# UNDERGROUND ACTIVITIES IN AREAS 1, 2, 3 and 5

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| 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** |
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|  | **Schedule One – Common Conditions Which Apply to All Waikato Regional Council and Hauraki District Council Consents** |  |
|  | 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** |  |
|  | 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** |  |
|  | For the purposes of this consent:  a. **Access Tunnels** means:   * 1. The Wharekirauponga Access Tunnel which connects the Waihi Surface Facilities Area to the WUG Dual Tunnel and Willows Access Tunnel;   2. The WUG Dual Tunnel and related development which connect the WUG mining activities to the Wharekirauponga Access Tunnel; and   3. The Willows Access Tunnel which connects the Willows Surface Facilities Area with the Wharekirauponga Access Tunnel.  1. Condition C.1.b does not apply and **Mining Activities** means: 2. Ore drive development along the EG Vein System; and 3. Stoping Activities (being the extraction of ore via drill and blast methods from level-to-level drill holes greater than 15 m). 4. For groundwater management purposes, **EG Vein** **System** means any orebody associated structures that will be mined or hydraulically connected to mined structures, which have the potential to cause effects on shallow groundwater. |  |
|  | **Pre-Mining Activities Groundwater Management** |  |
|  | The Consent Holder must control groundwater ingress into all tunnels and ventilation shafts not including those that are Mining Activities by:  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 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. | There is now good knowledge of the hydrogeology of the area through which the Access Tunnels will pass.  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.  Based on that knowledge the Consent Holder will apply the appropriate solution specified in the Trigger Action Response Plans such that water ingress is suitably managed to achieve Condition UG.7.  Trigger Action Response Plans will provide an 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. |
|  | 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:  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.  b. The first Quarterly Access Tunnel Report must be provided no later than four months after Access Tunnel construction commences. | This condition requires regular communication with the Consent Authority and Expert Groundwater Management Panel on progress and the effectiveness of the management measures.  Condition UG.32 compels the Consent Holder to implement the recommendations of the Expert Groundwater Management Panel. |
|  | **Baseline Data Collection Ahead of Mining Activities** |  |
|  | 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.  The baseline data collection must be undertaken in accordance with the Wharekirauponga Underground Mine Water Management Plan referred to in Condition C4. |  |
|  | **Compliance Limits – Natural State Water Bodies and Natural Inland Wetlands Potentially Affected by Mining Activities** |  |
|  | 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. | This is the bottom line compliance limit the activities must be managed to achieve.  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.  The exception of the warm spring is due to the positive effects of its depletion during mining on surface water quality. |
|  | **Natural State Water Bodies** |  |
|  | To ensure compliance with Condition UG.7 during mining activities, and in accordance with the Wharekirauponga Underground Mine Water Management Planreferred 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.  As a minimum the monitoring programme must:   1. Measure and record the daily volume of water pumped from the underground mine (in accordance with Condition UG.39); 2. Provide data on the dewatering effects on groundwater at different levels (shallow and deep) in the vicinity of the Wharekirauponga Underground Mine; 3. Measure and record daily rainfall data specific to the catchments above the Wharekirauponga Underground Mine; and 4. 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. |  |
|  | The monitoring programme required by Condition UG.8 must be implemented at the locations listed in Table UG.9.T below, unless otherwise agreed in writing by the Waikato Regional Council.  **Table UG.9.T**   |  |  | | --- | --- | | **Natural State Water Body Monitoring Site** | **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 | |  |
|  | At all times during mining activities, the Consent Holder must compare the monitored stream flow and rainfall conditions required by Condition UG.8 against the Alert Trigger Levels identified in Table UG.10.T below.  *Advice Note:* 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. **Attachment 1** details and defines the composition / function of the derivation of the Alert Trigger Level.  *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)*   1. 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 Body locations set out in Table UG.9.T until the flows are no longer less than the Alert Trigger Level, and:  * 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 consistencies; * 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 a report required by Condition UG.26.  1. If monitoring identifies that the flow in 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, 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).   **Table UG.10.T: Alert and Respond Trigger Levels**   | **Natural State Water Body** | **Alert Trigger Level, m3/day**  (based off a rolling 7-day mean flow) | **Respond Trigger Level, m3/day**  (R30 = the rolling 30-day mean rainfall in mm) | | --- | --- | --- | | WKP01 | 10,200 | 2213 x R30’ + 4285 | | WKP03 | 4,800 | 1106 x R30’ + 1864 | | T-Stream West | 2,700 | 626 x R30’ + 919 | | Edmonds Stream | 2,200 | 447 x R30’ + 930 | | Thompson Stream | 1,600 | 299 x R30’ + 856 | | Adams Stream | 1,000 | 145 x R30’ + 577 | |  |
|  | 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** |  |
