior to the first discharge of tailings to this impoundment and prior to commissioning of subsequent embankment stages, provide to Waikato Regional Council written confirmation that all aspects of this structure have been designed in accordance with accepted engineering best practise, and to ensure the effective control of acid and metalliferous drainage acid rock drainage and the containment of tailings.	
SC7.H.17	The Consent Holder must supply at least the following documentation to the Waikato Regional Council prior to commencement of TSF3 construction works: <ul style="list-style-type: none"> a. Detailed Design Report b. Specification c. Drawings d. Construction Monitoring Inspection Schedule All subsequent amendments to the design must be supplied to the Waikato Regional Council prior to implementation and following peer review by an appropriately qualified and experienced person or persons.	
SC7.H.17.A	<u>All detailed design reporting shall include seismic design analyses in accordance with National Seismic Hazard Model (2022).</u>	

Commented [MD84]: Amended at request of WRC who noted that acid rock drainage is not restricted to rocks that generate acidity but can also include rocks that generate neutral metalliferous drainage.

Commented [MD85]: Added at request of WRC.

	Condition	Comment
SC7.H.18	All construction works must be implemented under the supervision of appropriately qualified and experienced persons. The Consent Holder must supply to the Waikato Regional Council a full set of as-built plans for each completed stage of the TSF3 development.	
SC7.H.19	The Consent Holder must maintain the structural integrity of the works associated with the exercise of these consents and of any erosion control and energy dissipation works which become necessary as a consequence of the exercise of these consents.	
SC7.H.20	<p>On completion of the initial embankment structure construction works and each subsequent stage (i.e. immediately prior to the first discharge of tailings into the impoundment) and prior to commissioning of subsequent embankment stages, the Consent Holder must supply written confirmation to the Waikato Regional Council and the Peer Review Panel stating that the embankment structure and associated works of the relevant stage have been constructed in accordance with the design referred to in Condition SC7.I.17.</p> <p>Thereafter, the facility must be inspected by a registered engineer on an annual basis, and a written report on the inspection provided to the Waikato Regional Council and copied to the Peer Review Panel within one month of completion of the inspection.</p>	
	Monitoring	
SC7.H.21	The Consent Holder must measure and record the volume of storage provided by the available freeboard behind the embankment structure at quarterly intervals. This information must be made available to Waikato Regional Council on request.	
SC7.H.22	Throughout the period of mining the Consent Holder must establish and maintain an inventory of sources and estimated volumes of available inert material. This inventory is to be updated at six monthly intervals and balanced against estimated future demand for inert material. This inventory must be available upon request by Waikato Regional Council and the Peer Review Panel. In the event a shortfall occurs or is identified in advance, the Consent Holder must prepare and implement contingency measures to ensure that proper control of geochemically active materials is maintained. A summary of the inventory and details of any measures which have needed to be taken must be reported annually to Waikato Regional Council.	
SC7.H.23	The Consent Holder must collect a sample of tailings being discharged to the tailings pond and must determine its acid neutralising capacity (ANC), maximum potential acidity (MPA), and	