|  | In accordance with the Wharekirauponga Underground Mine Water Management Plan referred to in Condition C4 the Consent Holder must implement a 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 those wetlands occur as a result of the mining activities authorised by this consent.  As a minimum the monitoring programme must include the monitoring methods specified in Condition UG.8, and:   * Measure and record the water levels in Natural Inland Wetlands that are potentially affected by mining activities and at a 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 water levels in Natural Inland Wetlands that are potentially affected by mining activities (as per Condition UG.13). |  |
|  | The monitoring programme required by Condition UG.12 must be implemented at the locations listed in Table UG.13.T below.  **Table UG.13.T: Monitoring Locations**   |  |  | | --- | --- | | **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 | | Waiharakeke (Control Site) | 1848909, 5864926 | |  |
|  | If an Alert Trigger Level in Condition UG.10 has been exceeded at any of the Table UG.10.T Natural State Water Bodies, the Consent Holder must:   * Check and verify the water level monitoring data and groundwater level data from piezometers within and near the Natural Inland Wetland sites for the period leading up to the trigger event for accuracy and consistency; * 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 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 exceedances, in the report required by Condition UG.26.   If a Respond Trigger Level in Condition UG.10 has been 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 differences of water level within any pair of piezometers, 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)). |  |
|  | In the event that an assessment undertaken pursuant to Condition UG.11 or Condition UG.14 concludes that supplementation or reinjection of water to a Natural State Water Bodies or Natural Inland Wetlands 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:   1. The location of groundwater bore(s) and discharge point(s); and 2. The expected commencement date and duration of the abstraction and discharge; |  |
|  | 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. |  |
|  | Prior to any discharge of groundwater into a Natural Inland Wetland for mitigation purposes a representative sample of the groundwater must be collected and analysed for temperature, turbidity, pH, electrical conductivity, hardness, sulphate, copper, iron, manganese and zinc. This sampling is required to confirm the groundwater quality in that bore can be discharged for recharge purposes in a manner which will comply with Condition UG.16. |  |
|  | Discharge of groundwater for Natural Inland Wetland effect 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. |  |
|  | **Mine Related Groundwater Management and Monitoring** |  |
|  | From the commencement of mining activities authorised by this consent the Consent Holder must control groundwater ingress into the area being mined in a manner that ensures compliance with the limits set out within Condition UG.7 by, as a minimum:  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);  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 Natural State Water Bodies and/or Natural Inland Wetlands are suitably adapted to address any deviations from the expected natural parameters of the Natural State Water Bodies and/or Natural Inland Wetlands 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 Natural State Water Bodies and/or Natural Inland Wetlands which are inconsistent with achieving Condition UG.7; and  c. Having available, when and where required, the equipment and suitably qualified and experienced personnel to conduct appropriate monitoring, carry out necessary mitigation, test efficacy of measures employed and if required implement alternative mitigation measures. | The Wharekirauponga Underground Mine Water Management Plan identifies key principles to manage groundwater ingress and describes how these principles will be implemented. |
|  | **Wharekirauponga Underground Mine Water Management Plan** |  |
|  | 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. |  |
|  | 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:  a. To ensure protection of the Natural State Water Bodies and Natural Inland Wetlands from dewatering activities associated with mining activities;  b. To describe how the Consent Holder will undertake dewatering activities in accordance with the principles in Condition UG.19; and  c. To describe how the Waikato Regional Council and the Department of Conservation 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 flows within the Natural State Water Bodies and/or natural water levels within the Natural Inland Wetlands which have been identified as being potentially affected by mining activities. |  |
|  | Any amended version of the Wharekirauponga Underground Mine Water Management Plan must include the following:  a. Identification of the baseline data to be collected;  b. A detailed strategy, describing how mining activities and associated groundwater management will be undertaken to achieve the following outcomes;   1. To ensure protection of the Natural State Water Bodies and Natural Inland Wetlands from dewatering activities associated with mining activities; 2. To describe how the Consent Holder will undertake dewatering activities in accordance with the principles in Condition UG.19; and 3. To describe how the Waikato Regional Council and the Department of Conservation 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 flows within the Natural State Water Bodies and/or the natural water levels within the Natural Inland Wetlands which have been identified as being potentially affected by mining activities.   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;  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  e. Identification of potential adaptive management and mitigation measures to be implemented in circumstances where dewatering activities result in flows/levels reaching the Respond Trigger Levels for Natural State Water Bodies in Condition UG.10. | At this stage of the consent the Consent Holder will have collected a substantial body of information on the geohydrology of the Mine Area.  That information will inform the development of the strategy. Including any necessary Trigger Action Response Plans. |
|  | 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. |  |
|  | Condition C8(c) of Schedule One does not apply to any amendment to the Wharekirauponga Underground Mine Water Management Plan. |  |
|  | **Reporting** |  |
|  | a. Within three months of 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:   * 1. A description of the monitoring instruments installed, and pre-development hydraulic testing undertaken;   2. A summary of all collected surface water flow and wetland water level data;   3. A description of any new mining activities, including their location, depth and volume;   4. A description of any dewatering that has occurred, including the method of dewatering and the daily flow rates, volume and chemistry of the water;   5. A description of any grouting or alternative migration undertaken to control the ingress of groundwater;   6. Any other methods of addressing dewatering as part of the Trigger Action Response Plan.   7. 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.   b. At the request of the Consent Holder, the Waikato Regional Council may agree in writing to a less frequent reporting 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. | This condition requires regular communication with the Waikato Regional Council and Peer Review Panel on progress and the effectiveness of the management measures.  Condition UG.32 compels the Consent Holder to implement the recommendations of the Peer Review Panel. |
|  | 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 Annual Groundwater and Surface Water Monitoring Report which includes:   1. Data from all monitoring undertaken during the previous year; 2. Identification of any effects or trends resulting from mine dewatering activities in the flow regimes of Natural State Water Bodies and/or water levels within Natural Inland Wetlands which are potentially affected by mining activities; 3. Interpretation and analysis of any change in surface flows or wetland water levels during the previous year, and any mitigation actions taken in response to those changes; 4. A summary of compliance and / or non-compliance with resource consent conditions; and 5. A summary of any works that have been, or are proposed to be, undertaken to improve environmental performance in relation to activities authorised by this consent. |  |
|  | **Mine Compliance Monitoring and Reporting** |  |
|  | In the event that a Respond Trigger Level is exceeded for 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. |  |
|  | 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 Body and Natural Inland Wetland Compliance Trigger Level Adjustment** |  |
|  | If the monitoring required by Conditions UG.8 and UG.9 determines that the Alert Trigger Levels and / or Respond Trigger Levels set out in Condition UG.10 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**. This report must set out any proposed adjustments to the Condition UG.10 Alert Trigger Levels or Respond Trigger Levels. 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 observed natural flow levels of the Natural State Water Bodies.  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.  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 by the Consent Authority. |  |
|  | **Expert Groundwater Management Panel** |  |
|  | Prior to commencing work on the access tunnels, the Consent Holder must engage, at its cost, an Expert Groundwater Management Panel. |  |
|  | The role of the Expert Groundwater Management Panel is to review and provide advice and recommendations to Waikato Regional Council, the Department of Conservation, and the Consent Holder on the adequacy and appropriateness of the following:  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;  b. Quarterly Access Tunnel Reports required by Condition UG.5;  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;  d. Quarterly Report required by Condition UG.25;  e. The Annual Groundwater and Surface Water Monitoring Report required by Condition UG.26; and  f. Any Compliance Report required by Condition UG.27. |  |
|  | The Consent Holder must address any recommendations from the Expert Groundwater Management Panel in finalising any changes to the Wharekirauponga Underground Mine Water Management Plan and any other document referred to in Condition UG.31 that is submitted to the Waikato Regional Council must identify any recommendations made by the Expert Groundwater Management Panel that have not been adopted and the reasons for this. |  |
|  | The Expert Groundwater Management Panel must comprise of a member or members who have expertise and technical specialty which has been demonstrated in at least one of the following fields:  a. Mātauranga Māori;  b. Hydrology;  c. Hydrogeology, including demonstratable experience in assessment of surface water-groundwater interactions;  d. Geotechnical engineering;  e. The use of grouting techniques to manage groundwater inflows; and  f. Underground mining.  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 (a-e) above as and when necessary. |  |
|  | 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. |  |
|  | In the instance that the Council considers that a member of the Expert Groundwater Management Panel is not fulfilling their role in accordance with Condition UG.31, the Council can terminate that members position on the Panel.  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. |  |
|  | 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. |  |
|  | 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. |  |
|  | 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.  If a resolution cannot be agreed 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 (‘Expert’), setting out the details of the matter to be referred for determination and the reasons the parties do not agree.  The Expert shall, as soon as possible, issue a recommendation on the matter. Within 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. |  |
|  | **Telemetry / Flow Metering** |  |
|  | 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. |  |
|  | 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 Review** |  |
|  | 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:  a. 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 mining activities on the expected natural flows of the Natural State Water Bodies and/or the natural water levels in Natural Inland Wetlands which have been identified as being potentially affected by tunnelling and mining activities, where those effects are likely to give rise to more than minor adverse changes in these flows / levels, 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  b. To address any matter relating to the recommendations of the Expert Groundwater Management Panel required by the conditions of this consent.  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. |  |