	Condition	Comment
	net acid generation (NAG) capacity at monthly intervals. The date the sample is collected and the ANC, MPA and NAG results must be reported to the Waikato Regional Council annually.	
SC7.H.24	The Consent Holder must install groundwater quality monitoring bores to detect seepage bypassing the underdrainage system, and to determine the representative groundwater quality for shallow and deeper groundwater around the perimeter of land downstream from TSF3 owned by the Consent Holder. This is to include installation of groundwater quality monitoring bores between the TSF3 and the Ruahorehore Stream (to the south and southeast of the TSF3). The locations and specifications of the bores shall be to the satisfaction of the Waikato Regional Council.	
SC7.H.25	The Consent Holder must undertake baseline monitoring of groundwater monitoring bores at least monthly over a twelve month period, prior to the discharge of tailings or PAF material within TSF3. Groundwater monitoring is to be undertaken using the methodology provided in the TSF3 Monitoring and Management Plan required by SC7.H.30 and monitoring shall include the measurement of all parameters annexed as Attachment 2 to this consent. The results of baseline monitoring must be forwarded to Waikato Regional Council at quarterly intervals.	
SC7.H.26	The Consent Holder must calculate trigger levels for the parameters annexed as Attachment 2 to this consent for down gradient bores based on the trends observed in the baseline monitoring data required by Condition SC7.H.25 at levels which will provide early warning of potential changes of groundwater quality as a result of the activities authorised by this consent. All trigger levels must be set at the 95 th percentile confidence limit.	
SC7.H.27	At any time following completion of baseline monitoring, if monitoring results within the monitoring bores exceed the relevant trigger level for that bore over two consecutive readings then the Consent Holder must: <ul style="list-style-type: none"> a. Characterise and assess the source of the change; and b. Take all necessary measures to ensure that General Condition G18 is complied with. The trigger and actions taken must be reported to the Waikato Regional Council immediately on completion.	
SC7.H.28	Ongoing monitoring must be undertaken at the locations and using the methodology outlined in the TSF3 Monitoring and Management Plan required by SC7.H.30, with monitoring to include the	



	Condition	Comment
	<p>measurement of all parameters annexed as Attachment 2 to this consent.</p> <p>Monitoring results must be provided to the Waikato Regional Council and copied to the Peer Review Panel as part of annual reporting as required under SC7.H.34.</p>	
SC7.H.29	<p>The Consent Holder must identify how waste rock produced within Tailings Storage Facility 3 will be classified. The classification process must as a minimum include:</p> <ol style="list-style-type: none"> Definitions used to characterise waste rock embankments in terms of acid base accounting; Criteria used for classifying waste rock; An assessment protocol for classifying waste rock; Waste rock sampling requirements for Tailings Storage Facility 3; Waste rock sampling requirements during construction and rehabilitation of Tailings Storage Facility 3; and Requirements for limestone addition for any potentially acid forming rock placed within stockpiles. <p>The classification process is to be provided in the TSF3 Monitoring and Management Plan required by Condition SC6.H.30.</p>	
	TSF3 Monitoring and Management Plan	
SC7.H.30	<p>Mo later than 30 working days prior to the commencement of works to establish TSF3, the Consent Holder must submit a TSF3 Monitoring and Management Plan for certification under Condition C5.</p> <p>Certification is required to verify that the TSF3 Monitoring and Management Plan:</p> <ol style="list-style-type: none"> Includes actions, methods, monitoring programmes and trigger levels as appropriate to meet the objectives in Condition SC7.H.31; and Satisfies the requirements in Condition SC7.H.32. <p>The TSF3 Monitoring and Management Plan need not be a standalone document, and the Consent Holder may, at its discretion, include it as part of any other management plan required by the conditions of this consent.</p>	



	Condition	Comment
SC7.H.31	<p>The objectives of the TSF3 Monitoring and Management Plan are to set out details of:</p> <ul style="list-style-type: none"> a. The monitoring that will be undertaken to ensure that the TSF3 does not adversely affect land, ground and groundwater resources; and b. The contingency measures necessary to ensure the conditions of this consent are achieved. 	
SC7.H.32	<p>The TSF3 Monitoring and Management Plan must include, as a minimum:</p> <ul style="list-style-type: none"> a. A Risk Management Plan for TSF3 which is in accordance with the Australian/New Zealand Standards for Risk Management (AS/NZS 4360:1999) or any subsequent replacement standard. The purposes of the Risk Management Plan shall be to: <ul style="list-style-type: none"> i. Identify and assess the operational risks relating to TSF3, ii. Develop an appropriate monitoring programme; and iii. Set out the actions to be taken in the event that monitoring in accordance with ii above indicate a material increase in the risks identified in i above. b. A structural integrity surveillance and monitoring programme for the embankment of TSF3 which conforms with the requirements of the current New Zealand Dam Safety Guidelines. c. A description of the tailings storage facility monitoring systems and the measures to be adopted to ensure compliance with General Condition G18, including: <ul style="list-style-type: none"> i. The details of the monitoring bores to be established in accordance with Condition SC7.H.24; ii. Details of the monitoring to be undertaken in accordance with Condition SC7.H.25; iii. The trigger levels set in accordance with Condition SC7.H.26 and the contingency measures required by Condition SC7.H.31; c. The measurement and monitoring of the liner and cover system integrity (by measuring drainage quality and flow from all underdrainage and surface collection systems) in order to verify the "as built" structure is achieving predicted design performance objectives. d. Details of the waste rock classification process in accordance with Condition SC7.H.29. 	



	Condition	Comment
	In detailing the monitoring programmes the Consent Holder must provide information on the monitoring methods proposed, the monitoring locations, parameters to be monitored, and the required calibration and maintenance of monitoring equipment.	
	<i>Review of the TSF3 Monitoring and Management Plan</i>	
SC7.H.33	<p>The TSF3 Monitoring and Management Plan must be reviewed at least annually by the Consent Holder to ascertain whether any amendments are required in order to ensure ongoing compliance with Condition SC7.H.31 and Condition SC7.H.32.</p> <p>Any required amendments must be made in accordance with Condition C8.</p>	
	TSF3 Monitoring Report	
SC7.H.34	<p>The Consent Holder must submit an annual TSF3 Monitoring Report to the Waikato Regional Council. The report must, as a minimum include:</p> <ol style="list-style-type: none"> The volume of all contaminated material disposed of within TFS3, including brine and hydrocarbons; The data from monitoring undertaken during the previous year. Identification of any environmentally important trends associated with the above monitoring. Interpretation and analysis of any change in groundwater chemistry over the previous year and predictions of any future changes in groundwater or surface water to identify what contingency actions, if any, it proposes to take in response to these predictions. Any contingency actions that may have been taken during the previous year. Comment on compliance with all conditions and any reasons for non-compliance or difficulty in achieving conformance with the conditions of this consent. A summary and analysis of complaints relevant to this consent, from the complaint log (refer Schedule One). Any works that have been undertaken to improve environmental performance or that are proposed to be undertaken in the forthcoming year to improve environmental performance in relation to activities permitted by this consent. 	



	Condition	Comment
	<p>The report must be forwarded in a format acceptable to the Waikato Regional Council.</p> <p>The TSF3 Monitoring Report need not be a standalone document and the Consent Holder may, at its discretion, include it as part of any other monitoring report required by the conditions of this consent.</p>	
	Peer-Technical Review	
SC7.H.35	<p>The design and construction of all works covered by this consent must be reviewed by an appropriately qualified and experienced person or persons.</p> <p>The Consent Holder must instruct the person or persons to report in writing to the Waikato Regional Council at least at the following times:</p> <ol style="list-style-type: none"> Prior to commencement of construction of TSF3; At all critical stages during the ongoing design and construction of TSF3 but not less than annually; On the completion of TSF3; Following any significant design changes; and Prior to commencement of approved post closure discharge to the Ruahorehore Stream from the tailings pond; <p>And must be instructed to address at least the following matters:</p> <ol style="list-style-type: none"> progress against the Annual Work Programme, site preparation including hydrogeological issues and geotechnical issues, foundation design and use of on-site material, embankment design and construction, all underdrainage systems, tailings impoundment management, monitoring, and rehabilitation and closure plans associated with the embankment and tailings pond. <p>The reports required by this condition shall also be provided to the Peer Review Panel for their consideration in an advisory capacity only with regard to the progression of works.</p>	

Commented [MD86]: Amended at request of WRC





CONSENT TYPE AND ACTIVITIES AUTHORISED	RMA S13	To erect overflow spillways from Collection Ponds S6 and S7 in, on and over the bed of the Ruahorehore Stream.
	RMA S15	To discharge water to surface water from Collection Ponds (S6 and S7) via a spillway.
LOCATION	Area 7	
TERM	35 years	
LAPSE PERIOD	10 years	

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC7.1.1	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC7.1.2	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent	
	Design and Construction	
SC7.1.3	The Consent Holder must maintain the structural integrity of the works associated with the exercise of this consent and of any erosion control and energy dissipation works which become necessary as a consequence of the exercise of this consent.	
SC7.1.4	The capacity of Collection Ponds (S6 and S7) must be constructed and designed to contain the run-off generated from within its catchment during a 24-hour duration rainfall event with an Annual Exceedance Probability (AEP) of 10%, taking into account a combination of both storage volume and pumping rate.	
SC7.1.5	Subject to Condition SC7.1.6 for 24-hour duration rainfall events with an AEP greater than 10%, all stormwater reporting to the	



	Condition	Comment
	Collection Ponds (S6 and 7) must be pumped to the Water Treatment Plant for treatment.	
SC7.I.6	<p>If the Consent Holder can demonstrate that the quality of water entering Collection Pond 6 or 7:</p> <ul style="list-style-type: none"> a. Meets or is better than the receiving water criteria defined in Condition G18; b. Is capable of remaining so on a continuous basis; and, c. In combination with all other discharges authorised for this site, does not cause a significant adverse effect on the receiving ground water and surface water, or on users of these resources, or, in the case of surface water, aquatic biota, <p>Then the Consent Holder may, if approved by the Waikato Regional Council in writing discharge directly from the pond, provided that</p> <ul style="list-style-type: none"> d. The Consent Holder continuously monitors pH and turbidity in the pond; and e. For rainfall events with an AEP greater than 50%, the Consent Holder may direct discharges from the pond provided the continuous monitoring shows the water: <ul style="list-style-type: none"> i. has a turbidity concentration of no greater than 100 NTU; and ii. has a pH within the range of 6.0-9.0 pH units. 	
SC7.I.7	The Collection Ponds (S6 and S7) must be provided with a spillway to Ruahorehore Stream that that will safely route a 1% AEP flood.	
SC7.I.8	<p>The Consent Holder must ensure that Collection Ponds (S6 and S7) are:</p> <ul style="list-style-type: none"> a. Constructed from materials which provide for secure long term containment; and b. Constructed using materials which have no acid forming potential; and c. Lined with 1.5mm HDPE (or other similar synthetic liner approved by the Waikato Regional Council) to a height of 1.5m from the base, and with a 0.5m protective cover layer. 	
SC7.I.9	The design for Collection Ponds (S6 and S7) is to be submitted to the Waikato Regional Council for certification no later than 30 working days prior to construction commencing.	



	Condition	Comment							
SC7.I.10	Collection Ponds (S6 and S7) and associated works must be designed and implemented under the supervision of appropriately qualified and experienced persons.								
SC7.I.11	Routine maintenance and desilting of Collection Ponds (S6 and S7) must only occur during periods of projected fine weather. All removed silt must be disposed of to a tailings storage facility.								
SC7.I.12	No chemicals or additives may be used in Collection Ponds (S6 and S7) or the discharge from the ponds without the prior written approval of the Waikato Regional Council.								
	Discharges and Monitoring								
SC7.I.13	<div>Except where Condition SC7.I.6(e) applies the Consent Holder must monitor the discharge from Collection Ponds (S6 and S7) every day during any overflow event in accordance with Table SC7.I.1.T1:</div> <table><tr><td>Table SC7.I.1.T1 – Collection Ponds (S6 and S7) Overflow Monitoring Parameters</td></tr><tr><td>pH</td></tr><tr><td>Conductivity</td></tr><tr><td>Suspended solids</td></tr><tr><td>Cyanide (WAD)</td></tr><tr><td>Total ammonia</td></tr><tr><td>Trace elements(iron, manganese, copper, nickel, zinc, silver, antimony, arsenic, selenium, cadmium, chromium (iv), lead and mercury.</td></tr></table> <div><i>Table Note:</i> <i>The Collection Ponds (S6 and S7) overflow monitoring programme for metals is for ‘acid-soluble’ concentrations determined on unfiltered samples.</i></div>	Table SC7.I.1.T1 – Collection Ponds (S6 and S7) Overflow Monitoring Parameters	pH	Conductivity	Suspended solids	Cyanide (WAD)	Total ammonia	Trace elements(iron, manganese, copper, nickel, zinc, silver, antimony, arsenic, selenium, cadmium, chromium (iv), lead and mercury.	
Table SC7.I.1.T1 – Collection Ponds (S6 and S7) Overflow Monitoring Parameters									
pH									
Conductivity									
Suspended solids									
Cyanide (WAD)									
Total ammonia									
Trace elements(iron, manganese, copper, nickel, zinc, silver, antimony, arsenic, selenium, cadmium, chromium (iv), lead and mercury.									
SC7.I.14	Results of the monitoring undertaken in accordance with Condition SC7.I.13 must be forwarded to Waikato Regional Council quarterly.								
SC7.I.15	All water quality sampling and analysis must be undertaken using Standard Methods for the Examination of Water and Wastewater (19th Edition 1995, or updates), APHA, AWWA and WEF, unless otherwise agreed in writing by Waikato Regional Council. Analyses must be undertaken at an appropriately certified laboratory. All								



	Condition	Comment
	other measuring, testing, recording and analytical methods as may be required from time to time pursuant to the requirements of this consent must be to the satisfaction of the Waikato Regional Council.	



CONSENT TYPE AND ACTIVITIES AUTHORISED	RMA S13	To disturb, reclaim and introduce plants in, on or over the bed of Ruahorehore Stream associated with a diversion of that stream around the Collection Pond S6 and S7 Buttress
	RMA S14	To dam and divert the Ruahorehore Stream around the Collection Pond S6 and S7 Buttress.
LOCATION	Area 7	
TERM	35 years	
LAPSE PERIOD	10 years	

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC7.J.1	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC7.J.2	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent	<p>Note: Schedule Two contains a comprehensive suite of conditions which address:</p> <ul style="list-style-type: none"> - Erosion and sediment control; - Aquatic fauna Fish salvage and relocation; and - Requirements for mitigating and offsetting residual effects on aquatic ecology, including minimum design requirements for new channel construction and riparian planting.

Commented [MD87]: Change requested by WRC.

CONSENT TYPE AND ACTIVITIES AUTHORISED	RMA S15	To discharge overburden and topsoil to land in the TSF3 Soil Stockpiles.
LOCATION	Area 7	
TERM	35 years	
LAPSE PERIOD	10 years	

	Condition	Comment
	Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents	
SC7.K.1	The Consent Holder must comply with the common conditions between the Hauraki District Council and the Waikato Regional Council in Schedule One to the extent relevant to the management of activities authorised by this consent.	
	Schedule Two – General Conditions Which Apply to All Waikato Regional Council Consents	
SC7.K.2	The Consent Holder must comply with the general conditions in Schedule Two which apply to all Waikato Regional Council consents to the extent relevant to the activities authorised by this consent	Note: Schedule Two contains a comprehensive suite of Erosion and Sediment Control Conditions.
	Stockpile Management	
SC7.K.3	Stockpiling of ore or potentially acid forming rock must occur only at the sites specifically prepared for that purpose.	
SC7.K.4	Preparation of stockpile sites for the temporary storage of soil prior to the placement of material must include: <ul style="list-style-type: none"> a. Stripping and stockpiling of topsoil and subsoils for later use in site rehabilitation. b. Construction of clean water diversion drains around the site to divert and discharge clean surface run-off and intercepted groundwater in accordance with consent [cross reference relevant diversion consent]. c. Construction of diversion drains around the site perimeter to divert stockpile run-off to sediment retention ponds for sediment reduction prior to discharge. 	

